# **REVIEW ESSAY**

# FROM SCRIPTURE TO FANTASY ADRIAN JOHNSTON AND THE PROBLEM OF CONTINENTAL FUNDAMENTALISM

Scott Bakker

ABSTRACT: Only the rise of science allowed us to identify scriptural ontologies as fantastic conceits, as anthropomorphizations of an indifferent universe. Now that science is beginning to genuinely disenchant the human soul, history suggests that traditional humanistic discourses are about to be rendered fantastic as well. Via a critical reading of Adrian Johnston's 'transcendental materialism,' I attempt to show both the shape and the dimensions of the sociocognitive dilemma presently facing Continental philosophers as they appear to their outgroup detractors. Trusting speculative a priori claims regarding the nature of processes and entities under scientific investigation already excludes Continental philosophers from serious discussion. Using such claims, as Johnston does, to assert the fundamentally intentional nature of the universe amounts to anthropomorphism. Continental philosophy needs to honestly appraise the nature of its relation to the scientific civilization it purports to decode and guide, lest it become mere fantasy, or worse yet, conceptual religion.

KEYWORDS: Intentionalism; Eliminativism; Humanities; Heuristics; Speculative Materialism

In *Thinking, Fast and Slow*, Nobel Laureate Daniel Kahneman considers the riddle of why we retrospectively underrate our suffering in a variety of contexts. Given the same painful medical procedure, one would expect an individual suffering for twenty minutes

<sup>&</sup>lt;sup>1</sup>Daniel Kahneman, *Thinking, Fast and Slow*, (Toronto: Doubleday Canada, 2011). www.cosmosandhistory.org 522

to report a far greater amount of suffering than an individual suffering for ten minutes. Such is not the case. As it turns out duration has "no effect whatsoever on the ratings of total pain." Retrospective assessments, rather, seem determined by the average of the pain's peak intensity and its coda. Otherwise, humans suffer what Kahneman calls 'duration neglect,' a brute inability to incorporate information signalling the *time* spent suffering.

Perhaps this is why we're so prone to remove the bandage slowly.

Far from being academic, duration neglect places healthcare providers in a very real and quite curious therapeutic bind. After all, what should the physician's goal be? The reduction of the pain *actually experienced*, or the reduction of the pain *remembered*? Kahneman provocatively frames the problem as a question of choosing between *selves*, the 'experiencing self' that actually suffers the pain and the 'remembering self' that walks out of the clinic. Which 'self' should the therapist serve?

Kahneman sides with the latter. "Memories," he writes, "are all we get to keep from our experience of living, and the only perspective that we can adopt as we think about our lives is therefore that of the remembering self." He continues:

Confusing experience with the memory of it is a compelling cognitive illusion—and it is the substitution that makes us believe a past experience can be ruined. The experiencing self does not have a voice. The remembering self is sometimes wrong, but it is the one that keeps score and governs what we learn from living, and it is the one that makes decisions. What we learn from the past is to maximize the qualities of our future memories, not necessarily of our future experience. This is the tyranny of the remembering self.<sup>4</sup>

There's many, many ways to parse this fascinating passage, but what I'm most interested in is the brand of *tyranny* Kahneman invokes here. The use is metaphoric, of course, referring to some kind of 'power' that remembering possesses *over* experience. But this 'power over' isn't *positive*: the 'remembering self' is no 'tyrant' in the interpersonal or political sense. We aren't talking about a power that one agent holds over another, but rather the way facts belonging to one capacity, experiencing, regularly find themselves at the mercy of another, remembering.

Insofar as the metaphor obtains at all, you could say the power involved is the power of *selection*. Consider the sum of your own sensorium this very moment—the nearly sub-audible thrum of walled-away urban environs, the crisp white of the screen, the clamour of meandering worry on your margins, the smell of winter drafts creeping

<sup>&</sup>lt;sup>2</sup>Daniel Kahneman, Thinking, Fast and Slow, 380.

<sup>&</sup>lt;sup>3</sup>Daniel Kahneman, Thinking, Fast and Slow, 381.

<sup>&</sup>lt;sup>4</sup>Daniel Kahneman, Thinking, Fast and Slow, 381.

through lived-in spaces—and think of how wane and empty it will have become when you lie in bed this evening. With every passing heartbeat, the vast bulk of experience is consigned to oblivion, stranding us with memories as insubstantial as coffee-rings on a glossy magazine.

It has to be this way, of course, for both brute biomechanical and evolutionary developmental reasons. The high-dimensionality of experience speaks to the evolutionary importance of managing ongoing environmental events. The biomechanical complexity required to generate this dimensionality, however, creates what might be called the *Problem of Indisposition*. Since any given moment of experience exhausts our capacity to experience, each subsequent moment of experience all but utterly occludes the moment prior. The astronomical amounts of information constitutive of momentary experience is all but lost, 'implicit' in the systematic skeleton of ensuing effects to be sure, but inaccessible to cognition all the same.

Remembering *experience*, in other words, is *radically privative*. As a form of subsequent experiencing, the machinery involved generating the experience remembered has been retasked. Accordingly, the question of *just what gets selectedfor that tasking* becomes all important. And given the metabolic expenses involved, the answer is bound to be ecological. In the case of duration neglect, evolution skimped on the metacognitive machinery required to reliably track and assess certain durations of pain. Remembering intensity apparently packed a bigger reproductive punch.

Kahneman likens remembering to a tyrant because selectivity, understood at the level of agency, connotes power. The automaticity of this selectivity, however, suggests that *abjection* is actually the better metaphor, that far from being a tyrant, remembering is more a *captive* to the information available, more a prisoner in Plato's Cave than any kind of executive authority.

If any culprit deserves the moniker of 'tyrant' here, it has to be *neglect*. Why do so many individuals choose to remove the bandage slowly? Because information regarding duration plays far less a roll than information regarding intensity. Since the mechanisms responsible for remembering systematically neglect such information, that information possesses no downstream consequences for the machinery of decision-making. What we have traditionally called memory consists of a fractionate system of automata scattered throughout the brain. What little they cull from experiencing is both automatic and radically heuristic. Insofar as the metaphor of 'tyrant' applies at all,

<sup>&</sup>lt;sup>5</sup> For an excellent review of the transformation of memory from monolithic, veridical faculty, Plato's 'aviary,' to the complex, constructive, and heuristically specialized set of systems we now know it to be, see William Bechtel, *Mental mechanisms: Philosophical Perspectives on Cognitive Neuroscience*,(London: Routledge, 2008), 49-88.

it applies to the various forms of neglect suffered by conscious cognition, the myriad scotomas constraining the possibilities of 'remembering experience'—or metacognition more generally.

Kahneman's distinction wonderfully illustrates the way the *lack* of information can have *positive* cognitive effects. Bandages get pulled slowly rather than yanked quickly because only a spare, evolutionarily strategic *fraction* of experiencing can be remembered. We only recall *enough* of experience, it seems safe to assume, to solve the kinds of problems impacting our paleolithic ancestors' capacity to reproduce. Metacognitive memory is ecological, heuristic.

**This** raises the general question of just what kinds of problems we should expect deliberative theoretical metacognition—'philosophical reflection'—to be able to solve given the limitations of its access and resources. After all, if we don't possess the metacognitive capacity to track the duration of suffering, why assume theoretical reflection to possess the access and capacity to cognize any 'truth of experience' otherwise? Given the sheer complexity of the brain, the information consciously accessed is almost certainly adapted to various, narrow heuristic functions. It's easy to imagine specialized metacognitive access and processing adapting to solve specialized problems possessing reproductive benefits. But it seems hard to imagine why evolution would select for the ability to theoretically intuit experience for what it is. Philosophy, after all, is an exaptation, a cultural achievement. As such, it is almost certainly a naive metacognitive consumer, something that repurposes information absent any means of intuiting the sufficiency of that information.

Not only should we expect theoretical reflection to be blind, we should also expect it to be blind to its own blindness. We have solid empirical grounds, in other words, to worry that philosophical reflection is at once blind, yet perpetually convinced it can see. Delusional.

It would explain the last twenty-five centuries, at least.

\_

<sup>&</sup>lt;sup>6</sup> This is what the cognitive neuroscience and psychology of metacognition confirms at every turn. The metacognitive deficits suffered by Alzheimer's patients (just for instance) are both numerous and specific, revealing both the fractionate and the heuristic nature of human metacognitive capacity. See, Alexandra Ernst, et al. "Anosognosia and Metacognition in Alzheimer's Disease: Insights from Experimental Psychology," *The Oxford Handbook of Metamemory*, eds. John Dunlosky and Sarah K. Tauber, (Oxford: Oxford University Press, 2015). For a discussion of the direct philosophical implications of this science, see, Author, "Introspection Explained," *Three Pound Brain*, Febuary 2 , 2015, https://rsbakker.wordpress.com/2015/02/07/introspection-explained/.

#### CONTINENTAL PHILOSOPHY

It is this question of neglect that I want to bring to Continental philosophy via Adrian Johnston's 'transcendental materialism,' his attempt to materially square the circle of subjectivity, to secure, as he puts it, "the possibility of a gap between, on the one hand, a detotalized, disunified plethora of material substances riddled with contingencies and conflicts and, on the other hand, the bottom-up surfacing out of these substances of the recursive, self-relating structural dynamics of cognitive, affective, and motivational subjectivity—a subjectivity fully within but nonetheless free at certain levels from material nature."

This is a Continental philosophical form of what I take to be the most *urgent* question of our day. How do things like freedom, rules, reasons, goals, experiences, minds, subjects, mental functions, first persons, representations, truths, norms arise out of what we know, scientifically, to be biomechanical systems? At stake, among other things, is the cognitive status of pretty much everything written within every one of the registers listed above. As Fodor famously observes, "if commonsense intentional psychology really were to collapse, that would be, beyond comparison, the greatest intellectual catastrophe in the history of our species." The answer to Johnston's question could very well tell us the last twenty-five centuries have been a dream.

But where Johnston sees the question as, "How must the material and the natural be (re)conceptualized if they indeed generate out of themselves more-than-material, denaturalized agents and actors?" <sup>10</sup> I see it as, 'Why do we find ourselves so theoretically perplexing?' Is it because we're so special, as Johnston has it, or is it because we're so stupid? Johnston, like Continental philosophy more generally, is invested in our exceptionalism, the notion that we seem to be exceptions to the laws of nature because we are. I disagree. I think mediocrity will prevail in this debate the same way it has prevailed in all debates regarding nature. We are complicated mechanisms, to be sure, but we are mechanisms all the same.

<sup>&</sup>lt;sup>7</sup> Adrian Johnston, *Prolegomena to Any Future Materialism. Volume One: The Outcome of Contemporary French Philosophy*, (Evanston: Northwestern University Press, 2013), 209.

<sup>&</sup>lt;sup>8</sup> Since I see meaning as ecological, as 'merely material,' I see the radical technological transformation of our ecologies as a material threat to the reliability of intentional cognition, the great distributed engine of society.

<sup>&</sup>lt;sup>9</sup> Jerry Fodor, Psychosemantics: The Problem of Meaning in the Philosophy of Mind, (Cambridge, MA: MIT Press, 1987), vii.

<sup>&</sup>lt;sup>10</sup> Adrian Johnston, "Adventures in Transcendental Materialism—Author Q&A," int. Graham Harmen, *Object-Oriented Philosophy*, 18 April, 2014, https://doctorzamalek2.wordpress.com/2014/04/18/q-a-with-adrian-johnston/. 3.

What do I mean by 'Continental philosophy'? My criteria are pragmatic: To the extent that Adrian Johnston is readily identifiable as a Continental philosopher, we can suppose that those referencing the same family of discursive authorities, and exhibiting similar styles of exposition and argumentation belong to his discursive ingroup. Continental philosophy, in other words, designates the intellectual activity characteristic of those individuals inclined to identify Adrian Johnston as one of their own. The temptation, I am sure, will be to assert that 'Continental philosophy' is so much more. But to the extent that this 'more' incorporates assumptions, authorities, and styles quite alien to Adrian Johnston, it also falls outside the purview of the present critique. A great number of naturalistically inclined thinkers possess various 'continental' affiliations and sympathies to be sure. The degree to which my argument generalizes to them is the degree to which their positions map across Johnston's.

Our ongoing technological transformation possesses no historical analogue; not even the Enlightenment or the Industrial Revolution compare. Continental philosophers need to explain why tools that have resolved next to nothing in over two thousand years of *gradual* social and technical transformation have a place in the exponential decades ahead. Do Continental philosophers possess *any* tools relevant to understanding the madness we find ourselves witnessing, or are they as baffled as the rest of us, and merely armed with the rhetorical devices required to appear otherwise in cloistered intellectual ecologies?

This is a hard charge, I know, but it is honestto the way Continental philosophy is generally perceived *from the outside*: as an institution where discursive *inquiry* has largely devolved into various idiolects of ingroup display. Think about it: *Where is the great defense of Continental philosophy*? In 2015, the NIH devoted 5.5 billion dollars to reverse engineering the brain, to plumbing the mechanical (that is, technologically *actionable*) basis of the human soul. <sup>11</sup> If Continental philosophers have anything important to say about the human soul, then surely they have important things to communicate to what has become a new Manhattan Project, an industrialized research programme threatening, if not the annihilation of life, then an apocalypse of *meaning*.

Does no one find the absence of such a work troubling?

## ADRIAN JOHNSTON

Some, certainly. More and more all the time. I take things like the ongoing 'materialist turn' in Continental philosophy as an indicator that the group dynamics dominating Continental philosophy through the latter half of the 20<sup>th</sup> century are evolving, if not

 $<sup>^{\</sup>mbox{\tiny II}} See, http://www.hhs.gov/about/budget/fy2015/budget-in-brief/nih/index.html$ 

breaking down. And I see Adrian Johnston as an exemplary figure in this regard, someone who has committed himself to modernizing, and therefore revitalizing, what has become an archaic and moribund institution. He continually criticizes what he calls "the hostility to naturalism and the natural sciences dominating twentieth century Continental philosophy." He poses transcendental materialism as his remedy, an account that:

... will not amount merely to compelling philosophy and psychoanalysis, in a lopsided, one-way movement, to adapt and conform to the current state of the empirical, experimental sciences, with the latter and their images of nature left unchanged in the bargain. Merging philosophy and psychoanalysis with the sciences promises to force profound changes, in a two-way movement, within the latter at least as much as within the former. <sup>13</sup>

He wants an account, in other words, that actually makes a difference, that *transforms the science* as much as the science transforms philosophy and psychoanalysis. He wants a position strong enough to force a negotiated peace, some kind of discursive compromise, apparently forgetting that science, being science, can only wage total war. No traditional discourse has survived the scientific rationalization of their domain. All of them have been reduced to hokum, expelled from the courts, hounded from policy, from rationality altogether, and relegated to *fantasy*, which is to say, become commodities sold to balm the superstitious soul.

As we shall see, Johnston does anything but stare the devil of scientific scepticism in the eye, and as result, makes arguments that only someone already substantially agreeing with him could appreciate. Since group membership turns on the coincidence of 'values,' defending those values for the edification of members amounts to little more than rehearsal, catechism. As much as Johnston sets off on the right foot, he continues wandering the same old paddock—and yes, stepping into the same old cow-pies—as a result.

Nothing is forced. The parochialism of Continental philosophy remains intact, as does the indifference of science. The ingroup prisonhouse remains closed. But at least the old words still carry the old water, and more importantly, the pecking order among inmates is conserved.

Perhaps this was the point all along.

<sup>&</sup>lt;sup>12</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism," int. Peter Gratton, *Society and Space*, http://societyandspace.com/material/interviews/interview-with-adrian-johnston-on-transcendental-materialism/ (accessed 10/12/2015).

<sup>&</sup>lt;sup>13</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 179.

#### THE PROBLEM OF MEANING

I've asked a number of scientists and wonks what they think of Continental philosophy 'forcing profound changes in science,' and their reply is to either laugh (when they know what Continental philosophy is) or to simply shrug and ask *how*. This is my question as well: *how* does Johnston think transcendental materialism can accomplish something *no other traditional discourse has managed to accomplish in history*, namely, radically change the shape of scientific cognition on the basis of *a priori* speculation alone?

The answer? By solving the problem of meaning—which is to say, by accomplishing another thing no traditional discourse in history has managed to accomplish. Theoretical speculation regarding the myriad forms of meaning—be it subjectivity or normativity or phenomenality or so on—forms the bulk of Continental philosophical canon. Science poses such a profound threat to the Continental project because it makes hash of meaning, discrediting traditional intentional explanations pretty much everywhere it encounters them in nature. As it happens, we too belong to nature, one among many astronomically complicated pockets. Now that science is beginning to overcome the technical challenges posed by that nature the question is one of what will become of meaning. Will humanity prove to be the exception for real this time? Or—as in the case of Copernicus or Darwin—will we prove to be natural through and through? Will mediocrity prevail yet again?

Now it is absolutely crucial that every Continental philosopher realize that this remains an *open question*. A priori arguments have a disastrous track record in science, <sup>14</sup> even though each of them was made by individuals every bit as intelligent and as educated as you. Given the numbers of incompatible interpretations out there, the odds are that you almost certainly *are wrong*. <sup>15</sup> Only the numerous biases, blindspots, and dysrationalias that we suffer as a matter of empirical fact make it seem otherwise. <sup>16</sup> After two and half millennia of fruitless toiling over intentional idioms, the ancient skeptics are finally accumulating scientific evidence for their ancient case...

The Continental philosopher is not. 17

This matter of fact indeterminacy regarding the case for exceptionalism shines a light on the glaring *lack* of any sustained consideration of what it means *if exceptionalism* 

<sup>&</sup>lt;sup>14</sup> See Anthony Chemero, Radical Embodied Cognitive Science, (Cambridge, MA: MIT Press, 2009), 3-17.

<sup>&</sup>lt;sup>15</sup> See David Dunning, Self-Insight: Roadblocks and Detours on the Path to Knowing Thyself, (New York, NY: Psychology Press, 2005), 81-98.

<sup>&</sup>lt;sup>16</sup> See Mercier, H., and Sperber, D., "Why do humans reason? Arguments for an argumentative theory," *Behavioural and Brain Sciences*, 34, 2011, 57-111, for an excellent review.

<sup>&</sup>quot;Johnston's ultimate disappointment in Terrence Deacon's *Incomplete Nature* is that all the science Deacon adduces falls far short explaining intentionality (or "ententionality," as Deacon calls it). See, "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," *Speculations VI*, (2015), 19-60.

turns out to be wrong. What will intentional cultural registers, 'the humanities,' look like recontextualized by three decades of industrial-scale research in cognitive science? The research is going to happen no matter what, and our biomechanical bases will be known with far greater resolution. The possibilities for biomechanical intervention could very well be limitless. <sup>18</sup> And yet the blithe, near universal assumption is that somehow human exceptionalism will be redeemed.

## Johnston writes:

From my perspective, these naturalists are overconfident aggressors not nearly as well-armed as they believe themselves to be. And, the anti-naturalists react to them with unwarranted fear, buying into the delusions of their foes that these enemies really do wield scientifically-solid, subject-slaying weapons. <sup>19</sup>

But this conflates the threat *science* poses to traditional discourses of meaning with—you guessed it—a particular group of extreme outgroup competitors, one that his ingroup is already primed to dismiss as 'ideological.' By enabling the technical application of theoretical cognition, science is inexorably revolutionizing *everything*. Science does away with traditional intentional explanations of nature. We explain ourselves intentionally, and yet we are also natural. Ergo...

The problem of meaning is as real as a heart attack, I assure you. We know that we are biological machines, and biological machinery seems to rule out our traditional, intentional self-understanding. The problem is the fact, here, not the claim that we must be exceptional. That's the guess.

The irony is that Johnston, despite the tenor of throwaway comments like the above, actually *agrees*. His entire project of 'transcendental materialism' is predicated upon it, in fact. What he wants is to domesticate the threat, transform it into something less explosive. He wants to believe that the problem is merely a technical one, a mere matter of 'getting our concepts right,' and not at all institutionally existential. He refuses, like so many other Continental philosophers, <sup>20</sup> to countenance the worst-case scenario. <sup>21</sup>

<sup>&</sup>lt;sup>18</sup>This is what makes the Singularity so crucial to these kinds of debates. If the possibility space of human technological augmentation is not intentionally constrained or 'anthropologically unbounded,' to use David Roden's term, then our future is scarcely imaginable, and scriptural claims quite simply become impossible. See David Roden's seminal, *Posthuman Life: Philosophy at the Edge of the Human*, (London: Routledge, 2015).

<sup>19</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>20</sup> With the notable exception of thinkers like Ray Brassier, Paul Ennis, and David Roden.

<sup>&</sup>lt;sup>21</sup> Author, "Back to Square One: Toward a Post-Intentional Future," *Scientia Salon*, 11 May, 2014, https://scientiasalon.wordpress.com/2014/11/05/back-to-square-one-toward-a-post-intentional-future/.

#### THE VERY IDEA OF 'TRANSCENDENTAL MATERIALISM'

Johnston is 'preoccupied,' as he puts it, "with constructing an ontology of freedom," figuring out how human capacities "come vastly to exceed the naturalness of their causes." Since any such ontology contradicts the prevailing understanding of the natural arising out of the sciences—how can freedom arise in a nature where everything is *in-between*, a stochastic or deterministic conduit of indifferent forces? The challenge confronting any materialism is one of explaining subjectivity in a materially consistent manner. As he puts it:

For me, the true ultimate test of any and every materialism is whether it can account in a strictly materialist (yet non-reductive) fashion for those phenomena seemingly most resistant to such an account. Merely dismissing these phenomena (first and foremost, those associated with subjectivity) as epiphenomenal relative to a sole ontological foundation (whether as Substance, Being, Otherness, Flesh, Structure, System, Virtuality, Difference, or whatever else) fails this test and creates many more problems than it supposedly solves. <sup>24</sup>

Of course 'true, ultimate test,' here, is little more than a rhetorical device, essentially a way to rule out eliminative approaches to the problem by fiat. But his larger point is quite valid: simply consigning intentional phenomena to epiphenomenal oblivion on the basis of their manifest incompatibility with nature *explains nothing*. The theoretical problem of meaning is the problem of *explaining* meaning in some consensus commanding—that is *scientific*—way. To the extent that doing away with meaning explains nothing, then *mere* elimination solves nothing.

Transcendental materialism proposes to *materialistically explain* meaning without reducing meaning to mechanism, or what we typically reference as 'material.' It proposes to genuinely *solve the problem*, to explain intentional phenomena, not simply to wow ingroup audiences, but in a manner that 'forces profound changes upon science.'

What Johnston perpetually neglects to point out, however, is that he has a taken on a second problem in addition to the problem of meaning: the *problem of metaphysics*. How does transcendental materialism 'force profound changes on science'? By solving the problem of meaning. So then, how does transcendental materialism solve the problem of meaning? According to Johnston, by explaining its metaphysical foundations.

But how do merely speculative, metaphysical explanations 'force profound changes on science'? Untestable claims turning on overdetermined posits based on the

<sup>&</sup>lt;sup>22</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 204.

<sup>&</sup>lt;sup>23</sup> Adrian Johnston, "Adventures in Transcendental Materialism—Author Q&A," 4.

<sup>&</sup>lt;sup>24</sup>Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

metacognitive intuitions of a Continental philosopher... Talk about creating more problems than you solve!

As should be clear, the *very idea* of transcendental materialism is problematic.

#### TRANSCENDENTAL MATERIALISM

So what is transcendental materialism? Most basically, what its name implies: an attempt to conceptually combine the transcendental and the material. Johnston wants to have it both ways, to discover freedom *within* mechanism. As he puts it:

... rather than categorically rejecting Kantian transcendentalism outright, my "transcendental materialism" refuses to write off the subjectivity of transcendental idealism as an empty illusion or ineffective epiphenomenon. Instead, inspired by F.W.J. Schelling and G.W.F. Hegel among others, I seek properly to situate such subjectivity *vis-à-vis* the meta-transcendental conditions of possibility for it as itself transcendental, pinpointing these ontological *Ur*-conditions at the levels of incarnate substantial actualities. <sup>25</sup>

The "root meta-transcendental necessary condition for transcendental subjectivity itself," <sup>26</sup> on Johnston's account, is what he calls 'weak nature,' the obvious fact that myriad, totally natural events regularly jump the rails of mechanism, or at least appear to contradict the principal of causal closure.

This phrase signals several things. To begin with, "nature" along the lines of the naturalism of the natural sciences, as the factically given spatio-temporal bodies and processes of the physical universe (or universes), is the lone, zero-level baseless base of this ontology.<sup>27</sup>

Except of course, that the caveats begin piling up rather quickly.

Obviously, this entails a rejection (ultimately on the grounds of Hegelian logic, in my case) of conceptions of ontology constrained by permutations of "ontological difference" à *la* Heidegger, with the ontic-ontological contrast being, by my estimation, insufficiently dialectical/speculative. <sup>28</sup>

He rejects, as I do, the ontological difference, or the standard continental philosophical theory of meaning (raising the question of what theory he wants to put in its place). The big question, of course, is how Hegelian dialectic manages to avoid any of the

<sup>&</sup>lt;sup>25</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 23.

<sup>&</sup>lt;sup>26</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>27</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>28</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

epistemological problems crippling Heidegger's ontological difference. This is a point we shall return to in due course.

Furthermore, however, I argue, buttressed by empirical as well as philosophical justifications, that the nature of a science-informed naturalist ontology need not and, indeed, should not be envisaged (as do so many advocates and denouncers alike of garden-variety scientisms and naturalisms) as a massive totality or seamless whole in which each and every entity and event is exhaustively determined by a foundational set of efficient causes qua iron-clad, inviolable laws of necessary connection.<sup>29</sup>

He also rejects, as I do, metaphysical reductionism. But where I reject it because it's well, *metaphysical*, he rejects it because he has an incompatible metaphysics to sell. He raises the determinism canard, and so fills the air with straw, which is unfortunate.<sup>30</sup> He continues:

This vision of nature is epitomized by the familiar figure of Laplace's Demon and could also be labelled, in hybrid Lacanian-Badiouian locution, as the big Other of the One-All of Nature-with-a-capital-N. Instead of such a freedom-prohibiting, subject-squelching "strong" Nature—faithful to Lacan and Žižek here, I maintain that this is yet another non-existent big Other—transcendental materialism portrays nature as "weak" in the sense of it being a detotalized, disunified non-One/not-All of distinct, heterogeneous levels and layers of beings shot through with and riven by a thriving plethora of antagonisms, conflicts, fissures, splits, and the like (as paradigmatically embodied by the "kludge"-like central nervous system of human beings). 31

<sup>&</sup>lt;sup>29</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>30</sup>Throughout *Prologomena to Any Future Materialism I*, for instance, he repeatedly references reductive and eliminative materialisms as his primary rhetorical foil without actually engaging any of the positions in any meaningful way. Instead he references Catherine Malabou's perplexing work on neuroplasticity, stating that "one need not fear that bringing biology into the picture of a materialist theory of the subject leads inexorably to a reductive materialism of a mechanistic and/or eliminative sort; such worries are utterly unwarranted, based exclusively on an unpardonable ignorance of several decades of paradigm-shifting discoveries in the life sciences" (29). Why? Apparently because epigenetics and neural plasticity "ensure the openness of vectors and logics not anticipated or dictated by the bump-and-grind efficient causality of physical particles alone" (29). At this stage in developing his project, at least, he seems to think that 'mechanism' in the brain sciences refers to something nonstochastic, 'clockwork,' that the spectre of Laplace is what drives the unwarranted claims of reductive/eliminative materialists. Only more recently does he seem to realize that indeterminacy, noise, is part and parcel by what is meant by 'mechanism' in things like cognitive neuroscience. (See, "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," *Speculations VI*, 19-60). More and more researchers, in fact, are beginning to see noise as a crucial *component* of neural mechanisms, playing a role analogous to the one it plays in evolution.

<sup>&</sup>lt;sup>31</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

I'm sympathetic to the messiness bit, <sup>32</sup> but *ontologizing it*? If everything is messy, *heuristic* as he himself contends, then *why assume philosophical reflection is clean*? It's a simple fact that our tools are adventitious, and that science is mess of techniques and assumptions, so why not assume this messiness also extends to our capacity to think this messiness?

Continental philosophers, I find, seem prone to equivocate two kinds of 'reductionisms'. As a rule, scientists don't dissemble things into their parts out of some kind of religious conviction regarding the (cue drums) Nature of the Universe, but because it works. Thus the pragmatic mess. If they go on to espouse some kind of metaphysical reductionism, they generally do so because it works so spectacularly well despite the messiness (even because of it in some instances). Scientists are pragmatic reductionists because that's where so much of the power is, taking things apart (or putting them together) and seeing how things tick. That's what's curing diseases, extracting fossil fuels, doubling computational power... you get the picture.

Of course, there's other ways to cognize as well, genuine nonmechanical knowledge of ourselves and our environments. The question of how these modes tick, not surprisingly, likely involves taking things apart and putting things together (thus the vast expenditures on neuroscience and artificial intelligence). So far as we eschew magic, we assume they operate according to the known laws of the universe *somehow*. After all, everything else seems to. But this need only be a hunch, not a dogma possessing regimental colours. Believing in the broad spectrum utility of decomposing phenomena into components in no way commits the naturalist to *metaphysical* reductionism, just to the hunch that it will prove as powerful here as elsewhere.

The point being that Johnston's dialogical dichotomy is pretty clearly a false one. But note the significance of the role it plays in painting his metaphysical picture:

These intra-natural negativities short-circuit what otherwise would be the heteronomy-enforcing determinism of a single, God-like Nature with its compulsory commandments. In a related vein, I advance, as I believe is requisite for my purposes, arguments against the reductivisms, eliminativisms, and epiphenomenalisms of scientistic—I would go so far as to say "pseudo-scientific"—objections to recognizing the real, efficacious actualities of a multitude of agencies and constellations appearing to resist being collapsed down to the

<sup>&</sup>lt;sup>32</sup> I'm presently partial to an eliminativist version of the tool shed picture William C. Wimsatt cobbles together in *Re-engineering Philosophy for Limited Beings: Piecewise Approximations to Reality*, (Cambridge, MA: Harvard University Press, 2007).

crude bump-and-grind mechanisms of narrow (mis)construals of the natural (especially life) sciences. <sup>33</sup>

The caricature of totality is what provides him with fixed canvas required to make sense of the immanent 'gaps' and 'fissures' that allow for eruptions of the human, for freedom and meaning more generally. In a sense, he has to commit the very error the pragmatic reductionist refuses to make to subsequently *accuse her* of committing that error. The positing of some totalized, continuous background provides the material thesis of positive nature that contradicts the material antithesis of what he calls 'abstential nature,' which *taken together* (somehow) form the greater totality of 'weak nature,' this 'meta-transcendental' clockwork bursting with inexplicable (irreducible, supernatural) efficacies.

Transcendental materialism, Johnston contends, solves the problem of meaning by reconceptualizing nature, materiality itself, as something that is *intrinsically*, metaphysically contradictory. Once we understand the immanence of contradiction in the material, then the apparent incompatibility of meaning and mechanism vanishes. It becomes possible to "be a partisan of a really and indissolubly free subject while simultaneously and without incoherence or self-contradiction remaining entirely faithful to the uncompromising atheism and immanentism of the combative materialist tradition." He thinks that certain real, physical systems (you and me, as luck would have it) do not obey physical law, at least not the way every single system effectively explained through the history of natural science obeys physical law.

He thinks, in other words, that we're a kind of *perpetual motion machine*, something moved by nothing.

### TRANSCENDENTAL FANTASY

Johnston wants an empirically significant metaphysical account of intentional phenomena as traditionally conceived. He wants to square the circle, to secure intentionality absent theological fantasy, and materialism absent nihilistic horror. This is no mean feat, requiring, as it does, the performance of two tricks unprecedented in the history of human thought: commanding scientific consensus with metaphysical claims on the one hand, and naturalistically resolving the conundrums of meaning on the other. But Johnston nevertheless genuinely thinks that it lies within his discursive grasp. He literally thinks that he can *convince* scientists of his perpetual motion machine.

Why? Because he thinks the answer is inescapably given.

<sup>&</sup>lt;sup>33</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>34</sup>Adrian Johnston, "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," 24.

<sup>&</sup>lt;sup>35</sup> Adrian Johnston, *Prolegomena to Any Future Materialism I*, 176.

"Following Hegel and Zizek, among others," he writes, "I am preoccupied with constructing an ontology of freedom, namely, an account of what metatranscendental substance must be (and has been) in the aftermath of the decision to affirm as an axiomatic intuition that desubstantialized transcendental subjects exist, albeit in modes nonetheless fully immanent to this same substantial being." He takes the material existence of low-dimensional, super-empirical agency as axiomatic, something given in intuition. In other words, he thinks that a particular deliverance of philosophical reflection provides absolute warrant to transcendental materialism. Of course, this is something a great many others have thought, but to no discursive avail, so it remains entirely unclear why we should trust any intuition as 'axiomatic.' But Johnston deftly manages to pass over such considerations (the most critical ones) in silence. After all, merely acknowledging (the obvious) that he was probably just guessing given deeply ingrained intellectual prejudices and tastes would scuttle his entire project insofar as it threatens the conceptual primacy of his discourse. His domain has to come first.

The problem, of course, is that scientists don't yield conceptual primacy to any traditional discourse, ever. And why should they? They see such bids for cognitive authority for the situational, self-aggrandizing guesswork they always turn out to be. I think almost all Continental philosophers are guilty of this (ultimately religious) conceit, but none illustrate the stakes of their social and institutional dilemma with quite the clarity as does Johnston. This is because of his discursive courage, make no mistake, his willingness to tackle his institution's monstrous theoretical other. His honesty to the hypocrisy of a critical institution possessing only internal consumers of critical output is what forced him to confront the question of Continental philosophy's relevance in a radically transforming world. He set out because he believed his intuitions were indeed axiomatic. And now, he's demonstrating how his institution's concepts and assumptions simply cannot survive outside its sheltered intellectual ecology.

Johnston himself recognizes this problem of ontological credibility, insofar as he makes it the basis of his critiques of Badiou and Meillassoux, who suffer, he argues, "from a Heideggerean hangover, specifically, an acceptance unacceptable for (dialectical) materialism of the veracity of ontological difference, or a clear-cut distinction between the ontological and the ontic." "Genuine materialism," as he continues, "does not grant anyone the low-effort luxury of fleeing into the uncluttered, fact-free ether of 'fundamental ontology' serenely separated from the historically

<sup>&</sup>lt;sup>36</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 204.

<sup>&</sup>lt;sup>37</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 170.

shifting stakes of ontic disciplines."<sup>38</sup> And how could it, now that the machinery of human cognition lies on the examination table? Johnston poses the (bad) ontologist's dilemma thus:

... the quarrels among the prior rationalist philosophers about being *an sich* are no more worth taking philosophically seriously than silly squabbles between sci-fi writers about whose concocted fantasy-world is truer or somehow more 'superior' than the others; such quarrels are nothing more than fruitless comparisons between equally hallucinatory apples and oranges, again resembling the sad spectacle of a bunch of pulp fiction novelists bickering over the correctness-without-criteria of each others' fabricated imaginings and illusions. <sup>39</sup>

And yet nowhere does one find any explanation of how his own 'meta-transcendental' ontology manages to avoid this 'fantasy world trap,' to be 'receptive' or 'responsive' or 'responsible' to any of the sciences—to be anything other than another fundamental ontology, albeit one that rhetorically approves of the natural scientific project. As perhaps should come as no surprise. After all, Johnston's picture of intentionally rising from the cracks and gaps of an intrinsically contradictory reality happens to bethe very ontological trope I use to structure the *fantasy world* of *The Second Apocalypse*!

The ontological formula he hopes will force change on science is the same ontological formula I use to *identify my fiction asfantasy fiction*. One of my goals in my epic fantasy series is to demonstrate the *seamless* nature of the fit between Continental philosophical concepts and *magical realities*, to explore the affinities one finds in theological and new age appropriations of Continental conceptualities.

To show the degree to which humanistic discourse belongs to prescientific cultural ecologies, and so examine the inevitability of its obsolescence.

I write about the death of magic. All of it.

#### PERPETUAL MOTION AND NEGLECT

Which brings us to the issue of my own apostasy, why I turned my back on Continental philosophy: we pull our band-aids off slow. As it happens, neglect is something we pervasively suffer as a matter of empirical fact. <sup>40</sup> The eminent consciousness researcher Stanislau Dehaene goes so far as to frame it as an informal law: "We constantly

 $<sup>^{38}</sup>$  Adrian Johnston, Prolegomena to Any Future Materialism I, 171.

<sup>&</sup>lt;sup>39</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 170.

<sup>&</sup>lt;sup>40</sup> Emily Pronin, "The introspection illusion," Advances in Experimental Social Psychology 41 (2009): 1-68.

overestimate our awareness—even when we are aware of the glaring gaps in our awareness."41

We know from the heuristics and biases research program, as well endless experiments and studies conducted across the cognitive sciences, that human cognition consists of myriad heuristics, and is quite easily hacked once we've isolated the situational cues triggering them. <sup>42</sup> But then none of this should come as any surprise given that all cognition is ecological cognition. Life is primarily about making due, not getting true. <sup>43</sup>

We know this. But what does it have to do with Johnston's perpetual motion machine? Well, because when confronted by something apparently impossible, typically the best thing to assume is some kind of trick.

Johnston would, I am sure, regard likening weak nature to a perpetual motion machine as preposterous, even though it is, in scientific circles, the signature metaphor for the kind of system he is describing. <sup>44</sup> What makes the metaphor preposterous, however, is the apparent *immediacy of subjectivity*, the way it strikes us as a *source* of some kind upon reflection, hemmed not by astronomical neural complexities, but by rules, goals, rationality. In a basic sense, what could be *more* obvious? This *is* what we experience!

Or... is it just what we remember?

Journal of Theoretical Biology 266 (2010), 504-515.

And here's the rub. Once again Johnston finds himself confronting an insuperable discursive problem. Even with the dazzling assurance of experience, a perpetual motion machine is pretty damn hard thing to explain. The fact that most everyone *is* dazzled by the myriad guises of subjectivity doesn't change the fact that they are, quite

<sup>&</sup>lt;sup>41</sup>Stanislau Dehaene, Consciousness and the Brain: Deciphering How the Brain Decodes our Thoughts, (New York, NY: Viking, 2014), 79.

<sup>&</sup>lt;sup>42</sup> G. Gigerenzer, P. Todd, and the ABC Research Group, *Simple Heuristics that Make Us Smart*,(Oxford: Oxford University Press,1999).

R.Hertwig, U. Hoffrage, and the ABC Research Group, Simple Heuristics in a Social World, (Oxford: Oxford University Press, 2012).

Herbert Simon, "A Behavioral Model of Rational Choice," *The Quarterly Journal of Economics* 69, no. 1 (1955): 99-118.

P. Todd, and G.Gigerenzer, "What is ecological rationality?" in *Ecological Rationality: Intelligence in the World*, eds., P. Todd, and G.Gigerenzer, (Oxford: Oxford University Press, 2012), 3-30.

T. Zawidzki, "Theory of Mind, Computational Intractibility, and Mind Shaping," in Proceedings of the 9th Workshop on Performance Metrics for Intelligent Systems, (New York, NY: ACM, 2009), 149-154.

43 Justin T. Mark, Brian B. Marion, and Donald D. Hoffman, "Natural selection and veridical perceptions,"

<sup>&</sup>lt;sup>44</sup> Perpetual motion machines lack awareness and cognition, of course, but transcendental materialism, at this phase of its developmental least, seeks to elaborate the basic 'meta-transcendental conditions of possibility' of things like awareness and cognition. The entire project hinges on efficacy from nothing.

explicitly, betting on a perpetual motion machine. There's a reason, after all, why everyone but everyone who's attempted what Johnston has set out to achieve has failed. "Empty-handed adversaries," Johnston chides, "do not deserve to be feared." And yet the fact remains they've managed to bury *every single theorysuch as his.* 46

When you start interrogating that 'dazzling assurance,' when you consider *just how much we remember*, things become even more difficult for Johnston. <sup>47</sup> Because the fact is we really don't remember all that much. Kahneman's account of duration neglect *generalizes*. <sup>48</sup>Certain things escape memory simply because they escape experience altogether. Our brains, for instance, have no more access to the causal complexities of their own function than they do to those belonging to other brains. As the history of philosophy attests, we seem to experience next to nothing regarding the *actual* function of these systems, or at least nothing we can *remember* in the course of pondering our various forms of intentional problem solving. All we seem to intuit are a series of problem-solving modes that we simply cannot square with the problem-solving modes we use to engineer and understand mechanical systems. And, most importantly, we seem to experience (or remember) nothing of just how *little* we experience (or remember). We have no inkling of cognitive indisposition. And so the armchair perpetually remains a live option.

I say 'most importantly' because this means remembering doesn't simply overlook its incapacities, it *neglects* them. When it comes to experience, we remember *everything* there is to be remembered, always. We rarely have any inkling of what's bent, bleached, or lost. What is lost to the system, does not exist for the system, even as something lost.

Add neglect and suddenly a good number of intentional peculiarities begin to make frightening sense. Why, for instance, should we be surprised that problem solving modes adapted to solve complex causal systems absent causal information cannot themselves make sense of causal information? We are mechanically embedded in our environments in such a way that we cannot cognize ourselves as so embedded, and so are forced to cognize ourselves otherwise, *acausally*, relying on heuristics that theoretical

<sup>&</sup>lt;sup>45</sup> Adrian Johnston, "Interview with Adrian Johnston on Transcendental Materialism."

<sup>&</sup>lt;sup>46</sup> Perhaps they know kung fu.

<sup>&</sup>lt;sup>47</sup> David Roden is the most unflinching and clear-eyed critic on these issues as they bear on the phenomenological and normativist flanks of Johnston's position. See, "Nature's Dark Domain: an Argument for a Naturalized Phenomenology," *Royal Institute for Philosophy Supplement*, 72, (2013), 169-188. And particularly, "On Reason and Spectral Machines: an anti-normativist response to bounded posthumanism," in *Philosophy After Nature*, eds., Rosi Braidotti and Rick Dolphijn, (forthcoming).

<sup>&</sup>lt;sup>48</sup> Into what Kahneman calls, 'WYSIATI,' or 'What-You-See-Is-All-There-Is.' See his, *Thinking, Fast and Slow*.

reflection transforms into rules, goals, reasons, and other hazy obscurities at the limits of discrimination.

We are, biologically speaking, amnesia machines, astronomically complicated causal systems that cannot 'recall' themselves as such, and so take themselves for perpetual motion machines for the profundity of their forgetting. At any given moment, what we remember is all there is; there is nothing else to blame, no neuromechanistic background we might use to place our thoughts and experiences in their actual functional context, namely, the machinery that bullets and spirochetes and beta-amyloid plaques can destroy. We do not simply lack the access and the resources to intuit ourselves for what we are, we lack the resources to intuit this lack of resources. Thus the myth of perpetual motion, our conviction in what Johnston's 'self-determining spontaneity of transcendental subjects.'

The limits of remembering, in other words, provide an elegant, entirely naturalistic, explanation for our metacognitive intuitions of spontaneity, the almost inescapable sense that thought has to represent some kind of fundamental discontinuity in being. Since we cannot cognize the actual activity of cognition, that activity—the function of flesh and blood neural circuits that would seize were you to suffer a midcerebral arterial stroke this instant—does not exist for metacognition. All the informational dimensions of this medial functionality, the dimensions of the material, vanish into oblivion, stranding us with a now that always seems to be the same now, despite its manifest difference, a life that is always in the mysterious process of just beginning.

But Johnston doesn't buy this story. For him, we actually *do* remember everything we need to remember to theoretically fathom experience. For him, the fact of subjectivity is dazzling as dazzling can be—an "axiomatic intuition," remember? He never explains how this magic might be possible, how *any* brain could possibly possess the access and resources to fathom its structure and dynamics in anything but radically *privative* (intentional) ways, but then he's not even aware this is a problem (or more likely, he assumes Freud and Lacan have already solved this problem for him). For him, self-determining spontaneity—perpetual motion—is simply a positive fact of what we are. Everything is remembered that *needs* to be remembered.

We are never told how. The science he passes over in silence.

#### CONTRADICTION AND NEGLECT

The problem, he's convinced, doesn't lie with us. So in order to pass his own test, to craft a materialism absent cryptotheological elements that nevertheless explains all the

<sup>&</sup>lt;sup>49</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 204.

perplexing phenomena of intentionality, he needs some different account of nature. He needs ontology.

I've already noted the distinction he draws in the *Prologomenato Any Future Materialism I* between his own metaphysical project and those belonging to his fellows. The closest he comes to genuinely explaining the difference between his 'good' ontologism and the 'bad' ontologism of those he critiques comes near the end of the book, where he espouses what might be called a strongly qualified Darwinianism, one where "the chasm dividing unnatural humanity from natural animality is ... not a top-down imposition inexplicably descending from the enigmatic heights of an always-already there 'Holy Spirit' ... but, instead a 'gap' signalling a transcendence-in-immanence." To advert to Dennettian terms, one might suggest that Johnston sees the bad ontologism of Badiou and Meillasoux as offering 'skyhooks,' unexplained explainers set entirely outside the blind irreflexivity of nature. His own good ontologism, on the other hand, he conceives *phylogenetically*, which is to say more in terms of what Dennett would call 'cranes,' a complicating continuity of natural processes and mechanisms culminating in 'virtual machines' that we then mistake for skyhooks. <sup>51</sup>

Or perhaps we should label them 'crane-hooks,' insofar as Johnston envisions a 'gap' or 'contradiction' written into the very fundamental structure of existence, a wedge that bootstraps subjectivity as *remembered*...

A perpetual motion machine.

But the fact is, one doesn't have to look far to conclude that Johnston's ontologism is just more bad ontology, the same old empty cans strung in a different configuration. After all, he takes the *dialectical* nature of his materialism quite seriously. As he writes:

... naturalizing human being (i.e., not allowing humans to stand above-and-beyond the natural world in some immaterial, metaphysical zone) correlatively entails envisioning nature as, at least in certain instances, being divided against itself. An unreserved naturalization of humanity must result in a defamiliarization and reworking of those most foundational and rudimentary proto-philosophical images contributing to any picture of material nature. The new, fully secularized

 $<sup>^{50}</sup>$  Adrian Johnston, Prolegomena to Any Future Materialism I, 178.

<sup>&</sup>lt;sup>51</sup> Daniel Dennett, *Darwin's Dangerous Idea: Evolution and the Meanings of Life*, (New York, NY: Penguin Books, 1995). The problem Dennett faces is that short any systematic consideration of heuristics and heuristic neglecthe lacks any naturalistic way to cash out this fable. Despite flirting with the explanatory possibilities of heuristic neglect in *Consciousness Explained*, (London: Little Brown, 1991), 355-362, he abandoned the approach, leaving us with the admonition that "the absence of representation is not the same as the representation of absence" (359). There are unknown unknowns. And in the absence of any difference making differences, cognition has no choice but to paper over them. The age of the 'axiomatic intuition' is dead.

materialism (inspired in part by Freudian-Lacanian psychoanalysis) to be developed and defended in *Prolegomena to Any Future Materialism* is directly linked to this notion of nature as the self-shattering, internally conflicted existence of a detotalized material immanence. <sup>52</sup>

What this means is that nature, for Johnston, is intrinsically contradictory. Three things are generally supposed of contradictions: first, they logically entail everything; second, they're difficult to think; and third, they're conceptually semantic, which is to say, intentional through and through. The first two considerations raise the spectres of obscurantism and sophistry (where better hide something stolen?), but the third should set the klaxons wailing for even those possessing paraconsistent sympathies. Why? Simply because saying that reality is fundamentally contradictory amounts to saying that reality is fundamentally intentional. And this means that what we have here, in effect, is pretty clearly a kind of anthropomorphism, an example of the deathless intuition that the universe must somehow resemble us for us to belong to the universe.

I don't care how inured to a discourse's conceits you become, this has to be a tremendous problem. Johnston writes, "a materialist theory of the subject, in order to adhere to one of the principal tenets of any truly materialist materialism (i.e., the ontological axiom according to which matter is the sole ground), must be able to explain how subjectivity emerges out of materiality—and, correlative to this, how materiality must be configured in and of itself so that such an emergence is a real possibility." Now empirically speaking, we have no clue 'how materiality must be configured' because we do not, as yet, understand the mechanisms underwriting consciousness and intentionality. Johnston, of course, *rhetorically* dismisses this ongoing, ever advancing empirical project, as an obvious nonstarter. He has determined, rather, that the *only way* subjectivity can be naturally understood is if we come to see that nature itself is profoundly subjective... <sup>54</sup>

If the contradiction of the human can only be resolved by rendering the whole universe contradictory, then aren't we demystifying the local at the expense of mystifying the global? Earlier, I agreed with Johnston that the epiphenomenalists inevitably raised more questions than they answered. But how does his figure-field inversion avoid doing the same? Johnston critiques Meillasoux extensively for using 'hyperChaos' as an empty metaphysical gimmick, a *post hoc* way to rationalize the nonmechanistic efficacy of intentional phenomena. <sup>55</sup> And yet it's hard to see how

<sup>&</sup>lt;sup>52</sup> Adrian Johnston, *Prolegomena to Any Future Materialism I*, 19-20.

 $<sup>^{53}</sup>$  Adrian Johnston, Prolegomena to Any Future Materialism I, 27.

<sup>&</sup>lt;sup>54</sup> One can almost hear Spinoza groaning from his grave on the Spui.

 $<sup>^{55}</sup>$  Adrian Johnston, Prolegomena to Any Future Materialism I, 131-174.

Johnston gives his reader even this much, insofar as he's simply taken a certain regimentation of the enigma of intentionality (as dialectical) and *identified it with thecosmos*.

As we have seen, Johnston references the 'sad spectacle of a bunch of pulp fiction novelists arguing their worlds,'56 but as someone who's actually participated in that (actually quite hilarious) spectacle, I can assure everyone that we, unlike the sad spectacle of Continental materialists arguing their worlds, know we're arguing fictions. What makes such spectacles sad for the Continental philosopher is the presumption of a cognitive authority that simply does not exist in the greater world. Arguing the intrinsically dialectical nature of materiality is of a par with arguing intelligent design, save that the intuitions motivating intelligent design are more immediate (they require nowhere near as much specialized training to appreciate), and that its proponents have done a tremendous amount of work to make their position 'receptive, responsive, and responsible' to the sciences they would 'complement with a deeper understanding.'

A contradictory materiality is an *anthropomorphic materiality*, full stop. It provides *redemption*, not understanding of some decentred-me-friendly world that science has been unable to find. In his attempt to materially square the circle of subjectivity, Johnston invents a stripped down, intellectualized *fantasy world*, and then embarks on a series of 'fruitless comparisons between equally hallucinatory apples and oranges.'57

And how could it be any other way when all of these pulp philosophy thinkers are trapped arguing *memories? Vivid* ones to be sure, but memories all the same.

The vividness, in fact, is a large part of the whole bloody problem. It means that no matter how empty our metacognitive intuitions regarding experience are, they generally strike us as sufficient: What, for instance, could be more obvious than our normative understanding of rules? But there's powerful evidence suggesting our feeling of willing is only contingently connected to our actions (a matter of interpretation). The fact that our episodic memory is not veridical has crept into the common knowledge canon. Likewise, there is powerful evidence suggesting our explanations of our behaviour are only contingently related to our actions (a matter of interpretation). Even if you dispute the findings (with laboratory results, one would hope), or think that psychoanalysis is somehow vindicated by these findings (rather than rendered empirically irrelevant), the fact remains that *none of the old assumptions can be trusted*.

<sup>&</sup>lt;sup>56</sup> Adrian Johnston, *Prolegomena to Any Future Materialism I*, 170.

<sup>&</sup>lt;sup>57</sup> Adrian Johnston, *Prolegomena to Any Future Materialism I*, 170.

<sup>&</sup>lt;sup>58</sup> Daniel M. Wegner, *The Illusion of Conscious Will*, (Cambridge, MA: MIT Press, 2002).

<sup>&</sup>lt;sup>59</sup> See Peter Carruthers, "How we know our own minds: the relationship between mind-reading and metacognition." *Behavioral and Brain Sciences*, (2009), 1-65, for a comprehensive review of the research.

This bears repeating, since the science is only becoming more conclusive, not less: none of the old assumptions can be trusted.

Do you have any metacognitive sense of the symphony of subpersonal heuristic systems operating inside your skull this very instant, the kinds of problems they've adapted to solve versus the kinds of problems that can only generate impasse and confusion? Of course not. The titanic investment in time and resources required to isolate what little we have isolated wouldn't have been required otherwise. We are almost entirely *blind* to what we are and what we do. But because we are *blind to that blindness*, we confuse what little we do see with *everything* to be seen. We therefore become the 'object' that cannot be an 'object,' the thing that cannot be intuitively cognized in time and space (and so must be 'transcendental'), that strikes us with the immediacy *of this very moment*, that appears to somehow stand outside a nature that is allencompassing otherwise.

The system outside the picture, somehow belonging and not belonging...

And this just follows from our mechanical nature. For a myriad of reasons, any system originally adapted to systematically engage environmental systems will be structurally incapable of systematically engaging itself in the same manner. So when it develops the capacity to ask, as we have developed the capacity to ask, 'What am I?' it will have grounds to answer, 'Of this world, and not of this world.' 60

To say, precisely because it is a mechanism, 'I am contradiction.'

Something more.

Exceptional.

## FROM SCRIPTURE TO FANTASY

In my public lectures on fantasy I always stress the profound way the fantastic (that is, *especially* fictional) nature of anthropomorphic 'secondary worlds' turns on the sociocognitive dominion of science. *Harry Potter and the Sorcerer's Stone* inspired bookburnings, <sup>61</sup> I argue, because Christian fundamentalists reject the scientific worldview <sup>62</sup>—because their ontology accepts sorcery as natural. Evangelicals, rather famously believe that we humans are *special*. Words are spoken, and reality *listens* because it is fundamentally in tune with us, *intentional*, and only secondarily mechanical.

<sup>&</sup>lt;sup>60</sup> Author, "Alien Philosophy," *Three Pound Brain*, 6 December, 2015, https://rsbakker.wordpress.com/2015/12/06/alien-philosophy-2/.

<sup>&</sup>lt;sup>61</sup>DanielSchwartz, "The books have been burning," *cbc.ca*, accessed 13 December, 2015, http://www.cbc.ca/news/world/the-books-have-been-burning-1.887172.

<sup>&</sup>lt;sup>62</sup>Wilfred Sellars, "Philosophy and the Scientific Image of Man," *Science, Perception, and Reality*, ed.Robert Colodny,(Ridgeview:Humanities Press,1963), 35-78.

I generally conclude by holding up *The Fellowship of the Ring* in one hand and *The Holy Bible* in the other, and calling attention to the contradiction of the *same ontological form* at once cuing extreme incredulity and extreme credulity.

I could do the same with Adrian Johnston's works, insofar as what strikes him as scriptural, axiomatically revealed through intuition, would strike the scientist as out-and-out fantastic.

Johnston is, without any doubt, a *believer*. Despite all his claims about 'empty handed foes,' he must feel the anxiety—the sheer distance between his discourse and the alienating future it would redeem, and the way that distance keeps *growing*. The fact is the process that rendered scriptural worlds fantastic is an *ongoing*, *even accelerating one*. Disenchantment is happening all around us all the time, in the medicalization of what once were character traits, <sup>63</sup> in the statistical rationalization of more and more organizational contexts, <sup>64</sup> in the cognitive engineering of commercial environments, <sup>65</sup> in neuromarketing, 'nudge' governance, 'Skinner box' apps, commercial transcranial magnetic stimulation, and the list goes on and on.

Historically, the only thing preventing the obvious identification of his intentional secondary worlds as fantastic was the scientific inscrutability of the human. Now that the human is becoming empirically scrutable across myriad dimensions—now that his claims have a genuinely cognitive baseline of comparison—the inexorable processes that rendered meaning fantastic across external nature are beginning to render more *proximate* forms of meaning fantastic as well.

Johnston's characterization of negative causes as "peculiar realities unto themselves" 66 actually provides an excellent case in point. His "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," in particular, demonstrates the *disenchantment of the soulin action*. 67 Impressed by Terrence Deacon's 'abstential' formulation of the problem of meaning in *Incomplete Nature*, he writes:

<sup>&</sup>lt;sup>63</sup> Remember when you could blame students for their shortcomings?

<sup>&</sup>lt;sup>64</sup> Remember when professional sports organizations looked at players as individuals, rather than statistical ledgers?

<sup>&</sup>lt;sup>65</sup> Such as malls or websites, or video games, or movies, or wherever resources provide a glimpse of what lies behind our often deceptive verbal reports.

<sup>&</sup>lt;sup>66</sup>Adrian Johnston, "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," 27.

<sup>&</sup>lt;sup>67</sup> Deacon's characterization of the problems intentionality poses natural science is a compelling one, his history of the debate is interesting, his thermodynamic speculations are ingenious, though, as Johnston points out (and Deacon admits), they fall far short answering any of the questions he set out to answer. The big problem with *Incomplete Nature* is that it systematically avoids engaging its only real empirical competitor, some kind of interpretivism or eliminativism. As a committed naturalist, Deacon needs to acknowledge that we could simply be confusing differences in signal with differences in being.

This paradoxical intrinsic quality of existing with respect to something missing, separate, and possibly nonexistent is irrelevant when it comes to inanimate things, but it is a defining property of life and mind. A complete theory of the world that includes us, and our experiences of the world, must make sense of the way that we are shaped by and emerge from such specific absences. What is absent matters, and yet our current understanding of the physical universe suggests that it should not. A causal role for absence seems to be absent from the natural sciences. <sup>68</sup>

Negative causes pop up in our explanations all the time, as when, for instance, we note that someone was killed by a heart attack. Even though it makes effortless sense to think of a heart attack 'causing death,' the puzzles stack up when we consider how it's the *absence* of activity that's doing the causing, not the presence. Johnston seizes on this for the same reason that Terrence Deacon does in *Incomplete Nature*: it offers the tantalizing possibility of something very real, *something efficacious*, that is nevertheless *absent*.

After all, what could be more obvious than a heart attack?

One might also ask what could be more obvious than pulling off a bandage quickly rather than slowly. As we've seen, neglect has a way of turning the obvious on its head. To give you an example, what could be more obvious than that *money possesses intrinsic efficacy*? Just think of all things it causes, all the *buying* it does. Surely, it's not the *paper* that's responsible. Certainly this provides yet another example of negative causality, another 'peculiar reality unto itself' at work.

Not many Continental philosophers, I suspect, would want to attribute 'peculiar reality' possessing 'intrinsic efficacy' to money, particularly those who see it as an ideological shill, another way to conceal socioeconomic relations. In the case of money, they would be quick to affirm, obviously some kind of heuristic simplification is at work. Our experiences with money are simply triggering causal cognition, given the cognitive impenetrability of the vast network of extrinsic differential relations involve in the use of money, not recognizing genuine, otherworldly causes.

The problem, of course, is that Johnston has painted himself into a corner. "For transcendental materialism," he writes, "there are, so to speak, no illusions." As we've seen, his position takes the *reality* of things like negative causes (at least pertaining to subjectivity) to be *axiomatic*.

I'm also interested in negative causes, but for reasons quite different than Johnston's and Deacon's. To my eye, negative causes shout *neglect*, an instance where all

<sup>68</sup> Adrian Johnston, "Lacking Causes: Privative Causality from Locke and Kant to Lacan and Deacon," 25.

<sup>&</sup>lt;sup>69</sup> Adrian Johnston, "Points of Forced Freedom: Eleven (More) Theses on Materialism," *Speculations IV*, (2013), 94.

we remember in reflection, the cue for some heuristic cognitive operation, strikes us as all there is, *indeed all there could be*—a kind of free-floating efficacy. <sup>70</sup> I've tracked empirical research into essentialism for years now, convinced that it was only a matter of time before someone in the field embraced heuristics and began regimenting their experiments and studies accordingly. Recently, Andrei Cimpian and his colleagues at the Cognitive Development Lab at the University of Illinois have done precisely this. In a 2014 *Brain and Behavioural Sciences* piece outlining their theory and approach, he and Erika Saloman write:

we propose that people often make sense of [environmental] regularities via a simple rule of thumb—the inherence heuristic. This fast, intuitive heuristic leads people to explain many observed patternsin terms of the inherent features of the things that instantiate these patterns. For example, one might infer that girls wear pink because pink is a delicate, inherently feminine color, or that orange juice is consumed for breakfast because its inherent qualities make it suitable for that time of day. As is the case with the output of any heuristic, such inferences can be—and often are—mistaken. Many of the patterns that currently structure our world are the products of complex chains of historical causes rather than being simply a function of the inherent features of the entities involved. The human mind, however, may be prone to ignore this possibility. If the present proposal is correct, people often understand the regularities in their environments as inevitable reflections of the true nature of the world rather than as end points of event chains whose outcomes could have been different. <sup>71</sup>

This has been my thesis for quite some time, my *philosophical thesis*, speculative, yet naturalistically tethered, possessing a spectrum of directly relevant empirical inputs.<sup>72</sup> And for reasons quite independent of me, I'm sure, this is now the thesis that is being widely discussed and tested in the cognitive science community. It has become a bona fide empirical thesis.

<sup>&</sup>lt;sup>70</sup> Author, "Meaning Fetishism," *Three Pound Brain*, 2 November, 2014, https://rsbakker.wordpress.com/2014/11/02/meaning-fetishism/.

<sup>&</sup>lt;sup>71</sup> Andrei Cimpian and Erika Saloman, "The inherence heuristic: An intuitive means of making sense of the world and a potential precursor to psychological essentialism," *Behavioral and Brain Sciences* 37 (2014), 461-462.

<sup>&</sup>lt;sup>72</sup> Blind Brain Theory, as I call it, can and will be empirically sorted. The radical upshot of the theory is to simply hold that the intentional posits Cimpian and Saloman use here can *themselves* be understood as kinds of 'inherence heuristics,' once we appreciate the full scope and systematic nature of heuristic neglect. There need be no 'intentional behind the scenes' (be it normative, phenomenological, or ontological) simply because there is none. All we need do is explain why we persistently think there must be when we so obviously remain perpetually stumped collectively.

With Cimpian's inherence heuristic, we now have an *empirical alternative* to Johnston's transcendental account, heuristics to posit contra his 'peculiar realities.' We have a choice between accepting the laws of physics and assuming 'negative causality' constitutes a kind of inherence heuristic, a way to solve some systematic event on the cheap, or radically revising the laws of physics,<sup>73</sup> assuming that we can somehow metacognize, *remember*, instances of negative causal cognition well enough to warrant such a radical revision.<sup>74</sup>

This choice, of course, is no choice, especially when one realizes all the myriad ways we continuously attribute intrinsic efficacy. <sup>75</sup> We are prone, in conditions of information scarcity, to treat certain things as inherently efficacious, as a matter of empirical fact.

Just look at money.

So consider the bind Johnston now finds himself. As he writes, "[a]lthough a materialist philosophy cannot be literally falsifiable as are Popperian sciences, it should be contestable as receptive, responsive, and responsible vis-a-vis the sciences." He himself admits that "[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 *a priori* theoretical issues raised and resolved by philosophers alone." Though he hedges when he can, he appreciates the *cumulative* character of scientific discovery. So what could count as 'receptive, responsive, and responsible' in this instance—that is, aside from outright capitulation?

The important thing the Continental philosopher needs to appreciate here is that suddenly, dramatically, Johnston, even though he deems his position a priori, has found himself taking empirical positions (and bad ones at that). And this, I submit, is how it happens. Claims once inoculated by neglect and ignorance, so much so as to seem like dispensations of necessity, 'axiomatic,' find themselves becoming more and more empirically loaded as science generates more and more testable alternatives within their bailiwick. This is how traditional theoretical discourses find themselves delegitimized, and how their domains are ultimately disenchanted.

<sup>&</sup>lt;sup>73</sup> As impressive as it is this is what I think Deacon's *Incomplete Nature* ultimately shows, the sheer amount of revisionary work required to get nowhere near understanding intentional phenomena.

<sup>&</sup>lt;sup>74</sup> And the more we learn about metacognition, of course, the more obvious our blindness becomes.

<sup>&</sup>lt;sup>75</sup>Klaus Fiedler, "Meta-Cognitive Myopia and the Dilemmas of Inductive-Statistical Inference," *Psychology of Learning and Motivation* 57 (2012), 3-46.

<sup>&</sup>lt;sup>76</sup> Adrian Johnston, Prolegomena to Any Future Materialism I, 171.

<sup>&</sup>lt;sup>77</sup> Adrian Johnston, "Points of Forced Freedom: Eleven (More) Theses on Materialism," 91.

And the process, I assure you, is just getting under way.<sup>78</sup> Soon, the soul will be mobbed with empirical alternatives.

The ecology is changing beneath our feet. The old adaptations are beginning to fail catastrophically.

#### CONCLUSION

Is it not just *obvious* that all Johnston is doing is drawing a toe across the beach sand, declaring that his line tracks the Condition of the Ocean, and thus guards against the ever rising tide? This is the glaring pattern, isn't it, people lining up and saying, "No science! No! Necessity commands you stop here!" at points farther and farther up the strand?

Like you, I once thought humanity exceptional. Not so anymore. Now, I see knowledge and experience flying ever more wildly out of joint, humanity floundering.<sup>79</sup> I think theoretical meaning has always been a phantasm, and I fear practical meaning is doomed to collapse in the near future. I think the semantic apocalypse is already well underway. What we call 'intentional phenomena' and the kinds of extraordinary properties we're inclined to theoretically attribute them are largely artifacts of philosophical reflection, chimerical. We cannot figure them out because there are no such things. Millennia of discord provide ample evidence, I think, that traditional philosophy is a kind of cognitive crash space, 80 a problem ecology characterized by the reflexive reapplication of perpetually ineffective tools. Intentional cognition, on the other hand, is as real as any other set of cognitive mechanisms, as are the idioms we use to communicate and facilitate its operation. The problem, most simply put, is habitat destruction. Intentional cognition is heuristic cognition, which is to say, problem-solving bound upon cues which are bound in turn upon inaccessible differential relations to targets. As the distributed competition for technological efficiencies continues to ratchet further efficiencies—as capitalism continues apace—innumerable capacities will be adventitiously transformed at all levels of society, all scales, utterly levelling the differential basis of the cues that make human meaning work.<sup>81</sup>

<sup>&</sup>lt;sup>78</sup> The National Institute of Health received a 6.6% funding increase for the 2016 fiscal year, the largest increase in 12 years. Jeffrey Mervis, "Updated: Budget agreement boosts U.S. science." *Science News*, accessed 19 December, 2015, http://news.sciencemag.org/funding/2015/12/budget-agreement-boosts-u-s-science.

<sup>&</sup>lt;sup>79</sup> Author, *Neuropath*, (New York, NY: Tor, 2009), explores this disjunction in narrative form.

<sup>&</sup>lt;sup>80</sup> Author, "Crash Space," Midwest Studies in Philosophy 39 (2015).

<sup>&</sup>lt;sup>81</sup>Spike Jonze's Her provides a provocative as well as poignant example of the narrowness and fragility of 'human meaning space,' I think. Theodore begins with an OS that is obviously mechanical, then moves to

What I'm affirming is ontological mediocrity and epistemic humility. The flat-flooted assumptions of natural science, its workaday ontology, are all I need. Meanwhile, what I'm predicting is entirely consistent with the industrial juggernaut in our midst, the medicalization of character, 82 the decline of empathy, 83 the bloat of narcissism, 84 the accelerating attenuations of responsibility... 85

Johnston, on the other hand, believes in ontological exceptionalism, that some things transcend ecology. He believes in mechanisms as much as I do, he just doesn't think the working assumptions of natural science can be all there is. Of course, everyone has their own ideas on what that transcendence consists in, but Johnston really believes his formulation is the one. He thinks the mystery of how agency and nature come together is best solved by positing a dialectically pocked and fissured nature, then trailing into cryptic silence. We never need fear for meaning, on his account, because it stands outside ecology, entirely part of nature, only as, well, something missing. He knows this because he can inferentially anchor the idea (begging the very intentionality he's purporting to explain) in something that feels axiomatic to him.

As should be clear, Continental *fundamentalism* of this sort is no longer a viable discursive alternative. Uncritical intentional thinking has become atavistic thinking, plain and simple. Rank noocentrism. 86 Our only way to *discursively* cognize our

the intentional transparency of his initial relationship with Samantha, only to find himself entangled with something that can only be cognized as machinic once again, this time for the way it exponentially transcends human cognitive capacity. See, Author, "Artificial Intelligence as Socio-cognitive Pollution," *Three Pound Brain*, 29 January, 2015, https://rsbakker.wordpress.com/2015/01/29/artificial-intelligence-associo-cognitive-pollution/.

<sup>&</sup>lt;sup>82</sup> Peter Kinderman, A Prescription for Psychiatry: Why We Need a Whole New Approach to Mental Health and Wellbeing, (London: Palgrave Macmillan, 2014).

<sup>&</sup>lt;sup>83</sup> Sara H. Konrath, Edward H. O'Brien, and Courtney Hsing, "Changes in Dispositional Empathy in American College Students Over Time: A Meta-Analysis," *Personality and Social Psychology Review* 15 (2011), 180-198.

<sup>&</sup>lt;sup>84</sup> Jean M. Twenge, et al., "Further Evidence of an Increase in Narcissism Among College Students," *Journal of Personality* 76:4 (2008), 919-928.

<sup>&</sup>lt;sup>85</sup> In what I regard his most prescient paper, "Mechanism and Responsibility," Dennett speaks of this process as one wherein the effectiveness of the intentional stance is progressively degraded as the reach of the physical stance extends into more and more domains of human interaction. See, *Brainstorms: Philosophical Essays on Mind and Psychology*, (New York, NY: Bradford, 1978), 233-255. He also discusses it under the rubric of 'creeping exculpation' in *Freedom Evolves*, (New York, NY: Penguin Books, 2004), 288-308.

<sup>&</sup>lt;sup>86</sup> On Blind Brain Theory, 'noocentrism' is the correlate of geocentrism and biocentrism, each of which can be understood as the result of ontologizing ignorance and neglect also, only with respect to experience and cognition. See Author, "Reactionary Atheism: Hagglund, Derrida, and Nooconservatism," *Three Pound Brain*, 27 February, 2013, https://rsbakker.wordpress.com/2013/02/27/reactionary-atheism-hagglund-derrida-and-nooconservativism/.

experiencing is via our 'remembering.' The thinner this remembering turns out to be—and it seems to be very thin—the more we should expect to be dismayed and confounded by the sciences of the brain. At the same time we should expect a burgeoning market for apologia, for rationalizations that allow for the dismissal and domestication of the threats posed. Careers will be made, celebrated ones, for those able to concoct the most appealing and slippery brands of theoretical snake-oil. And meanwhile the science will trundle on, the incompatible findings will accumulate, and those of us too suspicious to believe in happy endings will be reduced to arguing against our hopes, and for an honest appraisal of the horror that confronts us all.

The age of scripture has drawn to a close. The words are there, preserved the same as always, but *they read as fantasy now*, telling of a time when our ignorance made us miracles unto ourselves.

#### **ACKNOWLEDGEMENTS**

The arguments in this paper have been extensively work-shopped on my blog, *Three Pound Brain*, and have benefitted immensely from the feedback of readers there. I would also like to thank Craig Hickman, Paul J. Ennis, and David Roden for their critical contributions to the present piece.

richard.scott.bakker@gmail.com