

Why Emergence Doesn't Emerge and Why Secondary Qualities Are Not Secondary^[1]

Fundamentalism failed. The idea that the world is structured bottom-up from a single “level” and from one set of relations, those found in the studies of physics, is no longer tenable. The thinking that, based on the overwhelming success of the hardest of sciences, physics is the foundation of being has quite a bit of rationale and justification behind it. There is no prospect to an end to such a destructive normativity in philosophizing, whose essence is to annihilate what does not conform. Yet, one finds that the cost of such a position that has rarely been assessed. There have been two paramount failures: 1) the failure to describe all higher-scale sciences in the form of strictly physics explanations, and 2) the failure to derive secondary qualities from primary qualities. Since there is a plenum of literature saying so much about both of these issues, rather than seeking further treatment, these will serve as motivation to develop an account of why and where things have gone wrong. As it is, there has been no retort to Meillassoux's claim that “...one cannot imagine an extension which would not be coloured, and hence which would not be associated with a secondary quality.”¹ Bluntly stated, the intention of the following is to argue that secondary and primary qualities deserve the same ontological status, and to argue that the world is not structured bottom-up, completely defined by physics, but that the world availed to the mind has been significantly dumbed down so that it may be comprehensible; that is, the modus operandi of key cognitive processes negate much of the infinitude that is the *real* world, in acquiring the contents of cognition, until there is only an abstracted —though still real— subset that constitutes the phenomenal world. Here, “abstraction” will be used in a sense that combines and goes beyond Cartwright's use of the term and Rand's use of “measurement omission”; and, perhaps, the sense in which the term is to be used is best exemplified by

¹ Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (New York: Continuum, 2011), 3.

David Milliern (Draft: Do not cite without author's permission)

Meillassoux's "contraction" and "subtraction," though there may be subtle differences. "Abstraction," "negation," "subtraction and contraction" (as a a collective process, in tandem), and "measurement omission" will be synonyms for the purposes of the present task, and it shall presently be clear why, if the reader doesn't already have a sense of why this is. Additionally, some of Meillassoux's ideas, such as those regarding the equality of status between secondary and primary qualities, will be employed, as well as some of his ideas on cognition, which also advance the thesis of negation.

Perhaps, the best way to begin is to start by painting a picture of the state of affairs consequent upon the fundamentalist schema, which will serve in presenting some of the key points that are to be critiqued. Historically, among the first and most important intellectual events that pushed thought in the direction of fundamentalism, consciously affording a special ontological status for the primary qualities was the move from Aristotelian physics—more general, the Aristotelian general mode of thinking about the world a holistic— toward Galilean physics. The ontological status of secondary qualities as being *less real*, or even "imaginary," arises from the sentiments of Galileo, as he his line of thinking follows:

But that it must be white or red, bitter or sweet, noisy or silent, and of sweet or foul odor, my mind does not feel compelled to bring in as necessary accompaniments. Without the senses as our guides, reason or **imagination** unaided would probably never arrive at qualities like these. Hence I think that tastes, odors, colors, and so on are no more than mere names so far as the object in which we place them is concerned, and that they reside only in [t]he consciousness. Hence if the living creature were removed, all these qualities would be wiped away and annihilated. But since we have imposed upon them special names, distinct from those of the other and **real** qualities mentioned previously, we wish to believe that they really exist as actually different from those.²

There can be no mistaking that disparate ontological statuses have been extended to primary qualities and secondary qualities, and that the distinction arises from a particular understanding

² Galileo Galilei, trans. Stillman Drake, *The Assayer*, 28. Accessed January 2, 2013. <http://www.stanford.edu/~jsabol/certainty/readings/Galileo-Assayer.pdf>

David Milliern (Draft: Do not cite without author's permission)

about the relation of the mind to the world, as well as a tacit pre-Kantian epistemology—or pre-Kantian understanding of cognition, more generally. The fact of the matter is that Galileo was consciously running counter to the Aristotelianism of his day, and that his work represented a methodological overthrow of Aristotelianism.³ Though Steve Clarke's use of "idealization" seems a bit confused—the reader cannot be sure as to whether Clarke means that the idealization truly exists in the phenomenal world or whether it is something that is artificially brought to the world for explanatory purposes—, one may take (*cum grano salis*) the commentary he offers as a productive and satisfactory explication of historical perspective and analysis. The analysis he offers is that Galileo took the view that "careful idealization leads straightforwardly to truth," and there can be little doubt that, even in Galileo's time, the normativity of the pragmatic "cash value" played a major role in this assessment by Galileo.⁴ The question to meet Galileo's assessment is a potentially humbling one: Is it that Galileo is correct, that the world is built from the ground up, by first principles, whereby fundamental laws are constitutive of Nature, which the mind has immediate access to; or is it the case that the feeble human mind can only make sense of part(s) of the world by stripping it down to simple individual fibers out of whole cloth?

Further, denial of secondary qualities has a fantastic legacy, especially in this era; and a most fascinating discussion has resulted from Dennett's treatment of secondary qualities qua qualia, essentially dismissing them, altogether: "So contrary to what seems obvious at first blush, there simply are no qualia at all."⁵ Problematic, however, is that such a position alienates the mind from the most natural, non-intellectual knowledge of the world, that of the phenomenological presence of the world. One of the assumptions that Dennett needs to make,

³ Steve Clarke, *Metaphysics and the Disunity of Scientific Knowledge* (Aldershot: Ashgate, 1998), 90.

⁴ Clarke, *Metaphysics*, 105.

⁵ Daniel C. Dennett, "Quining Qualia," in *Readings in Philosophy and Cognitive Science*, ed. Alvin I. Goldman et al. (Cambridge: MIT Press, 1993), 409.

like Galileo, is that abstractions are fundamental, not the phenomenological mode by which the first contents of cognition are acquired. Dennett is a fundamentalist in the most extreme and bizarre kind of way, not even wishing to acknowledge that sensibility precedes understanding; that cognition precedes recognition; and that objects recognized as such avail the mind only after some process of abstraction has been performed—a process that results in interwoven theory-laden products. Explaining away qualia seems deleterious to the philosophical project of understanding the world, as that line of philosophizing simply wishes to get rid of the most difficult components. If what Dennett has done is dug a hole out in Nevada, mafia style, with the intention of throwing in the carcass of the recently deceased idea of qualia, something similar is going on among the philosophers of science, who, in attempting to bring unity to the sciences through physics chauvinism, attempt to deny that something different is happening on different “levels” within the sciences. The emergence advocates, while having the right idea, in that something different is happening at different “levels,” the suggestion to be made is that they have it backwards: it’s not that some new principles appear because the goings-on are taking place at a higher level of complexity or size scale, but that the opposite is the case. That is, those properties, powers, capacities, relations, and so forth, that the emergentists think spring forth are really already there and science cuts them out, abstracts them away, and science does so as it defines particular research projects and sets its sights on varying interest-dependent models. (Models are taken to be as real as the phenomenal world, constituting a subset that has negated some part of the world to yield a satisfactory, pragmatic result, whatever the particular endeavor might be.) From these few points—explaining away of secondary qualities and the inherent convoluted schemes to account for emergence—the project is to develop a framework that affords for emergence in a different way than does the set of all emergentist accounts, and which

David Milliern (Draft: Do not cite without author's permission)

makes permissible the existence of secondary qualities, all the while not having to either rationalize how they derive from primary qualities, nor having to bury them in a ditch. The conclusion offered regarding Dennett, on the other hand, may be surprising, as it accepts his lines of argument, *in toto*, but suggests radically different final statements, *ex hypothesi*.

The way to begin is to absolutize the mind's relation to the world, which is the essence of the speculative turn. Instead of developing sets of *correlates*, such as subject/object, noetico/noematic and signifier/signified, for example, the idea is to accept as fundamental that subjectivization of experience is a false premise. (A kind of subjectivity, in a different form, will arise as a consequence of what follows, but this goes beyond the scope of the paper, and is left for the reader to infer.) The classical philosophical project has been to figure out how the phenomenal world is constructed out of forms or categories, when, in reality, what needs to be done is to supply a cognitive scientific framework that proceeds on the basis of lopping off some amount of all that comes in. That is to say, much the way in which a discriminator works in an electrical circuit (or any system where input is parsed to determine between signal and noise), converting the infinitude of stochastic analog amplitudes into digital outputs. It is not being argued that the discriminator analogy is a perfect picture of how a cognitive process like perception works, because there is some amount of interpolation going on in the discriminator — a slightly weaker than anticipated current in a circuit can result in a digital output, if the current is above some arbitrary threshold; but even this should not be ruled out, as it is currently understood that much of the human visual field is interpolated and filled in by memory. However, the argument goes further than the idea that perception, the presentation of the phenomenal field, is, alone, facilitated by negation. As adumbrated, it is maintained that the cognitive processes deriving any other forms of cognitive contents are also products of further

David Milliern (Draft: Do not cite without author's permission)

measurement omission from perception —the stipulation being that the mind's justificatory writ in doing this is that there is a natural theory-ladenness in all facets of world in which the mind operates. The idea, here, is subtle, but is not to be missed: rather than a world of eternal forms (or Kantian pure concepts, or whatever), the mind operates through a negative, not a positive process, wherein *what is* is stripped down to the point that it is manageable for the mind to work with. Juxtaposing this with the positive process, wherein the mind supplies form such that the material world can be recognized, regardless of extreme variations, the negative process is one in which error approximation is already accounted for —the analogy of the discriminator carries over well, in this respect—, and where measurement omission process is not fixed but can change, whether throughout human history or between different species (and throughout evolutionary history).^a

There are two ways to get at the result of this absolutizing, and they are (surprisingly) closely related, but the connections run far too deep to be explicated here. The first might be referred to as anything like “objectification of the real,” “making objective the conceptual-physical space,” “a Meillassouxian absolutizing that eliminates the correlates,” “linking subjectivity to objectivity,” or something along these lines, just to give the reader a taste of where this line goes. Essentially, it allies two unlikely philosophers, Quentin Meillassoux and Ayn Rand. The second approach is one that establishes a flat ontology by bringing together pragmatism and theory-ladenness, which is accomplished by way of van Fraassen's pragmatics of explanation.

Measurement Omission or Absolutizing Perception

When one reflects on Meillassoux's project in "Subtraction and Contraction: Deleuze, Immanence, and Matter and Memory," it becomes clear that there is something in it very, very similar to Rand's project in her *Introduction to Objectivist Epistemology*. What it is exactly that separates these two in the minds of most thinkers, almost ensuring that they are not present in any single thought, is that Meillassoux is often thought as being so wildly heterodox—and perhaps he does this by design vis-à-vis the poetic nature of the speculative turn—that it seems outrageous to (conceptually) place him next to a thinker (Rand), whose philosophy is sometimes considered to be a variant of commonsense realism, whatever the connotation attached may be. However poetic Meillassoux may or may not be, his project, as primary instigator of the speculative turn, is to ground what is traditionally thought of as "the subject" in such a way that there is no subject-object divide. In essence, the observer is being put first, in the sense that perception is absolutized, keeping in mind that Meillassoux constrains perception. Even the manner in which Meillassoux, calling upon Bergson—and, really, modern science of the visual field, oft explained by Daniel Dennett—, explains that the mind does not perceive by pure perception, noting the interpolation of memory into the visual field.⁶ Even though science is set of abstractions from the phenomenal, it is interesting that modern science embeds memory of some type into the phenomenal world. Since the flow of discussion has entered into interpolation of contents into the phenomenal field, a shift toward the nature of abstraction and Rand's philosophy would, at this point, prove valuable.

Rand's project is, on the face of it, quite different from Meillassoux's. What they have in common is that Rand's philosophy "on one foot" asserts that her metaphysics is "objective reality," while Meillassoux seeks to make primary the contents of experience. Now, these are

⁶ Quentin Meillassoux, "Subtraction and Contraction: Deleuze, Immanence, and Matter and Memory," *Collapse* 3 (2007): 67.

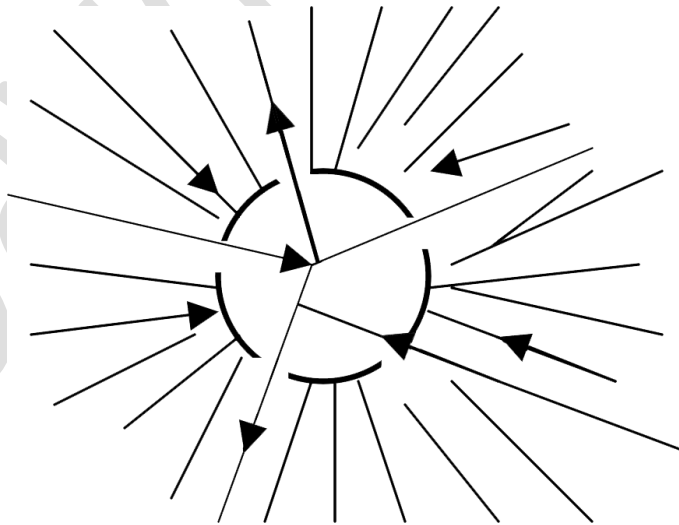
two incredible different ways of saying the same thing, namely, that the world of sensibility will be the only valid basis for reasoning and philosophizing, and all preternatural metaphysics shall be eliminate—or, more accurately, both seek to extirpate metaphysics, in the traditional senses of the word. From objective reality, Objectivism's epistemology goes about its business by measurement omissions: the perceptual contents of cognition omit certain measures, that is, characteristics, which permits generalization through integrating the post-omission cognitive contents.⁷ All knowledge will stem from sense experience, and it is left to the measurement omissions and integrative processes to derive it. One problem not addressed by the Objectivist epistemology is that, while abstractions from abstractions are permitted, no explanation is given as to why first-order, in-perception cognitive contents taken to be recognized (even cognized as separate from the background) are considered different from other cognitive contents. The point need not get too polemical, as it is well within reason that, just considering the neuroscientific component of cognition, the visual system is a receptor with some similarity to the sensors one will find on the other end of a discriminator in a circuit. Throw in processing hardware of the brain, and the notion that perceptual contents—which are theory-laden by necessity of understanding, and recognized as—are abstractions in a sense that places them on the same ontological status as what Rand calls “abstraction.” However, the concluding remarks at the end of this exposition will push for a much more radical understanding, on the basis of perception being first-order, in the sense that it is the world, while abstractions are secondary, relying upon perception.

Picking back up with Meillassoux, Rand's project fits well into the same forum of Meillassoux's notion of pure perception as a way of absolutizing and making objective

⁷ Ayn Rand, *Introduction to Objectivist Epistemology*, eds. Harry Binswanger and Leonard Peikoff. (New York: Meridian, 1990), 11-18.

David Milliern (Draft: Do not cite without author's permission)

perception. Meillassoux wants to eliminate the idea that there are things that can't be thought or perceived, though there may be things that the mind does not perceive or think —the poet and painter often perceives differently, probably on a higher aesthetic (perceptual input) level, than the physicist, for instance. Meillassoux lays out his notion of pure perception, saying, “The theory of pure perception is what we might call a *subtractive* theory of perception: it seeks to establish that there is less in perception than in matter —less in representation than in presentation.”⁸ In a bizarre turn —“bizarre,” because Meillassoux claims to not be an idealist, but a materialist⁹—, Meillassoux employs an unusual philosophical hermeneutic of a modern scientific principle, in part, quoting Bergson's *Matter and Memory*: “My body [the mind?] is thus a ‘centre of action’, not a producer of representations. Whence Bergson's double definition: ‘I call matter the aggregate of images, and perception of matter these same images referred to the eventual action of one particular image, my body.’”¹⁰ In sum, the picture that Meillassoux wants to paint is well explained by the representation is gives



⁸ Meillassoux, “Subtraction and Contraction”, 72.

⁹ Graham Harman, *Quentin Meillassoux: Philosophy in the Making* (Edinburgh: Edinburgh University Press, 2011), 165-167.

¹⁰ Meillassoux, “Subtraction and Contraction”, 72.

David Milliern (Draft: Do not cite without author's permission)

The diagram is intended to illustrate a number of things, but the broken boundary is particularly emblematic, suggesting that the mind has immediate access to that which is given, and that which is not, at some given time, available is due to a deliberate subtraction. While Meillassoux has been accused of platonizing reality, because of apodictic status given through the real immediacy of mathematics, which enters the mind as the given structure of the world, such accusations fail to realize that the same ontological status is given to those things that are traditionally considered to exist in the realm of aesthetics. He says, "So Berkeley was right to affirm that secondary qualities had as much objective reality as primary qualities..."¹¹ The difference, on this point, between Rand and Meillassoux is a metaphysical one; and it is by no means acknowledged across literature as being a major point that needs exploring, though it is: does abstraction come from the world, as an immanent piece of it, or is abstraction simply idealization, an artificial entity which is brought to the world. The former is the position maintained herein.

In typical, intentionally esoteric continental philosophical tradition, Meillassoux, of course, does not refer to measurement omission in the way that Rand does, but as "ascesis." There is some function to the terminology, because Meillassoux is trying to subvert the Kantian (i.e., "correlationist) project, showing that what happens in cognition is completely antithetical to Kant's synthesis. Meillassoux says, in his anti-anthropocentric fashion, "Perception does not connect, it disconnects."¹² The qualification that absolutely must be added to this pithy dictum, placing it in line with the purposes of the present exposition, is that this disconnecting occurs to suit the minds need for a sufficiently simply pabulum, that it may be sufficiently capable of operating pragmatically within the world.

¹¹ Meillassoux, "Subtraction and Contraction", 71.

¹² Meillassoux, "Subtraction and Contraction", 75.

Meillassoux does deserve a fair share of criticism, from the historical standpoint, because he erroneously aligns the Galilean revolution with the Copernican revolution, which could not be much further from the truth.¹³ As the above-cited passages in Clarke note, the shift from Aristotle to Galileo was the sort of thinking that brought on the corrupt notion that secondary qualities are ontologically different from primary qualities. Meillassoux would do his project well to ally himself with the Aristotelian philosophical heritage that his holistic project exudes, contra accusations of Platonism. At any rate, the second line of argument, which involves van Fraassen, pragmatism, and theory-ladenness, is connected to Meillassoux's project through the reordering of ontological status of entities. A brief purview of that approach should be presented, if for no other reason than to help the reader's imagination to understand the preceding parsimonious account.

The Flat Ontology Path^a

The grounds for this proposal is a philosophy of science that has been extended well beyond the original intentions of philosophers like Cartwright, Dupré, and Steve Clark, but especially Cartwright's. Such philosophers have dealt with the metaphysics of the hard sciences, and the relations between some element of a hard science, which has been abstracted away from the perceived world, and that "real" phenomenal presentation from which it has been abstracted. Cartwright is deserving of the focus, because Clark, Dupré, and others, it is maintained, confuse "abstraction" and "idealization," making it difficult to talk about one apart from the other. Let it be clear that idealization is typically associated with idea of bring something into the world that is not typically there. In others words, idealization means that when a marine biologist makes an

¹³ Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (New York: Continuum, 2011), 115-128.

David Milliern (Draft: Do not cite without author's permission)

illustration of a sea squirt, that illustration is of no thing in the world: the illustration is alien, in that it is not of any particular sea squirt, and so the illustrated does not exist. Something is brought into the world, an idealization. In opposition to this view, abstraction is subtly different, at least, in the way it is sometimes used in the literature and in the way it is to be taken I this exposition. As already noted in the introduction, abstraction, in the sense measurement omission, is the process of interest. In the question of whether there is unity or disunity among the sciences —the inquiry attempting to find how deep of a unity exists among the sciences, if any—, one finds an incredibly problematic concept that arises from fundamentalist, bottom-up worldviews, and that concept is the idea that there are levels. Then, of course, the debate about the ontological nature of these levels ensues, sometimes with claims that the levels are only epistemological. All of this occurs because *in-principle* talk and *this-is-nothing-but-that* talk, centered upon the bizarre, yet pervasive view that everything must be physics, leads to conclusions that are absolutely untenable, except in the highly imaginative minds of scientists and philosophers. These absolutely untenable conclusions are of the form: if it cannot be constructed out of physics, then it must be baloney (i.e., not real). Therefore, secondary qualities, Galileo argued, are not real; Dennett has argued that there doesn't appear to be a *where* in the mind, that is, a location in which the inputs of experience are bound, and so qualia are not real; and, quite frankly, nothing that is irreducible or not quantifiable is real. Then again, such philosophers have built in a backdoor, because there are just too many things that they want to exist that, by the stated standard, simply wouldn't exist. For instance, biology doesn't seem to reduce to physics. That's a problem. Chemistry doesn't reduce to nothing but physics. That's a problem. In fact, it doesn't seem like anything reduces to physics —a big problem. The reason this doesn't outright make everyone throw out fundamentalism on the spot is twofold: 1)

David Milliern (Draft: Do not cite without author's permission)

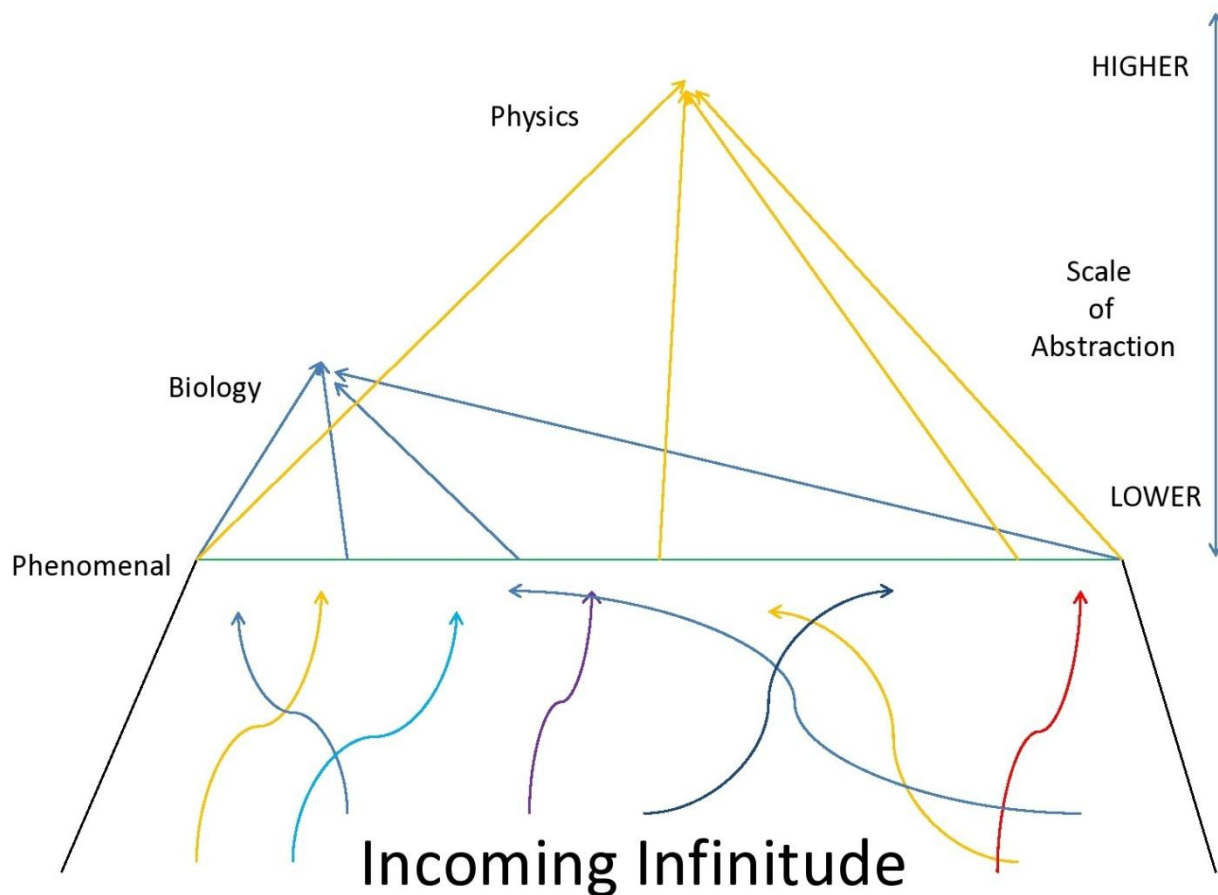
everyone agrees that, in some way, everything is made of one kind of stuff, and nobody wants to go back to a science with bizarre notions where supervenience doesn't reign, and 2) what other option is there, really, other than a physicalist bottom-up world. On this second point, the only option that has oft shown its face is some sort of Divinely ordered universe, perhaps, something like pre-established harmony. The first objective, at this point, is to demonstrate that, when the world is seen to be theory-laden and pragmatic (not as a meta-philosophy, the way James claimed, but as a first-order philosophy), unified through van Fraassen's pragmatics of explanation, there is no need to invoke magic-imbued levels that come replete with properties of "emergence" —and certainly no need for handwaving terminology, like "in principle." The second objective is to demonstrate that this picture of the world's structure is such that it provides another option —one that won't share the problems of the fundamentalist view—, satisfying the second of the above-enumerated issues, and showing that there can be a different kind of supervenience, one that does not concern itself with scales of size or complexity, but one of abstraction.

The work of Kuhn and Hanson lack no familiarity among philosophers of science, yet theory-ladenness' produces some question about the relation between rational processes and abstract thought, in science, and psychology; and, most will admit, that it is permissible to go ahead and replace the word "psychology" with "cognition." Rather mysteriously, Hanson and Kuhn present fascinating views of science and the nature of observation that bring about this grey area: it is certainly clear that elements from the cognitive sciences are at work in their writings, as they are explicitly noted, either by nature of the example or by citation of cognitive science literature, but the nature of relation and degree to which these cognitive science ideas being employed are real or metaphor. [This would be a good place for "Observation" by Hanson,](#)

and mentioning that there would be no need to call it a metaphor if the mind were pushed entirely to the periphery of the body and beyond.

Concluding Remarks: Where to Go?

The general conclusion is that fundamentalism bestows abstraction with the status of “first-order cognitive process.” Such is folly. The model that places perception, in the sense of sensibility, into the status of first-order cognitive process is the following:



The primary difference between this picture and the one presented by the fundamentalist is that the fundamentalist would have it turned upside down, where the bottom of the diagram would be the smallest scales, the top the largest size scales —or maybe the emergentist would convince them to add to the confusion by implementing in a scale for complexity. Instead, the presented diagram suggests that the truly fundamental, first-order “level” of the world is that in which the least content has been removed, the phenomenal plane. If one insists on flipping the diagram upside down, the world would only appear as pluralistic, which isn't wrong, but it is a perspective that arrives at a minor paradox: the world is both apparently plural and monist in its structure.

Further, the mode by which the mind acquires any knowledge comes by way of sensibility, namely, the phenomenal plane. If it is the case that what occurs is the processing of the phenomenal world by means of processes in the brain, this is only understood in a manner that is second-order, the first-order being phenomenal. Therefore, the claim is that the general philosophy by which various subject matters are approached should acknowledge the first-order status of the phenomenal. Of recent, philosophers have experimented with various arguments and the placement of the mind (e.g., some have extended it beyond the skin) and its nature. For example, the laudable attempt by Maturana and Varela, which, in addition to seeking after holism, sought to ground biological science on the notion that the observer is the basis for the science, as all contents of the science originate from within the contents of cognition of the observer.¹⁴ Unfortunately, their project collapses under the solipsism that results from the complete internalization of mind within their autopoietic system —try as they did to claim such

¹⁴ Humberto R. Maturana and Francisco J. Varela, *Autopoiesis and Cognition: The Realization of the Living* (Boston Studies in the Philosophy of Science) (Boston: D. Reidel Publishing Company, 1972), 8.

David Milliern (Draft: Do not cite without author's permission)

was not the case¹⁵—, and the failure to place all first-order stresses upon the phenomenal by placing stress on language as essential equivalent to the first-order presentation to the mind. Likewise, Dennett seems to have made two errors, both of which come precisely at the point of conclusion, which are erroneous only by virtue of their having been situated upon the wrong assumptions: the first is that, assuming that everything is in the head, Dennett proceeds to show that there is no unified consciousness inside the brain, a conclusion drawn by the fact that brain sciences have shown there is no unitary location where all the information goes to, e.g., the pineal gland pace Descartes¹⁶; the second being that, contra Wittgenstein, the ineffability of qualia (and the propensity to move intrinsicity into the head) informs all of the unreality of qualia.¹⁷ With regard to the second conclusion, Dennett fails to make a strange inversion of reason, namely, that the fundamentalist cannot account for qualia. In particular, he seems to take Wittgenstein's thinking and confuses two propositions: that which cannot be said is not; and that which is not cannot be said. However convinced of himself Dennett may be, all he has only *ipso facto* shown that there is no known conceivable way to (re)construct qualia from the abstractions of science. With regard to first conclusion, the faulty assumption is the placement of the abstract scientific schema over and above the phenomenal. What he has concluded is that the fundamentalist picture can't account (by scientific abstraction) for the givenness that avails the mind, as based on understandings of information flow, processing, etc. The remarkable feature of the phenomenal level of experience that distinguishes it from what Dennett has attacked (the Cartesian theatre) is that, in the experiential sense, the mind lives at the periphery of the body and even beyond it. Going beyond the periphery has been explored by Chalmers and Clark, in

¹⁵ Maturana and Varela, *Autopoiesis*, 53.

¹⁶ Daniel C. Dennett, *Consciousness Explained* (Boston: Little, Brown and Company, 1991).

¹⁷ Daniel Dennett, "Quining Qualia," in *Readings in Philosophy and Cognitive Science*, ed. Alvin I. Goldman et al. (Cambridge: MIT Press, 1993), 386 and 404.

David Milliern (Draft: Do not cite without author's permission)

their article, "The Extended Mind." The criticism to be offered, though they go quite a ways in contradicting Dennett by placing some of the cognitive processes outside the mind, is that they adhere to the abstracted schema of cognitive sciences as fundamental. While the modern geometer believes that he or she is constructing wholly within the mind (à la Hilbert), the ancient geometers constructed truths outside, beyond the encapsulation of their skin. Kant's project may be seen as having addressed this issue. After all, space, for Kant, was an external intuition, yet he makes the claim, which some have found quite bizarre, that, "I cannot represent a line, however small, without drawing it in thought..." (B203).¹⁸ The proposal is an answer to Chalmers and Clark's question, "If this thesis is accepted, how far should we go?"¹⁹: All the way, i.e., all of cognition should be placed at and beyond the periphery of what is traditionally thought to be the organism. The world is built, not from the bottom up, but from the top down, in the sense that all contents of cognition are first derived from the phenomenal level, and everything else is abstracted from it; and one may very well speculate that the mind, is an absolute relation between a system and an environment. It is no exaggeration to say that the world, in the realest and most complete sense, being built top down, is partitioned, contracted, and dumbed down so that the mind can efficaciously operate within it. In opposition to what Dennett thinks, qualia are not "metaphysical,"²⁰ in the sense that they somehow mysteriously undergird the mind's reality; instead, they are absolute access, first-order, to the known world, and the metaphysics enters in only after contemplation about what (if anything) has been

¹⁸ Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (New York: Palgrave Macmillan, 2003), 198.

¹⁹ Andy Clark and David J. Chalmers, "The Extended Mind," in *The Extended Mind*, ed. Richard Menary et al. (Cambridge: MIT Press, 2010), 37.

²⁰ Daniel C. Dennett, "Quining Qualia," in *Readings in Philosophy and Cognitive Science*, ed. Alvin I. Goldman et al. (Cambridge: MIT Press, 1993), 389.

David Milliern (Draft: Do not cite without author's permission)

subtracted in providing the world of experience, though such an exercise is, without a doubt, supererogatory for the scientist and philosopher of science.

[1] This paper is a broader picture of a more precise, considerably more abstract project, the foundation of which is presented in a paper, entitled “Abstraction as Dissection of a Flat “Ontology”: The Illusiveness of Levels.” The pre-print may be found at: <http://milliern.wordpress.com/2012/12/18/flat-ontology-and-the-onto-epistemic-stance/>. Some of the key elements, too long to be worked out above, are presented in a more thorough, if not more systematic fashion. Many conclusions presented in the original paper are taken for granted in the present exposition.