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PhD Thesis

Darwin's Ontology

The Consequences of Reciprocity

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I hereby declare that this thesis has been composed by Gerald Ostdiek, the undersigned, with intention to acquire the degree of Ph. D. at Charles University in Prague. This thesis represents an original piece of work and has not been presented in any previous application for an academic degree.

Gerald Ostdiek, June 2010

To Tom Rudloff,
with deep appreciation

For my first library at discount, and so much more:
like so many who have profited from your living,
I might never have found my self,
had you not assisted.
Thank you.

Those who call themselves most religious seem to me the least. They see themselves as committed in faith, I see them committing heresy. It is the irreligious, those who do without the comfy blanket of certitude, who are far more faithful than any such escapist. How we know is deeply a part of what we are able to know, which then becomes what we are able to do and by so doing it generates how and what and who we are. *Who we are* is, in a very real sense, a question of *how we know*. The relational algebra of epistemology is more basic than any presumed theology, and closer to our core binding, the *religio*, that is the *ground of our being*, but also the *first philosophy* of both rational construction and irrational abduction. These ontological complexes are both generated by and generating of belief, which is not a supernatural affair, but rather the propensity to action of some knowing actor engaged in some specific situation. While we cannot measure the *umwelt* that is the individual mind, we can measure the effects of actions. We know others by their fruit and the apples are falling. The most overtly religiously committed of our egoistically self-named species, *Homo Sapiens*, are often the least able to adapt and learn, to live well with their neighbors or even to see their neighbors as human as themselves. They are less able to weave their selves within the world and thereby foster greater and deeper living. To me, this makes perfect sense. Those who claim to *have* religion very often refuse to *do* religion; they do not give of themselves to the world or bind themselves within it. Their interest in maintaining some grand self-ideation has trumped the needs of both their actual self, and their other self, which is the natural world from which their self emergences and without which their self cannot be. All too commonly, *to be religious* is not just the degree to which one opposes science or claims unsubstantiated but absolute knowledge, but the degree to which one has stopped believing in the world in which one lives, stopped acting in concert with nature, and turned away from life. The consequences of such 'faith' are, to some greater or lesser extent, evil. And we render judgment pragmatically, by measuring the consequences of specific actions from within the shared context that is our world. To the extent that any metaphoric arc impedes the fostering of our greater selves, in and through the world, internally and externally, as individuals and cultures within the *actual* world, it is evil. And evil is the word for the torture inflicted by the scorched earth tactics employed by all the insecure and unattached people falsely claiming to own our shared gestalt. By and large, this essay is a study of the historic reconstruction of base concepts of and within being and knowing, religion and ethics, believing, good, bad, evil, etcetera which is both demanded by and resulting from the semiotic retooling, the philosophical rebinding and epistemic reconstruction, that laid the foundation for the science of Charles Darwin.

This is Darwin's Ontology. JT Ostdiek

Darwin's Ontology: the Consequences of Reciprocity

Abstract:

This essay follows a path laid down by the collaboration of Charles Darwin with Chauncey Wright, so as to explore the niche subsequently developed by Wright's closest friends, especially William James and Charles Peirce. Charles Darwin offered us no definition of life, and certainly no definition of being; he seems never to have been particularly interested in either his theological studies or any of the philosophy that happened his way. However by definition, he did operate by means of – and through the agency therein – a specific ontological set. His was one wherein the quickening of life is reciprocal becoming. Despite the obvious efficacy and élan this set has offered and vast libraries devoted to the man, Darwin's Ontology remains woefully under studied.

And yet Darwin did specifically engage Wright to develop philosophical considerations of his science, a study which came to demand a redefinition of thinking itself, of sapience, and of the consequences of rationality which include the various constructions we call science and religion, knowing and believing, culture and self, but also cause and effect, existence and being, and more.

We will follow the various streams of influence and chart some of the confluences therein, primarily through the immediate encounter of Wright with Darwin, and then on to chart the development of Darwin's Ontology within/throughout some principle features of James and Peirce. Our intent is to critique and thereby clarify our mental mapping, and better adapt it to the terrain we inhabit. Our methodology and purpose will follow each other; they are at once pragmatic and historical – to study the record of the past so as to open more potential for extended continuity, future study and greater being, by performing in real time acts of metaphysical ecopoesis.

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Introduction

As a tag for a particular flavor of philosophy, Pragmatism explicitly favors three particular arguments: that in reasoned speculation as well as experience in actuality consequence has priority over cause, that no postulation, be it belief, theory or claim of facticity – down to the simplest posture of doubt, can escape constant and continual modification, and that no postulation can ever receive any kind of metaphysical warrant. These conceptions have consequences which, in certain quarters, are thought to place Pragmatism beyond the ken of 'civilized' philosophy: but they also define the most basic perceptions of Darwin's long argument, which are that no ideal exists, no form is ever finished, no phenomena ever complete, and that no being can be defined in and of itself. Continually changing circumstances continually redefine what is "fit" (to use Spencer's term), making it, in every way, a relative term; this is to say that to define fitness as Spencer did, in essential terms, or to claim any sort of vulgarly neo-platonic agent (be it genetic, hygienic, or hegemonic) in the shaping and sorting of living things, is to disassociate from Mr. Darwin and to reject the ontological set within, and with which, Darwin formed his long and profound argument.

For the man did more than revolutionize the manner in which species are defined; rather, Darwin took from his boxes of collected specimens, an ontology so revolutionary that, to this day, most of his critics – along with many of his self-purported adherents, cannot grasp it. Speaking philosophically, this ontology rejects the supposed division of being into subjective and objective categories as an absurd and vulgar Neo-Platonism. Instead, it posits that subject (this-ness) is in constant re-negotiation with, and dependent upon an incorporation of, object (that-ness); and that this mutuality is reciprocal, continual, and scale thick. This activity is what actually is, making such conundrums as the delineation of Cartesian duality a trifling fiction. Of course this critique of Descartes must come with a caveat: it can be argued that much of his subtlety was lost on his followers and that the problem stems, not from Cartesian thought, but from Neo-Cartesian. This distinction is not dissimilar to the Platonic/Neo-Platonic divide, and this thesis will posit similar considerations of Darwinian and Neo-Darwinian thought.

Of course, as Whitehead pointed out so many years ago, Descartes, along with most of western philosophy, could be described as just a footnote to Plato; the argument here is that the same could be said for Mr.'s Paley, Agassiz, and W. J. Bryan; and as we shall see, this list must include Richard Dawkins – but not Charles Darwin. There is no essence, nor is there any essential scale or base level of being; and neither spirit nor system, neither species nor genes, neither Gaia herself nor any individually autonomous agent existing therein and thereby; quite simply, *nothing* can claim fiat over the social cultures, the events which are us, our work, and our world; and which define, however loosely, our speciation of being. While Dawkins claims one scale as *the* scale, and works *outwards* from there, Darwin wove together multiple scales, and claimed fiat for none.

A further consequence of this Darwinian Ontology is that the very idea of speciation, as with the delineation of any species – be it of forms of life or categories of being, must never pretend to be clear and distinct, as seen early by Charles Peirce. As the individual being interacts with its environment, it both alters and is altered by its surrounds. Likewise, individuals exist as members of populations, wherein succeeding generations (events) incorporate these alterations in their own time and place, leaving behind trails of co-ordinations that themselves defy clear and distinct categorization. Again, Darwin did not merely redefine this or that species – he redefined the concept of speciation to exclude any reason for any kind of Essential or Metaphysical Form, Final or Metaphysical Cause, and Transcendent or Absolute Ideal. 'Species', like 'fitness', is a relative term. These grand abstractions depend on the speciation of mind and matter that is, in Descartes' words, clear and distinct; whereas the Darwinian view of species involves a certain fluidity of definition that Neo-Cartesians, as well as Neo-Platonists and certain Neo-Darwinists, would scarcely recognize as valid. But these days, a century and a half after the publication of Origin, we must either recognize this logic and deny the term 'fixed' to all our concepts and categories – and also the term 'ultimate' to any single scale of life, or give up our claim to knowledge, collapse the project of Enlightenment, and retreat to nihilism and know-nothingism. This option, however, is suicide.

It is central to this thesis that while pseudo-proponents and opponents both rail against and railroad Darwin's very pragmatic depiction of what actually happens as species originate and the fluidity of definition that is implied therein, they ordinarily do so while blatantly insisting that their argumentation is (and possibly they themselves are) clearly and distinctly ideal. Such unbalanced subjectivity is effectively countered by the palliative effect/effort of the ideational (ontological, epistemological and ethical) set implicit within Darwin's Ontology and explicit within the subsequent philosophy of Pragmatism, a philosophy formed of and within encounters with Darwin's science. This exploration involves a redefinition of major concepts of human experience, including truth and meaning, ethics and religion, and being itself. It should be of no surprise that religion is a significant focus of Pragmatic thinkers, even while Pragmatism itself cleaves to the epistemic method of contemporary science.

That Pragmatism originated in a study of Darwin's science is a well-documented affair, but the view of being that lies behind both is not. This essay is centered on the work of Chauncey Wright, a man long and falsely accused of *shallow* positivism. Darwin cites Wright twice in Descent, corresponded with him until his untimely death, and wrote to and about him in glowing and familiar terms. For his part, Wright published several essays concerning phyllotaxy, the mathematics of beehives, the organic qualities of weather systems, and the failure of Spencer to grasp the true implications of Darwin's theory. ("He did with the word 'evolution' what Agassiz did with the word 'creation': he erected an idol"[I]). We will soon turn to Wright's philosophy of science, developed as it was through his study of Darwin's Ontology, as well as the demands it makes upon both science and religion. In this intertwining of ethics and epistemology we find an empirical and materialistic condemnation of reductionism – that school of thought mistakenly identified with science. To get there, it will behoove us to spend a moment defining being *qua* being, which takes us to our first chapter. And so: *We now begin the science of the properties of all things in general, which is called ontology.* [II]

[I] *Wright, C. Spencer's Biology, Nation, 2 1866*
[II] *Kant. 1997 pg. 140, Lectures on Metaphysics, Part III*

Ontology for the Living

Pointed threats, they bluff with scorn
Suicide remarks are torn
From the fool's gold mouthpiece
The hollow horn plays wasted words
Proves to warn
That he not busy being born
Is busy dying.[1]

The Origin of Species sought to define how species come into being; in doing so it makes presumptions of what it means for life to be. In this way, *Origin* can be read as a work of theoretical ontology, as well as biology. But how do we approach this book in this way? Darwin says: do it tentatively.

To define is to circumscribe, that is, to write a wall of words around some specified finitude; enclosing, corralling, – baiting a trap, capturing, and domesticating a wild event in time and space (which is to say, some *thing*). The important part here is the domesticating: we define things for the same reason that man first captured wild fowl. And it is similar to why a butcher sharpens his knives: to make better use of them. This is difficult enough when attempted with non-living matter, and becomes well nigh impossible wherein life is concerned. Life! As with Art, Pornography and even domesticated wild fowl, we know it when we see it, but stumble like sleep-deprived sophomores at every attempt to describe it.

Picture in your mind's eye a lately differentiated hominid – running, scrambling, chasing after and finally catching some wild *sign* (feeling bold she may even try for a *signifier*); then acting with premeditation (naturally making an unnatural act) to take it home, care for it, feed it, raise its offspring, and eat *them* – rather than make that same mad scramble a daily affair. Such a giant leap for a single man, such a small step for mankind! It took roughly five thousand years, perhaps as few as 250 generational iterations, for mankind to go from the domestication of Red Junglefowl (chicken) to the possible beginnings of a

[1] *Dylan, 1965, It's Alright Ma (I'm Only Bleeding)*

domestication of the *signifier*: chicken. We had long since learned to capture and use such definitions, and to keep and feed them well; but the raising of viable offspring remains a catch as catch can proposition, and our skill at breeding them intentionally for desired traits has long been beyond reach, a distant goal barely realizable. Worse yet, whatever mastery we do have is blatantly marginal: our supposedly tame *signs*, wild little beasties every one, run rampant – how easy it is that some animals become more equal than others –! To chase after life is common enough, but to circumscribe 'life' – to speak of it, to define it usefully and well, and to know its being – seems to have been a task beyond the ken of the heroes of olde, and equally beyond all that we can now accomplish.

It seems to be as Wittgenstein said, "We can only *describe* and say, human life is like that."[I] Accepting this logic, we must face it. We must (again) choose whether or not we will advance the entire project of the Enlightenment and its deeper reach into the quest implicit in our self-appellation *Homo Sapiens*; or if we will retreat into know-nothingism. To accomplish the former, we must again step forward, and chase yet another sign (or rather, another set of signage). To cross that Delphic threshold is to birth our selves anew; we do this through careful attention to our selves, our situation, and the specific relationships that these entail. And we express our attention through practiced development of competent signifiers. So, following Darwin's lead and applying his ontology we proceed (tentatively, provisionally) to describe what cannot be defined, life.

Life: any physically coherent structured complex which depends upon constant and continued but rhythmic, regular and regulated, incorporation of extant matter as well as excorporation of defuncted matter, such that it can extend its self in time and space by mutual envelopment, by taking part in greater processes through scale thick development of functioning relaters instanced in moments of selective response, and endure by maintaining coherence as well as continuity through incessantly transformative and potentially deadly experience and, importantly, grow so as to create its own completion, draw its own circle, become ever more itself in the face of, the immanence of, its own ending, and counter that ending by minding that which is its larger self, the complex of

[I] *Wittgenstein, 1993, pg. 123, Remarks on Frazer's Golden Bough*

reciprocity (the *umwelt* or *ecosystem*) that is on one hand its specific aspect or agency, and on the other its immediate situation, extended so far as relevance pertains.

Though I hasten to clarify that this is not of Darwin's hand, but derived from a study of his ways and means, I postulate that for Darwin, all this is life; and as Darwin wrote:

> There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.[I]

We begin at the end of *Origin*, the closing sentence of the 6th and last edition, and a tantalizing peek at our ontological definition, we will again and again return to our *significant*: life. And as go, we – as Darwin – *a priori* avoid ontological argument. In this final verse of his epic long argument, Darwin poetically references *Creator*; and then, with equal poetry, *Newton's Theory of Universal Gravitation*, but neither here nor elsewhere in his published work does he make use of ontology as such:

> Ontological arguments are arguments, for the conclusion that God exists, from premises which are supposed to derive from some source other than observation of the world — e.g., from reason alone. In other words, ontological arguments are arguments from nothing but analytic, *a priori* and necessary premises to the conclusion that God exists.[II]

It is impossible to reckon that Charles Darwin, who did complete a BA in theology, was unaware of this context wherein, even when (if only temporarily) setting aside the object of such argumentation, we can define ontological implication as explicitly non-empirical, as conjectures of syntactical metaphysics, or of metaphysical syntax. Yet this scion of nonconformity also held some formal background in medicine – a relentlessly pragmatic discipline if ever there was one – as well as a strong family tradition and evident personal interest in the study of natural history. Last but not least, he also held both intimate and extensive familiarity with the practice and theory of, as well as controversies within, the

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[I] *Darwin, 1872, pg. 429, The Origin of Species by Means of Natural Selection*
[II] *Stanford Encyclopedia of Philosophy*

scientific paradigms reigning within his time, place and culture. While Darwin would have been familiar with the teleology implicit to such 'ontological' argumentation, he rather choose to embed himself within a near Humian rendition of Baconian Empiricism, and hence, treat even his own abstract constructions as if they were live coals – helpful when handled with healthy skepticism and careful concern, but quite capable of burning down your house if haphazardly kept. And so he did not explicate his own startlingly vital ontological considerations, but buried them where, in this conception, they would be most useful: deep in massive collections of data capable of empirical challenge. It is debatable how actively he even considered these considerations; his extant work contains little in the way of metaphysical musings. And yet, however unvocalized, perhaps even unpremeditated (unconscious) they may have been, Darwin's metaphysics, the underlying conceptions of being that informed his methods, means and motives, and which interwove his will and his way, stands unrivalled among its peers: no honest debate remains about the vitality, the efficacy, the *elan*, of his challenge to age old and unworkable standards of ontology circumscribed within its traditional bounds.

Here I speak of ontology in its normative sense, Ontology:

> 1. A science or study of being: specifically, a branch of metaphysics relating to the nature and relations of being; a particular system according to which problems of the nature of being are investigated; first philosophy.
> 2. A theory concerning the kinds of entities and specifically the kinds of abstract entities that are to be admitted to a language system.[I]

While the first of these definitions applies directly to both philosophy in general and this thesis in particular, the second applies specifically to the intersection of Knowledge Theory and research in Artificial Intelligence, i.e. Tom Gruber: "An ontology is a specification of a conceptualization", and only peripherally to this thesis. We will leave the second aside focus on the first, but not until after one quick but necessary caveat that ties the two together: ontology is most commonly thought to be limited to a (or worse yet, *the*) study of *categories that exist, or may exist in some domain.*

[I] *Webster's Third New International Dictionary*

This tracks perfectly with Gruber's use of the term,[1] as well as most, if not all, philosophical study of formal ontology. However it fails to allow for Darwin's Ontology, which sees cataloging as utterly adjunctive to being, hence, not central to the study thereof. Interestingly, Gruber does allow space for Darwin's Ontology within his field by limiting ontology to ontologies, by defaulting to a kind of vulgar neo-pluralism and postulating a vulgar kind of Neo-Late-Wittgensteinian cavalcade of world (cosmic) gaming. In other words, his default position is 'relativism' – though I hasten to emphasize that to the best of my knowledge, while Gruber holds this position as necessary within the study of artificial (designed) intelligence, he has wisely not claimed this depiction of ontology to be universal or axiomatic, or necessarily applicable to natural being.

Meanwhile but on the other hand, traditional ontology tends to claim verifiable knowledge of, not *some* domain, but *the* domain. Thinkers operating therein tend to default, often unwittingly, to a simple and vulgar realism, even in their most abstracted metaphysics. Those operating within either of these ontological approaches, pseudo-Gruberian relativism and traditionalist metaphysics – are hindered in any attempt to grasp Darwin's radical metaphysics, or even recognize that he developed one. They likewise tend to misunderstand the myriad implications of his vast accumulations of empirical data; their scientific approach is hindered by failure within their philosophy.

And so straightaway we see the primary difficulty in discussing Darwin's Ontology: it requires a fundamental rethinking of the term, 'ontology'. The commonly held view of ontology (within and without philosophy) is limited (perhaps made dysfunctional) by its similarity to Gruber's use of the term: *the study of categories*. In Darwin's Ontology, categories of being are only species, that is, they are mutable, accidental, and contingent. They have no essence separate from their interactive existence and no metaphysical essence (being that is not derived from interactive existence) at all. It should be of no surprise that this is similar to the Radical Empiricism of William James, wherein being is the incessant interaction of varying potentialities, interaction which includes all acts of interpretation (a rationally – though most often *not* consciously – constructed separation of this potential into various aspects). Categories only exist subsequent to interpretation

(to being 'read' into being) and are thus subject to the interpreter's foibles (including the capriciousness of 'Mother' Nature). As such, to presume that ontology is a study of categories is to determine an outcome for the study before it even begins. Such studies, however practically sophisticated, will always remain both arbitrary and fictional, and are bound to lead to a corruption of reason, and subsequent difficulties in successful living.

The danger inherent in the willy-nilly application of a Gruber's use of the term is that it tends to justify an unsupportable 'relativism' – a tinker-toy conception which has clearly lost all sense through the countless straw-dog attacks upon it by those who cannot seem to grasp that the concept *to relate* is itself related to the concept *to be related*. It will become apparent throughout this thesis that in Darwin's Ontology the common use of the terms 'relative' and 'relativism' (now bracketed within 'air quotes' so as to indicate ironic disagreement) is utterly and dangerously absurd. Perhaps the only greater danger to/within epistemological success is the absurd polar opposite of this absurdity, 'objectivism', which is the claim a singular 'world' or Gruberian set that is known through some absolutely warranted but inexplicable act of fiat, and frequently stated in that unambiguous way *but it just is*, or alternatively, *oh that's just a theory, this is fact*.

Returning to our dictionary's first definition of ontology, we see three conceptions, all of which are linked into a fourth: ontology as a science or study of being, a study of what actually *is* – coupled, as it must be, with a study of what *is* is. Of course by postulating that Darwin offers us an ontology, we implicitly act on two of these three concepts and use the word exactly as said: to signify both or either *system* (a genus even) and/or *branch* (phylum) of philosophy. But ontology as *first philosophy* carries rather more baggage. However, by leaving aside its vast heritage of implication, innuendo and usage, the phrase does quite neatly sum up much traditional formal ontology – though only in the sense of 'limiting' first philosophy to signify mere cosmogony! This is to say that, even when not cognized, our conceptions of (we could say, our speciation within) ontological principles inform, shape, guide, and even make (initiate/conclude) whatever else we do in our lives – it lays parameters, not only of *life* and *living*, but *of* and *for* our *own* living, becoming our very own functioning *a priori*, our own first principle(s).

Paradoxically, Darwin's ontology is less interested in firsts, as in origins, and more interested in continuation (seconds, thirds, fourths, *ad infinitum*). Quite to the contrary of some badly read notions of Darwin's work, he does not postulate on the origin of life. Likewise, he offers no definition of life, and certainly no definition of being. However by definition, he did operate by means of – and through the agency therein – an ontological set: and by unpacking that set, we can define, that is domesticate, its particulars.

To get there, we must identify our signifiers and verse ourselves in their use; the term ontology is itself one such marker that need be reset. Darwin individually tasked one man, Chauncey Wright, to address this challenge, and Wright's changing use of the term offers us an excellent view on how we might accomplish exactly that. In two different reviews of two different books of science and philosophy we see two very different views of ontology from the same young man. Of course, Wright also knew of the depiction of ontology as *removed from empirical (actual) knowing*, and we see this in his review of *Recent British Philosophy* where he tells us: "Ontology means the science of the supernatural, of the non-phenomenal."[I] But he also came to see this as a dysfunctional minding, an insentient notion in need of mending. From his review of *Problems of Life and Mind* by G. H. Lewes we see Darwin's Gawain with the cup in his hand, renewing the marriage of man and nature by redefining the terms of the binding. Speaking of Lewes, Wright tells us:

> His issue with Plato was that Sophia is not eternal in a world of ideas, and is not born in the man except as a greater power of observation, induction, and clear thought making the most of its means and opportunities. Though his first philosophy was also called ontology, since it dealt with the relations of things merely as things, or with what was common to all objects of scientific comprehension, yet he gave no warrant for the meanings which the terms ontology and metaphysics afterward acquired, and which they now have in relation to sources of knowledge, supposed to be distinct from proper scientific evidences. These terms have become so far identified with the doctrine of transcendentalism, the modern form of Platonism, that is, with supposed or supra-sensible grounds of valid belief, that they have been discarded by many modern thinkers as tending from their acquired meanings to associate in the mind falsely the objects of legitimate speculation in the most abstruse problems with

[I] *Wright, 2000, vol. 1, pg. 344, Masson's Recent British Philosophy*

> that solution of them which is by no means accepted or acceptable to the clearest thinkers.[1]

We quite actually need a *first philosophy* if ever we intend to do philosophy, or science, or any kind of thinking at all, however, no such foundation will function as well as it otherwise would when we deify, or merely fetishize, conceptualization itself; moreover, our problems multiply geometrically when we so arrogate whatever subsequent concepts to/in which our psyche adheres. Quite so, BS makes a poor foundation for any edifice. And the evidence of this dysfunction is written into the history of the human race. This principle is especially applicable when thinking religiously, when unconsciously abducting meaning from within whatever situation through/in which we find our selves existing. Binding ourselves into dysfunctional thought forms is no ticket to success in any field of living endeavor, and yet living itself is a binding, something none can escape and still live. It is a Gnostic Marriage, a mystical and unknowable event, a complex at critical mass cresting over and over that point whereupon the whole becomes greater than the sum of its parts and new life crawls upon the earth. Yet too, the fact remains that dysfunctional marriages will often produce as many children as functional ones; this complicates our task at hand, which is to discover a method of distinguishing the two.

This is a story of how Chauncey Wright, through his close study of the science of Charles Darwin, discovered/generated/sought to domesticate a set signifiers capable of casting such thoughts into *a posteriori* argumentation capable of both logical and empirical challenge, of how he learned to rethink thinking by rethinking being, and of how he and his close friends, a large circle which included at its center William James and Charles Peirce, came to demand the same of us all.

[1] *Wright, 2000, vol. 1, pg. 361, Lewes's Problems of Life and Mind*

Origin and Encounters

I do not know which to prefer,
The beauty of inflections
Or the beauty of innuendoes,
The blackbird whistling
Or just after.[I]

While it is true that Charles Darwin was seldom prone to seek out Minerva's owl (in his most private musings on the interconnections of such life qualities as marriage, poverty and the life of letters, he cleaved to strictly practical thought and remained decidedly unsentimental even while being evidently moved by deep devotion), we note that on more than one occasion he specifically engaged another to do so on his behalf. His Champion was an unlikely but natural choice: a man better known for skill at conversation rather than literation, and who, though highly regarded as a skilled mathematician, was most remarkable for his unique mixture of profound amiability, dogged dialectic and disinterested logic, who sallied forth with argumentation that spanned decades but would leap from topic to topic at the slightest turn of a phrase, was relentlessly social but incessantly shy, and remained a persistent failure at lecturing. I refer, of course, to Chauncey Wright.[2]

Darwin was aware of Wright's earliest published works; writing a year and a half after the publication of Origin, to Chauncey Wright's former professor, friend, and occasional colleague, the Harvard natural historian and biologist Asa Gray, he comments:

> If you wish to save me from a miserable death, do tell me why the angles 1/2, 1/3, 2/5, 3/8, etc, series occur, and no other angles. It is enough to drive the quietest man mad. Did you and some mathematician publish some paper on the subject? Hooker says you did; where is it? [II]

The mathematician in question was apparently Chauncey Wright, and the essay on phyllotaxy was written in the year following his Harvard MA in mathematics (under

[I] *Stevens, 1923, Thirteen Ways of Looking at a Blackbird*
[II] *Darwin, R.C., 2006, pg. 235*

Benjamin Peirce) with a thesis on ancient geometry; it was published in Gould's *Astronomical Journal*, No. 99, 1856, then expanded in *Mathematical Monthly*, 1859. Wright was, a decade later, to rework this essay on the encouragement of Darwin, altering and expanding it to accommodate the language of the Natural Selection Hypothesis. This final rendition was delivered as a lecture at the American Academy of Arts and Sciences on October 10, 1871, titled, *The Uses and Origin of the Arrangements of Leaves in Plants*, and was warmly received by Darwin, who wrote:

> I have read your paper with great interest, both the philosophical and special parts. I have not been able to understand all the mathematical reasoning; for irrational angles produce a corresponding effect on my mind. Nevertheless, I have been able to follow the general arguments; and I am delighted to have a cloud of darkness largely removed. It is a great thing to be able to assign reasons why certain angles do not occur, or occur rarely. I have felt the difficulty of the case for some dozen years. Your memoir must have been a laborious undertaking; and I congratulate you on its completion. The illustration taken from leaves of genetic and adaptive characters seems to me excellent, as indeed are many points in your paper. [I]

But we are getting ahead of ourselves: the letter Darwin wrote Grey concerning Wright's work on phyllotaxy was only one of many encounters. Sometime before December of 1860 (the letter has not been found; however it can readily be inferred), Asa Grey wrote to Charles Darwin suggesting that Wright's views would significantly add to a planned special edition of Huxley's *Natural History Review*, which focused exclusively on *Origin* and the natural selection hypothesis. Darwin replied positively, and forwarded the suggestion to Huxley, who wrote:

> [W]e shall hardly be able to pay anything & even then I am afraid not much – But get us the article if you can & if your friend is the most rabid advocate you ever had so long as he argues the question scientifically & is'n't abusive (beyond reason). [II]

It took Wright some months to finish the essay; and when it was finished, it was almost lost in the post. However, it finally came to Darwin in March of 1861; he handed it to

[I] *Wright, 2000, vol. 2, pgs. 234-5*
[II] *Burkhardt, 1985 – 2010, letter 3022*

Huxley, who, as Darwin had surmised, declined to publish it, Darwin wrote to Grey immediately upon its arrival:

> I received this morning Wrights Article: I have hardly glanced at it, but rather fear it is too metaphysico-theological for me. Huxley will be here in few days, & I will hand it to him & he will decide. If it does not suit him; what on earth shall I do with it?[I]

In a letter written the following month, he added:

> I believe, but cannot swear, that I wrote & told you that Wrights Review had come ...I had time hardly to read it, before Huxley took it away. He much feared it was too general & not natural-Historical enough for him. This was my impression, likewise; though I daresay it is very clever. What shall I do with it, if Huxley does not take it? I know no other Review to send it to.[II]

In May, Darwin wrote to Huxley:

> I had a note this morning from Asa Gray saying that Wright was very glad to hear by my first note that his Review had not arrived & was lost, & was very sorry to hear by my second note that it had arrived & was sent to Nat. Hist. Review. So he does not estimate it highly.[III]

This being Wright's opinion of his first attempt to tackle the philosophical implications of Darwin's modification by descent through natural selection, we can surmise that Chauncey Wright would be cheered to know that this essay has not been found. (And are left with mere speculation, however, as to whether this is so despite, because, or irregardless of the fact that Darwin requested that Huxley return the essay to him.) As indicated by these and other letters, it is apparent that Wright initially left no great impression on Darwin.

If, as the correspondence shows, Darwin had little interest in Wright's career in its early stages, this may well be because Wright offered Darwin little reason to do so. Chauncey

[I] *Burkhardt, 1985 – 2010, letter 3087*
[II] *Burkhardt, 1985 – 2010, letter 3115*
[III] *Burkhardt, 1985 – 2010, letter 3153*

Wright was as famously uninterested in the life of letters as Charles Darwin was. For most of his adult life, he made his living as a computer working on astronomical navigation charts; he would complete a year's work in as few as 5 or 7 weeks – inventing new techniques to speed his way and working night and day on stimulant induced binges – so as, living frugally, to devote the remainder of his days and nights to never ending rounds of conversation, with students in pubs over beer and their professors' entire families on holidays in the hills, with children in gardens or debutantes in salons, friends in his rented rooms while dressed in a torn night gown and smoking endless pipes of tobacco, sailors, freed slaves, Louis Agazzi, Asa Grey, Charles Lyell, and several generations of Peirces, James's, Nortons and Holmes's, wherever and with whomever he could find capable of satisfying his lust for stimulating conversation. And the Cambridge/Boston society in which he lived certainly furnished him well, for he seemed never to have time to write.[3]

In his life, Wright published only 56 articles, largely short reviews of books on science, in a variety of sources few of which were overtly academic. Though he was elected a member of the American Academy of Arts and Science in 1860, and served as that association's recording secretary from 1863 to 1870 (an appointment which rather confirms his social regard than his scientific peerage), his philosophical output – loosely focused on scientific methodology – was always lagging. Indeed, Wright's most lasting influence has been felt through his many deep conversations with his closest friends – and their subsequent writings, as well as his extensive body of personal letters, mostly written after intensive prodding from those closest to him. Even his published works were only accomplished upon the persistent demands of his editors (who were, most often, also close friends). And it must be noted that Chauncey Wright's 'Socratic paradise' was punctuated by recurring bouts of chronic depression wherein he would set about and suffer from torporous isolation and alcoholism, and which often concurred with problems of poor physical health.[4] These periods of depression were most often resolved by the intercession of friends, typically taking the form of philosophical clubs, including the famed Metaphysical Club of the early 1870's – a club founded principally but not exclusively by William James, specifically to engage a torpid Chauncey and set him (at

least metaphorically) sober (James initially organized the members, and was the one most responsible in keeping the irregular club active, often arranging its meetings at his home, supplying the drinks, etcetera). It is of no surprise that the primary, nearly exclusive, topic of conversation therein was Wright's topic of choice: Darwin's theory of origination by descent with modification plus selection, the Natural Selection Hypothesis.

And so, ten years after first inquiring about the man, Darwin would cite Chauncey Wright's work *On the Limits of Natural Selection* in Origin's epic sequel, *The Descent of Man, and Selection in Relation to Sex*. This lead the ever-oddly shy Wright to pen a letter to Mr. Darwin, thanking him for the respect offered in *Descent*, and – shyly – enclosing proofs of a new essay, *The Genesis of Species*, being an expanded review and critique of Saint-George Mivart's book of the same name. Chauncey Wright explained his motivation, saying:

> Mr. Mivart's book, of which this article is substantially a review, seems to me a very good background from which to present the considerations which I have endeavored to set forth in the article, in defense and illustration of the theory of Natural Selection. My special purpose has been to contribute to the theory by *placing* it in its proper relations to philosophical inquiries in general.[I]

We will soon visit this essay, and others, as our focus takes us to the philosophical inquiries that captured Darwin's attention, but first, it is worthwhile to look at Darwin's response: he penned two letters, sending the second just three days after the first, in which he praised Wright's work and asked humble permission to publish the essay as a pamphlet – at his own expense!

> I have hardly ever in my life read an article which has given me so much satisfaction as the review which you have been so kind as to send me. I agree to almost everything which you say. Your memory must be wonderfully accurate, for you know my works as well as I do myself, and your power of grasping other men's thoughts is something quite surprising; and this, as far as my experience goes, is a very rare quality. As I read on I perceived how you have acquired this power, viz. by thoroughly analyzing each word.[II]

[I] *Wright, 2000, vol. 2, pg. 230, italics original*
[II] *Darwin, R.C., 2006, pgs. 234-5*

Then just three days later, he added:

> I have been looking over your review again; and it seems to me and others so excellent that, if I receive your permission … I will republish it, notwithstanding that I am afraid pamphlets on literary or scientific subjects never will sell in England.[I]

And the essay was indeed quickly printed as a pamphlet, distributed widely, and well received. Writing the following October, Mr. Darwin informs Chauncey:

> It pleases me much that you are satisfied with the appearance of your pamphlet. I am sure it will do our cause good service; and this same opinion Huxley has expressed to me.[II]

This exchange ushered in a correspondence that was to last only four plus years, until Chauncey Wright's untimely death at the age of 45, and cumulate in an encounter that Wright would describe as leaving him beatifically enthusiastic, "without a *but* or criticism"; this was his stay at Down House and conversations with Charles Darwin during the first week of September, 1873. He described the visit in a letter to one of his large circle of friends who was already known to that household and would soon become Darwin's daughter-in-law, Sara Sedgwick. (One of the most sought after young women of her time, beautiful, vivacious, highly intelligent and very, very wealthy, she was also a life long friend of Chauncey Wright, and met her husband to be, William Darwin, while he was visiting Chauncey in Cambridge, Massachusetts.)

> I am not unmindful, as you will see, of my promise, -made a long time ago, as it now seems, and in the expectation of a very long letter in return, -to write you after seeing Mr. Darwin . . .
>
> It would be quite impossible to give by way of report any idea of these talks before and at and after dinner, at breakfast, and at leave-taking; and yet I dislike the egotism of "testifying," like other religious enthusiasts, without any verification, or hint of similar experience; though what I have said must be to you a confirmation of what you already know. One point I may mention, however, of our final talk. I am some time to write an essay on matters covering the ground of certain common interests and studies, and in review of his "Descent of Man,"

[I] *Wright, 2000, vol. 2, pg. 231*
[II] *Wright, 2000, vol. 2, pg. 235*

> and other related books, for which the learned title is adopted of psychozoology, - as a substitute for "Animal Psychology," "Instinct," and the like titles, - in order to give the requisite subordination (from our point of view) of consciousness in men and animals, to their development and general relations to nature. So, if you ever see that learned word in print, you will know better than other readers when and where it was born! But you will not, I imagine, care so much about the matter of the conversation, which might be repeated, as about its incommunicable manner and spirit, which you will readily supply from your own imagination.[I]

The entire letter certainly carries the fervor of a religious enthusiast, but there is no other extant record of the meeting. Whatever ardor the man endured, whatever commission he felt, Chauncey Wright was not one either to bask in the irregularities of poetry, or to gather posies for his own adornment.[5] Rather, he set about writing the essay that Charles Darwin requested of him. This work became the longest and most sustained effort of his literary career, and was published in the *North American Review*, in April of 1873, titled *Evolution of Self-Consciousness.* But this was not the only time Darwin was to encourage Wright to follow the purpose he had stated in his first letter, "to contribute to the theory by *placing* it in its proper relations to philosophical inquiries in general". Rather, such requests were from its onset an ongoing aspect of their correspondence.

The degree to which Wright had become a regular in Darwin's stable, as well as the extent to which Darwin turned to Wright to develop the philosophical implications of his work, is readily apparent in their correspondence; e.g. Darwin's letter of the previous spring concerning Wright's Essay, *The Genesis of Species,* which consists primarily of an aggressive dismissal of St. George J. Mivart's 'straw-dog' dishonesty in his attack on Darwin's theory of the transmutation of species by natural selection, as Darwin wrote:

> Many thanks for your (new) article in the 'North American Review,' which I have read with great interest. Nothing can be clearer than the way in which you discuss the permanence or fixity of species. It never occurred to me to suppose that any one looked at the case as it seems Mr. Mivart does. Had I read his answer to you, perhaps I should have perceived this; but I have resolved to waste no more time in reading reviews of my works or on Evolution, excepting when I hear that they are good and contain new matter...It is pretty clear that Mr. Mivart has come to the end of his tether on this subject.

[I] *Wright, 2000, vol. 2, pgs. 246-7*

> As your mind is so clear, and as you consider so carefully the meaning of words, I wish you would take some incidental occasion to consider when a thing may properly be said to be effected by the will of man. I have been led to the wish by reading an article by your Professor Whitney versus Schleicher. He argues, because each step of change in language is made by the will of man, the whole language so changes; but I do not think that this is so, as man has no intention or wish to change the language. It is a parallel case with what I have called "unconscious selection," which depends on men consciously preserving the best individuals, and thus unconsciously altering the breed.[I]

And to clarify that Charles Darwin specifically understood what Chauncey Wright brought to his socio-scientific arsenal, we turn back again in time to a letter Darwin wrote to Alfred Wallace, shortly after receiving Wright's first post, and well after Wright had decimated Wallace's neo-platonic ontological dualism in *The Limits of Natural Selection*, the very work that Darwin cited in Descent (but more on this later). Many things are clear from the tone and content of this excerpt, in particular, that both men knew Wright's work, that Darwin acted as though he must soft-pedal, while continuing to both insist on and give reason for, using Wright's work in support of his own, and that he considered Wright's work to be complimentary to his own.

> My dear Wallace,
>
> I send by this post a review by Chauncey Wright, as I much want your opinion of it as soon as you can send it. I consider you an incomparably better critic than I am. The article, though not very clearly written, and poor in parts from want of knowledge, seems to me admirable. Mivart's book is producing a great effect against Natural Selection, and more especially against me. Therefore if you think the article even somewhat good I will write and get permission to publish it as a shilling pamphlet, together with the MS. additions (enclosed), for which there was not room at the end of the review...
>
> I am now at work at a new and cheap edition of the 'Origin,' and shall answer several points in Mivart's book, and introduce a new chapter for this purpose; but I treat the subject so much more concretely, and I dare say less philosophically, than Wright, that we shall not interfere with each other. You will think me a bigot when I say, after studying Mivart, I was never before in my life so convinced of the GENERAL (i.e. not in detail) truth of the views in the 'Origin.' I grieve to see the omission of the words by Mivart, detected by Wright. ('North American Review,' volume 113, pages 83, 84. Chauncey Wright points out that the words omitted are "essential to the point on which he [Mr. Mivart] cites Mr. Darwin's authority." It should be mentioned that the passage from which words are omitted is not given within inverted commas by Mr. Mivart.) I complained to

[I] *Darwin, R.C., 2006, pg. 343*

> Mivart that in two cases he quotes only the commencement of sentences by me, and thus modifies my meaning; but I never supposed he would have omitted words. There are other cases of what I consider unfair treatment. I conclude with sorrow that though he means to be honourable he is so bigoted that he cannot act fairly.[I]

It is clear to any who has studied Darwin's life and work, that having and employing a well-stocked arsenal of letters (learned exegesis) was vital to him, (i.e. see above: "it will do our cause good service"). Remaining, as he was, locked in public dispute much of his career, he did not want to loose the support of his old colleagues, – even of those who failed to grasp many basic implications of his own theory. But Chauncey Wright's *special purpose* developed a whole new and complex set of possibilities (one could even say, as James was want to do, that it opened a new niche in the ecology of the mind):

Wright exposed the illogic of both Darwin's critics such as Mivert, and pseudo-proponents alike and with equal fervor. By challenging the system, logic, and argumentation of both Wallace and Spencer for failing to grasp the fullness of Darwin's ontology, he strengthened both the Natural Selection Hypothesis and Darwin's hand in reshaping the discourse of public reasoning. In further reading into their private letters, we see Darwin placating both of these men concerning the argumentation Wright brought forth against their respective renditions of evolutionary philosophy (the first, in Wright's view, watered down and the second hyped, both beyond recognition, utility, logic or empirical challenge), while simultaneously encouraging Wright to ever more strenuous effort and resoundingly supporting his conclusions.

But Chauncey was no June day convert, nor did he fit the billing of a "true believer", rather, his interest in the ontology implicit within Darwin's Theory of Natural Selection proceeded quite naturally from his previous aptitude, interest and study. And he spent most of his adult life persistently reconstructing his understanding of Darwin's ontology. This background, this connection between Wright and Darwin, lays the groundwork for a discussion of Wright's development of Darwin's Ontology. And so we proceed – via one

[I] *Darwin, R.C., 2006, pg. 578*

of philosophy's most hoary claims, the presumed necessity of *a priori* knowledge, so as to hold it accountable to the *a posteriori* methodology of modern scientific knowing – towards Wright's unpacking of Darwin's *first philosophy,* which, I am not the only to argue, forms the cosmogenic foundation and informs the ethos of today's most exciting work in both life science and living philosophy – and serves as a critical hurdle for accomplishment therein.

An Instant *A Priori*

Life only avails, not the having lived.[I]

So much has already been done, much of it well. The importance of Chauncey Wright's contributions to science and philosophy in general, and scientific methodology and the application of metaphysical considerations within and to Darwin's Theory, both generally and specifically as relating to the work of Charles Peirce, William James, Oliver Wendell Holmes Jr. and on to John Dewey, et al. has been and is being well explored. Some have focused on Wright as an inheritor of the Baconian tradition, and a disciple of presumed metaphysical neutrality in and of science, others on his work as a progenitor of Classical Pragmatism: i.e. Philip Wiener and Edward Madden. Though neither of these very able scholars specifically explicated Darwin's Ontology as such, it is evident that at least occasionally their work hinges upon an understanding of this ontology (however it may occasionally suffer from a lack thereof, but more on this later). Likewise, C. I. Lewis's Pragmatic A Priori – along with Sandra Rosenthal's unpacking thereof, Quine's Relative Ontology and Naturalistic Epistemology – though not Rorty's repacking thereof, Susan Haack's Passionate Moderation and Deviant Logic, at least some aspects of Hartshorne's Devoted Fragmentariness and Bergson's Creative Evolution – though not their respective working definitions of *necessity* and *vitality*, and also F.C.S. Shiller's Humanism, G. H. Mead's Social Self, Putnam's Vatted Brain, and Lovelock's Gaia Hypothesis as well as the Animal Faith of Santayana and the incomparable Beast & Man of Midgley, all these and more have worked and do work with and within Darwin's Ontology and hence, knowingly or not, with Wright's legacy.

However, others – including many who have no excuse – have not. In a review[II] of Edward Madden's *Chauncey Wright and the Foundation of Pragmatism*, Richard Rorty claims Wright to be of little significance, just other mid-19th century associationalist, that he did no more than re-write J. S. Mill; Rorty ended this review with the decidedly

[I] *Emerson, 1920, pg. 44, Self-Reliance*
[II] *Rorty, 1964*

unpragmatic thought that no other book need be written on Chauncey Wright![6] Herein I will endeavor to prove Mr. Rorty wrong by (for starters writing another book, but also by) demonstrating that he errs in mistaking Darwin's Ontology for a heritage, an ideation/delineation, rather more Lockean – or even Hobbesian in its speciation of being, (a mistake that we will see made again and again by many contemporary pseudo-proponents of Darwin). Likewise, Steve Fuller's Social Epistemology (not to mention his testimony in support of rank creationism at *Kitzmiller v Dover*[I]) absolutely misses the metaphysical implications of Darwin's Ontology vis a vis his absurd truism: *everyone has a right to be wrong*.[7] But far more damaging is the work done by the contemporary biographer and commentator, Louis Menand.[8] As story-telling, his opus rendition, *The Metaphysical Club* dabs together a brilliant pastiche of the ethos of classic Pragmatism – and even ties it well with Darwin; but he persistently misstates, underestimates and even outright dismisses Darwin's Ontology (as well as, practically speaking, all of classical pragmatism) in favor of a kind of neutered post-modernism; i.e. he trades a concrete study which speciates *being* as scale thick trans-active agency, for something closely akin to the 'relativistic' candy floss matrix of being as truthiness[II]. Menand seemingly fails to grasp that Darwin's Ontology could even be (and certainly fails to explore considerations therein). Playing heavily on Peirce's comment that Wright was the 'boxing master' of the Metaphysical Club, he relegates to him a kind of supporting role similar to the garrulous coach in a feel-good sports-buddy movie (and to Peirce the motivational role of the failed steroid using athlete, who gives witness to the errors-of-his-ways in the bad morality play sequence of the same stupid movie).[9]

But again, we are getting ahead of ourselves. We will visit these various takes on Wright's work, and others, but must first establish the manner in which he read Darwin's Natural Selection Hypothesis, the *way* as well as the *why*, in which he – like Darwin, a man with a severe distaste for unwarranted speculation of all kinds, especially in metaphysics! – devoted himself to the explication of Darwin's Ontology. And so we begin again, this time with beginning itself, with the pragmatic *a priori*, then go back to

[I] *Transcripts of Kitzmiller v Dover, 2005*
[II] *Haack, 1997*

influence on and the chronology of Chauncey Wright's work, so as to investigate the continuity, the origination as descent, of Darwin's Ontology as seen by this man whose "power of grasping other men's thoughts is something quite surprising" through his several essays on the subject.

As Darwin's Ontology is less interested in firsts than in continuity, linking it to some kind of pragmatic *a priori* may sound absurd but is not; rather, only by working within Darwin's Ontology does the very idea of *a priori* become pragmatic. To live is to have lived, to have a history of incorporations, a history of needs. And it is a specific living being that lives – not the abstracted "life" or the even more abstracted "subject". And so we speak of *pragmatic a priori* in a manner more basic than C. I. Lewis' early 20th century delineation (notwithstanding the vitality of said conception).

From his experience as a student of theology, Darwin was undoubtedly familiar with the conceptualizing of ontology as strictly non-empirical; so too from his previous study, Wright knew *a priori* as "true by definition" (i.e. the analytic a priori) as well as the Kantian *a priori* as "transcendental" i.e. actually pre-existent (teleological) form (containment) of all possible experience (as opposed to the content of said experience). But Chauncey was very much a devotee of the works of, and in passing acquaintance with, Ralph Waldo Emerson. As such he knew (how) to claim the transcendence of being as the *completion* of specific (that is, both specifiable and specified) being, and to see these *completions* (the wholeness of the leaf, the tree, the forest, etcetera) as scale thick. The making (initiating/forming/enacting/concluding) of *living* being is specified in its unique, individual quest for being, and not in abstracted improbabilities whether they be the contours of Kant's mental soup bowl, or the bright fog of neo-Platonic metaphysics – but neither does origination begin as just another yellow page listing in a fat neo-Aristotelian catalog. An inheritor of the traditions of British Empiricism and a contemporary admirer of J. S. Mill and Auguste Comte, Wright saw no need to credit anything empirically unproven; but the pragmatic *a priori* is as evident as the logic of its own need.

And so with Emerson, Wright refuses to grant formative power (or indeed any kind of physical agency) to any variant of either Platonic *essence* or Aristotelian *final cause* by claiming self-formation through conditioning being upon the functionality – and thereby also the mutability and fallibility, but therein also great and open possibility – of the continuative process(es) of its own being: a circle is made a circle by the *completion* of it and nothing else; certainly not by any criteria, of whatever catalog, applied to it. However, living being shares kinship with neither the abstractly perfected conceptualization of form nor the imperfectly existential; we rather draw our own circle, or struggle to, at any rate, with every ragged breath. And so: *he not busy being born is busy dying*. Life avails by living, by incorporating the extant, by excorporating the defunct. The *pragmatic a priori* is the *living a priori*,[10] the breathing, eating, shitting, thinking, drinking, selfish *I*, always on the lookout for the next breath, the next meal, the next bowel movement, the next empirical proof of our own self-ish Wundtian solidity. Emerson's elders, the founders of the American Republic, would have called it: *interest*.

There have been a number of books published, from any number of authors[I] and over many decades, arguing that Mr. Emerson deserves to be listed as the ranking member of the 'Golden Age of Pragmatism'. This would seem appropriate in light of the above discussion of the pragmatic a priori; however it can also be argued that Emerson's work must remain in the background, outside the cohort, as Emerson was unable – or uninterested – in the *technical* explication of the details of his metaphysics, ethics, ontology, etc. I contend that Emerson was both uninterested and unable for several reasons, the most basic of which is: he described himself as a poet, not as a philosopher and his body of work, including the styling of his essays, defends this self-description. This is to say, as he wrote grand essays but not technical philosophy, we can assume that his interest did not include the latter. The larger question, however, is whether or not the man was *able* to define his metaphysics in the explicit detail of philosophical methodology; with all respect for Mr. Emerson, I think not.

[I] *E.g. H. Putnam, M. Magee, V. Colapietro, S. Cavell, etcetera*

Emerson was not the first to wonder at the interconnections of all life, nor was he the first to cast his gaze at *the endless forms most beautiful and most wonderful*, or consider the source of such splendor within the sheltering branches of the tree of life. He was likewise not the first to wonder at the trans-active nature of experience, the permanence of change and the flow of consequences, the contiguous action – the acting that is creation ongoing and the occurrence of true novelty in an ancient world; nor was he the first to write of the nature of experience and the experience of nature, that is, the consequences of being. All of this goes without saying, but point to the ways in which Darwin's Ontology – and the subsequent development of Pragmatism as a philosophy – has deep precedence in the spirituality and poetry of human culture. Emerson was as much a mystic and a poet as he was a brilliant essayist and deep thinker. This is not to ignore the originality of the philosophical challenge he offered, but merely to recognize that, for all the life and history on which he drew, and for all brilliance of his unique offering, he did not seem to have the language – the speciation of signifiers – which would allow him to develop his ideation into the aforementioned *a posteriori* methodology of modern scientific knowing. Like generations of poets and mystics before him, Emerson lacked the vocabulary to turn his instinctive[11] ontological insight into quantifiable argumentation: he was unable to write his ideation as philosophy, to specify (esp. in the pre-Darwinian sense, i.e. *to catalog*) his own answers and thereby fix (nail down, systematize, domesticate) his philosophical considerations. This task he left, deliberately I would say, for others, knowing full well that circles (structured complexities, being itself) exist only upon the possibility of being outdone, of themselves being circumscribed. He uses circles poetically, of course, not as a metaphysical abstraction of perfection, but as metaphorical striving for a transient instantiation. It is as he wrote in 1841:

> Our life is an apprenticeship to the truth, that around every circle another can be drawn; that there is no end in nature, but every end is a beginning; that there is always another dawn risen on mid-noon, and under every deep a lower deep opens ...There are no fixtures in nature. The universe is fluid and volatile. Permanence is but a word of degrees.[I]

[I] *Emerson, 1920, pg. 167, Circles*

Such considerations were, prior to Mr. Darwin, limited to mystical treatment; that is, they were incapable of becoming subject to the construction of rational or logical explanations capable of doubling as empirically testable models of natural phenomena, capable of both limited but actual verification and falsification via the prediction of future occurrences.

It was Mr. Emerson's younger and much devoted admirer, Chauncey Wright, who – taking empirical comfort in the mountains of verifiable data on earthworms, barnacles and domesticated rock pigeons – discovered in Darwin's theory of the transmutation of species through natural selection, a manner of signification – a way of speaking – that captured Emerson's wildly speculative ontology, domesticated it, defined it, and thereby developed this mystical vision within philosophy, and began the delineation of ontology that we call Darwinian, a simple, clear depiction of which comes from William James' 1904 review of John Dewey's *Studies in Logical Theory*, titled, *The Chicago School*:

> Dewey makes biology and psychology continuous. 'Life,' or 'experience,' is the fundamental conception; and whether you take it physically or mentally, it involves an adjustment between terms. Dewey's favorite word is 'situation.' A situation implies at least two factors, each of which is both an independent variable and a function of the other variable. Call them E (environment) and O (organism) for simplicity's sake. They interact and develop each other without end; for each action of E upon O changes O, whose reaction in turn upon ·E changes E, so that E's new action upon O gets different, eliciting a new reaction, and so on indefinitely. The situation gets perpetually 'reconstructed,' to use another of Professor Dewey's favorite words, and this reconstruction is the process of which all reality consists.[I]

Darwin's Ontology changes the way in which thinkers are able think, not through some supernatural conception, cutting into metaphysically novel whole cloth, but through the language of Darwinian biology which subjected this specification of ontology as interaction and transmutation to the scientific process. The very idea of that ontology depicts a purely metaphysical agency is distinctly anti-Darwinian, and rather points to ideations older than the Medieval ethos, such as Creation *Ex Nihilos* or Spontaneous Generation. No, Darwin was a materialist in the sense that he looked to existence (the interaction of fragile actuality) to find the origin of *what is*, rather than presuming a

[I] *James, 1978, pg. 103*

metaphysical essence from which *what is* had been or is being beamed into existence; and Darwin was a naturalist in the sense that he looked to causes in the physical world to be followed by effects which required no inexplicable, metaphysical or teleological meddling.

To clarify both the extent of this change, and the influence of Emerson on the later delineations of Pragmatism, compare Mr. James above with Mr. Emerson, from 1837:

> (N)ature is the opposite of the soul, answering to it part for part. One is seal, and one is print. Its beauty is the beauty of his own mind. Its laws are the laws of his own mind. Nature then becomes to him the measure of his attainments. So much of nature as he is ignorant of, so much of his own mind does he not yet possess. And, in fine, the ancient precept, "Know thyself," and the modern precept, "Study nature," become at last one maxim.[I]

And from a longer excerpt from 1836 (*italics added*):

> To speak truly, few adult persons can see nature. Most persons do not see the sun. At least they have a very superficial seeing. The sun illuminates only the eye of the man, but shines into the eye and the heart of the child. The lover of nature is he whose *inward and outward senses are still truly adjusted to each other*; who has retained the spirit of infancy even into the era of manhood. His intercourse with heaven and earth, becomes part of his daily food. In the presence of nature, a wild delight runs through the man, in spite of real sorrows. Nature says, -- he is my creature, and maugre all his impertinent griefs, he shall be glad with me. Not the sun or the summer alone, but every hour and season yields its tribute of delight; *for every hour and change corresponds to and authorizes a different state of the mind*, from breathless noon to grimmest midnight...In the woods, we return to reason and faith ...Standing on the bare ground, -- my head bathed by the blithe air, and uplifted into infinite space, -- all mean egotism vanishes. I become a transparent eye-ball; I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or particle of God. The name of the nearest friend sounds then foreign and accidental: to be brothers, to be acquaintances, -- master or servant, is then a trifle and a disturbance. I am the lover of uncontained and immortal beauty. In the wilderness, I find something more dear and connate than in streets or villages. In the tranquil landscape, and especially in the distant line of the horizon, man beholds somewhat as beautiful as his own nature.

[I] *Emerson, 1941, pg. 6, The American Scholar*

> The greatest delight which the fields and woods minister, is the suggestion of an occult relation between man and the vegetable. I am not alone and unacknowledged. They nod to me, and I to them …[I]

As with James above, Emerson speaks of being as interaction, of factual knowing as the internalization, the incorporation, of some supposedly objective other, of the innocent (unconscious) quality of immediate (instinctive) incorporation (knowing), and of the development of the subjective self through both awareness of and extended reach within this never-ending embodiment of being, these circles ever (self) drawn *of which all reality consists*. For Mr. Emerson, nature is man, and man nature, and our selves individuate only upon and to the extent to which we become conscious of the interactions of this mutuality, a process which begins with the pragmatic a priori, the interest implicit within our living need to breath (eat and drink, and also effectively deal with our physical as well as metaphysical excrement) so as to (momentarily) 'complete' our being (without poisoning ourselves, of course). Here we have Darwin's Ontology, captured but not domesticated, waiting patiently for some arc to close its circle, to transcend through the agency of its own completion, to complete itself through the re-construction, the re-ratiocination, the re-cycling that is *living*: incorporating the extant and discorporating the defunct of and within human knowing (embodied as it is within carbon complexes) and to form this knowing in the language of science, thereby corralling it, defining it ever new in usefully consequential ways: Emerson casts his thoughts with conscious intent, for:

> I look for the new Teacher, that shall follow so far those shining laws [of religion and philosophy], that he shall see them come full circle; shall see their rounding complete grace; shall see the world to be the mirror of the soul; shall see the identity of the law of gravitation with purity of heart; and shall show that the Ought, that Duty, is one thing with Science, with Beauty, and with Joy.[II]

Poetry, to be sure, but also challenge, for truth "cannot be received at second hand. Truly speaking, it is not instruction, but provocation, that I can receive from another soul." [II] And with this bold call, came its near simultaneous response: Darwin was but six years younger than Emerson, and died eight days before him. Wright was two decades younger

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[I] *Emerson, 1941, pgs. 75-6, Nature*
[II] *Emerson, 1941, pg. 46, Divinity School Address*

than Darwin, and died seven years before the other two; but it was within his thoughts that the two mated; the offspring of which we proudly call Darwinian, as it is the specification of Mr. Darwin's language that fathered this promising new lineage.

What Wrought Wright

When I was a child, I spoke as a child,
I understood as a child, I thought as a child:
but when I became a man, I put away childish things.[I]
…
I tell you the truth, unless you change and become like little children,
you will never enter the kingdom of heaven.[II]

We proceed ideologically, following the ideas in Wright's work, beginning just before the publication of Origin. In 1858, he published an ostensible review of several books on weather systems, titled *The Wind and the Weather*, which was essentially an original essay on interactions within coherent systems, and the difficulties had by various philosophical and scientific approaches to the concept of cause and effect which accrue by virtue of the fact that systems act as wholes in ways that are incomprehensible though any feasible study of its parts; this is particularly apparent in his discussion (both here and in a post-Origin (1864) essay; *A Physical Theory of the Universe*) of 'counter-movement' as being inherent within 'movement', not as a pseudo-Hegelian *antithesis* proceeding in a mechanical tik-tok towards an inevitable absolute, but as an accidental consequence of the formation of some functional, consequential, and identifiable wholeness (on multiple scales of being) – though, it is important to note, this is neither experienced nor understood as a leviathan of association, but as chance consequence of the weltering barrages of object experienced by all existent things, little of which is benevolently relevant (or, *fits*), and far less capable of the kind of incorporation necessary to life. In concluding this essay, Wright applies this concept to a subject that had fascinated him since childhood: the consequences of natural history (though today, we might more aptly describe his work as philosophical interpretation of theoretical biology).

It is worth quoting the entire conclusion so as to better capture the focus of his interest (especially in light of our earlier interest in Emerson) as well as the difficulties he seemed to experience specifying those interests:

[I] *1 Cor 13:11, King James Bible, American Version*
[II] *Mt 18:3, New International Version UK*

The regular alternations of day and night, summer and winter, dry seasons and wet, are adapted to those alternations of organic functions which belong to the economy of life. The vital forces of plants and of the lower orders of animals have not that self-determining capacity of change which is necessary to the complete development of life: but they persist in their present mode of action and, when they are not modified by outward changes, reduce life to its simplest phases. Changes of growth are effected by those apparent hardships to which life is subject; and progression in new directions is effected by retrogression in previous modes of growth. The old leaves and branches must fall, the wood must be frost-bitten or dried, the substance of seeds must wither and then decay, the action of leaves must every night be reversed, vines and branches must be shaken by the winds, that the energies and the materials of new forms of life may be rendered active and available.

Some of the outward changes of nature are regular and periodic, while others, without law or method, are apparently adapted by their diversity to draw out the unlimited capacities and varieties of life; so that as inorganic nature approaches a regulated confusion, the more it tends to bring forth that perfect order, of which fragments appear in the incomplete system of actual organic life.

The classification of organic forms presents to the naturalist, not the structure of a regular though incomplete development, but the broken and fragmentary form of a ruin. We may suppose, then, with a recent physiological writer, that the creation of those organic forms which constitute this fragmentary system was effect in the midst of an elemental storm, a regulated confusion, uniting all the external conditions which the highest capacities and the greatest varieties of organized life require for their fullest development; and that as the storm subsided into a simpler, but less genial diversity, - into the weather, - whole orders and genera and species sank with it from the ranks of possible organic forms. The weather, fallen from its high estate, no longer able to develop, much less to create new forms, can only sustain those that are left to its care.

Man finds himself everywhere mirrored in nature. Wayward, inconstant, always seeking rest, always impelled by new evils, the greatest of which he himself creates, - protecting and cherishing or blighting and destroying the fragmentary life of a fallen nature, incapable himself of creating new capacities, but nourishing in prosperity and quickening in adversity those that are left, - he sees the workings of his own life in the strife of the elements. His powers and activities are related to his spiritual capacities, as inorganic movements are related to an organizing life. The resurrection of his higher nature is like a new creation, secret, sudden, inconsequent.

"The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth; so is every one that is born of the spirit."[I]

[I] *Wright, 1858, The Wind and the Weather*

The ‘metaphysico-theological’ quality of Wright’s early writing is rather blatant in this extended passage, as well as the lack of specificity which made his work at the time so eminently forgettable to both Darwin and Huxley. But so is the ‘cleverness’ on which Darwin would later comment; here we see an inherently flawed groping toward Darwin’s Ontology: evolution not as ordered progress through an ordained eschatology, but as consequential and preservative in the face of dependence and dissolution; mankind both mirroring and mirrored in nature, not merely as a consequent of being (either his own or that of the world), but as generative though unwilled (primarily, but not necessarily, unwillful and therefore indeterminate) interaction – and certainly we see nothing of existence as a mirrored consequent of essence, but existence as its own essence; mankind’s much vaunted free will overwhelmed, a paltry and venial thing in the face of this essence-of-existence; and all his various systems of classifications as, at best, useful tools in shaping knowledge; however often, our egoism turns all our willful knowing into absurdities, impediments on mankind’s ability to fit (which is then also *to fit in with*) the world on which both us, and our knowing, depends.[12]

Two years before reading Origin, Wright was wrestling with these contradictions in ways which bordered upon what would become Jamesian Radical Empiricism, as well as Peircian Transformational Logic; but lacking the appropriate signifiers he was unable to turn his subjective inductions into successful science, and lacking poetic skill he was unable to cast them skywards into successful religious or literary expressions. At this time in his life, Chauncey Wright, following the American dictum *fake it till you make it*, is producing little more than bad copies of Emerson while attempting to channel Hume.

Not unlike many young and old of any time and place, Wright was groping in a fog for something he knew not what. However he had, following Hume, begun to see the inherent difficulties of all claims of an objective standard of logic, specifically those inherent in the application of an absolute, abstracted and strictly linear logic to living (and hence commonly a-linear, always immediate – that is, situationally embedded as per James’ and Dewey’s use of the term – and never absolute) situations. Going further than Hume ever had,[13] Wright was downright offended by any presumption of eschatological

progression. But to be very clear, it is not my argument that Wright was knowingly working towards anything akin to postmodern philosophy, or the intertwining twentieth century theories of Chaos, Complexity and Emergence, or even that he was himself in the process of developing an ontology as capable as that of Darwin. Rather the opposite, at this time he could not even begin to identify the object of his own search. And yet for all that, he had, unknowingly of course, been preparing himself for this new Ontology. His (admittedly sometimes less than stellar) work – on weather systems, the structural mathematics of bee hives and the arrangement of leaves on plants, the viscosity of sugar candy as well as the untamed psychology of domesticated animals, coupled with his eclectic approach to systematic philosophy, the long study of Kant and Hume he undertook alongside Charles Peirce, and even their joint efforts in amateur theatre – all this prepared him well for his life's great work, the unpacking of Darwin's Ontology. But none of these were the experiences whereupon his success was centered.

For all that he drew from Hume and admired in J.S. Mill, for all that he considered himself a positivist in the manner of Comte, a materialist in the spirit (if not actuality) of Newton, a scientist in the tradition of Francis Bacon, Wright, in his late twenties, remained mired in mysticism; but it was the mysticism of Emerson, close akin to that of a Saint Francis or Meister Eckhart, and not one of obfuscation. He, as they, were not enmeshed in unreason; quite the opposite, the pantheon of religious mysticism is filled with brilliantly capable and systematically rational thinkers. Yet still, lacking competent signage, they, as with the young Chauncey Wright, remained incapable of a structural logic of life and incompetent at empirical verification of their logic. Like Emerson, most contented themselves with poetry, and never really tried.

Darwin's Ontology generates with it and is generated of, a speciation of signification which allows a thinker to work rationally and coherently on a subject which, previous to Darwin, was limited to mere speculation: life in all its oneness (the commonality of its origin, interdependence of its existence, and the contingent hence punctuated and thereby rhythmic origination and persistence of novel forms). Chauncey Wright would perhaps become the first man to successfully explicate Darwin's Ontology so as to apply it

knowingly, but this was still in his future. (Though of course, the future does not arrive in a limply linear manner; notice that for the extended quotation above to make any sense at all, we must presume one of Pragmatism's principle corollaries, that being in all its forms are consequential to interactive existence, that the interaction is what actually is, an idea Wright held from his school days.)

Admittedly, Chauncey Wright's future was not at all that far away; in a letter written Feb. 12 1860, to a Mrs. Lesley – the daughter of Ann Lyman, the family friend who sponsored him to Harvard (Chauncey being the first of his family to attend any schooling beyond the elementary level) and the wife of a prominent geologist and occasional philosopher, J. Peter Lesley – Chauncey wrote:

> I have received from Mr. Lesley his pamphlet on the gradations of words. I have looked over it, but not yet attentively enough. The idea of it is a very attractive one, and closely resembles the argument in that new book on "The Origin of Species," – Darwin's, – which I have just finished reading, and to which I have become a convert, so far as I can judge in the matter.
>
> Agassiz comes out against its conclusions, of course, since they are directly opposed to his favorite doctrines on the subject; and, if true, they render his essay on Classification a useless and mistaken speculation. I believe that this development theory is a true account of nature, and no more atheistical than that approved theory of creation, which covers ignorance with a word pretending knowledge and feigning reverence. To admit a miracle when one isn't necessary sees to be one of those works of supererogation which have survived the Protestant Reformation, and to count like the penances of old for merit in the humble philosopher. To admit twenty or more (the more, the better), as some geologists do, is quite enough to make them pious and safe. I would go even farther, and admit an infinite number of miracles, constituting continuous creation and the order of nature.[I]

I hasten to add that by 'continuous creation' Wright agues against the notion of 'Creation' as a singular event. Such creation is 'natural' in that it is spontaneous (un-premeditated) emergence via complexes of action, and most decidedly *not* the medieval ideation of spontaneous generation. More to the point, it is *not* the result of some supernaturally willful agent. (However, the development of these arguments can wait for

[I] *Wright, 2000, vol. 2, pg. 43*

a more appropriate moment; this will become clear when through our discussion of Peirce, love, and god.)

When writing *The Wind and the Weather*, Wright was 28 years old, and working as a professional computational mathematician; he had for several years been engrossed in a philosophical duet with his younger friend and colleague, Charles S. Peirce. The two men had become friends some years before through their attendance of a social club which organized parlor readings of Shakespearean dramas (both were, in their younger days, occasional amateur actors), although it is most likely that they knew (perhaps only knew of) each other from Wright's earliest days at Harvard. Charles Peirce was a mathematical prodigy, famed through out New England for, among other things, his testimony on calculating odds in a well-known celebrity court case involving the inheritance of one of America's richest families. He was likewise well known among the scientific community from a very young age, for performing mathematical parlor tricks. His father, Benjamin Peirce, was Harvard University's very first Professor of Mathematics and Astronomy; he was deeply politically connected within university politics as well as the intrigues of national scientific politics; and Charles was well used by his father in furthering his own agenda. Though to be fair, in addition to being a cantankerous genius, Benjamin Peirce was a fierce, but fiercely loving and supportive father, who was deeply involved in his son's upbringing and subsequent career. Wright was one of Benjamin Peirce's few advanced students.

At the time of Origin's publication, Wright and Peirce were just completing an exhaustive comparative study of Kant and Hume, and were casting about for fresh approaches to the inherent contradictions of modernism and to the critiques offered by these men. (This followed Wright's earlier study of Hamilton, and Peirce's of Schiller.) But it was more than a mere set of principles that these friends (soon joined by their third, William James) drew from Darwin, and more than mere revolution or paradigm shift, it was hope itself.

These young men came into their own on the edge of the American Civil War, at a time and place when more and more it appeared that all the established ways could lead only to disaster, and the known means were completely inadequate for the problems at hand. The idealism that had fostered the anti-slavery movement had long since degenerated into John Brown and major acts of domestic terrorism – the validity of which were a major preoccupation throughout New England. A slave owner's paean, that life, liberty and the pursuit of happiness are inalienable rights, had long since become evident to all but the most intransigent, as a deeply cruel non sequitur; the older 'gods' of land and blood had returned to the fore. The Native American peoples had, practically speaking, been romanticized entirely out of consideration, and almost out of existence. Jingoistic use of vulgar Neo-Platonisms to justify cronyistic and imperialistic practices had long since become the national norm. Materialism was settling well into its transformation from a scientific philosophy to crass consumerism. Thoreau was walking his way to an early grave. The fires of the Burned-Over District had burned out, leaving in its wake broken shells of institutions and a resurgent pseudo-conservatism. The fruits of Alcott and Company's triumphant liberalism were well soured – particularly, it seems, in the eyes of the youth it had intended to 'save'.

It was in this context that the arc of Chauncey Wright's study, from Hamilton and Hume through Kant to Darwin (by way of Ockham, Bacon and Mill – but mediated always by Emerson), opened an entirely new niche in the metaphysical ecosystem, wherein human culture and mankind's knowing were able to take an entirely new form, and nothing, not science, not religion, not society, not politics, not philosophy, nothing, nothing would be the same.

The Motivation of Science

Let me not to the marriage of true minds
admit impediments. Love is not love
which alters when it alteration finds.[I]

We continue as we started, alternating sequence and consequence and turn this time to Wright's philosophy of science, particularly his speciation of the origins of Modern Science. The following argumentation comes from his 1865 essay: *The Philosophy of Herbert Spencer*; here, we focus on the opening section extracted by Edward Madden and published independently as exemplary of Wright's philosophy of science (and later return to Wright's problems with Spencer).

Written well after his first encounter with *Origin* and well into his incorporation of elements (not the least of which involves vocabulary) of Darwin's Ontology, Wright attempts to identify that which marks the transition betwixt ancient and modern science, a singular causal phenomena from amidst the 'constellations of causes' which form all, method and matter alike. He begins by identifying and rejecting two well-established theories, beginning with the deduction v. induction hypothesis. His argumentation here (as elsewhere) identifies him as a rather more complex sort of positivist than much of the literature credits him to be. To Wright, induction and deduction are inseparable, and verification is itself of far less importance than the immediate co-ordination of in- and de-duction as a complex method (which in some ways resembles Peirce's 'abduction'). Furthermore, verification is essentially unverifiable as it represents a new appeal to observation, as well as a new demand for rational construction, which remains the generation of a hypothesis, and hence is subject to the same sorts of dysfunction as any initial postulation. This is precisely what led Dewey's Pragmatic focus on never-ending reconstruction as the only basis for continued (or *continuing*, that is, *present*) knowing.

Or, as Wright put this into one of its earliest explicit formulations:

[I] *Shakespeare, 1977, Sonnet 116*

> [A]ll knowledge is founded on observation, and proceeds from this by analysis and synthesis, by synthesis and analysis, by induction and deduction, and if possible by verification, or by new appeals to observation under the guidance of deduction – by steps which are indeed correlative parts of one method …[I]

The hypothesis that the aforementioned differentiation is found in a move from a deductive methodology to one of induction is rejected on the grounds that the methodological complex which we identify as science has existed as an irreducible whole at least as long as civilization, and perhaps as long as sentient being; and which, for Wright, can be identified with all formation of knowledge – though, Wright would quickly add, one which often fails – and fails most often due to the ready manner in which reason and logic succumb to self-interested motivations, particularly those which are psychologically apparent but not otherwise actual.

Wright then turns to the hypothesis that the development of modern science out of ancient science came from a shift in the focus of science from fact to theory, where his argument follows a similar bent, turning on the fact (of great importance to both us and S. J. Gould) that:

> Facts and theories are not co-ordinate species. Theories, if true, are facts – a particular class of facts indeed, generally complex ones, but still facts. Facts, on the other hand, even in the narrowest signification of the word, if they be at all complex and if a logical connection subsists between their constituents, have all the positive attributes of theories.

Throughout his life's work, Wright would argue that science (as well as knowing and being) functions as a complex wherein the whole is more than the sum of its parts, as the relational structure of and within the parts of the whole at least partly determines the success of the behavior of the parts. Wright goes so far as to suggest that simple causes can yield complex effects (and vice versa), and as the increased intensity of interrelationships create a degree of wholeness which pushes a complex into a new scale of being wherein the whole acts as one – rather than as a mere agglomeration of parts.[14]

[I] *All citations this chapter, unless otherwise noted, are:* W*right, 2000, vol. 1, pgs. 43-97, The Philosophy of Herbert Spencer*

Wright does seem to revert, frequently but momentarily, to a more simplistic version of positivism wherein verification proceeds directly from experience. Certainly this is the common reading of Wright's depiction in this essay of Pascal's experimentation with a Torricellian tube, which begins with the claim that: "To convert theories into facts is to add *simple verification* ..." (*italics original*). However, Wright adds:

> But even in this most remarkable instance of scientific discovery theory was not wholly reduced to fact, since the verification, though easy, was not entirely simple, and was incomplete until further observations showed that the quality of the fall in the Torricellian tube agreed with deductions from the combined theories of atmospherical pressure and elasticity.

And in concluding his rebuttal of the fact v. theory hypothesis of the distinction between ancient and modern science, he turns against the philosophy that is most often associated with him, positivism, and presents a solid argument against verification as the central goal of science.

> It is indisputable that verification is essential to the completeness of scientific method; but there is still room for debate as to what constitutes verification in the various departments of philosophical inquiry. … [Hence] Platonists or the rationalists may equally with the empiricists claim verification for their theories; for do they not appeal to the reason for confirmation of deductions from their theories, which they regard as founded on observation of what the reason reveals to them?
>
> The positivists' principle of verification comes, then only to this – that, inasmuch as mankind are nearly unanimous about the testimony and trustworthiness of their senses, but are divided about the validity of all other kind of authority, which they in a word call the reason or internal sense, therefore verification by the senses produces absolute conviction while verification by reason settles nothing, but is liable to the same uncertainty which attends the primary appeals to this authority for the data of speculative knowledge.

By minding that this statement is made in the context of the hypothesis that ancient science was overly focused on 'theory' while modern science owes its greater success to its emphasis on 'fact', and quickly follows the earlier quotation concerning the theoretical nature of all facts, it becomes quite apparent that Wright has dismissed simple verification – that is, reasoned experience inductively confirming the validity of a

deduction – as worthy (capable) of generating proper conclusions of the scientific method. After all, by examining phenomenological data through the auspices of the same theoretical set by which it was gathered, 'reason' creates its own 'reality' and hence its own 'validity' (there is nothing new in this admission). And even to examine data through a variant theoretical set can at best off set, but not eliminate, this inherent difficulty. As such, Wright did not accept that experience could ever be shaped pre-meditatively, so as to directly yield tangible, immediately sensible (so called 'factual') confirmation of any theoretical postulation *without* the active engagement of the subjective self, a factor which inevitably calls into question all claims of 'objectivity'.

On this issue, I am in stark disagreement with the Jean De Groot, author of the article on Wright in the Stanford Encyclopedia of Philosophy, who states that "Verification, for Wright, meant the testing of theories by deducing from them consequences that can be confirmed by direct perception, the 'undoubted testimony of the senses'".[I] While technically accurate at one step in Wright's thinking, this premise is utterly misleading. Yes, for Wright verification was consequential in nature and hence better than not; but it is not sufficient in and of itself for several intertwining reasons: first, because verification involves reason and reason is always suspect (easy to corrupt), but also and more importantly, because reasoning is done by organic beings, who *always* have 'interests' which quite naturally frame the testimony of the senses in self-interested ways, also that 'selfhood' is its own actuality with its own interest, and finally, 'self' is a scale thick phenomena wherein attachments on one scale often runs counter to successful adaptation on another. The interweaving of these ideations place Wright's conception of positivism far closer to the skepticism of Hume than the triumphalism of Comte. Yet his approach therein opened a way past Hume's loggerhead, to begin the reconstruction of knowing.

I should add that De Groot's article does somewhat redeem itself by recognizing, or at least tossing a bone to, the scale thick quality of Wright's thinking about thinking: "It is important for understanding Wright's philosophy of science that even induction from sense experience is not of one type. It may start with evidence taken from different levels

[I] *De Groot, 2009*

of perceptual and experiential complexity and is at work at different stages of an investigation". This is particularly evident in relation to "What philosophers, either Platonists or Cartesian, usually call intuition he understood to be induction from the data of self-consciousness." And this will become ever more important to us as it takes us to the liquid spandrels of William James.

But again, we are getting ahead of ourselves. The notion that 'subjectivity' can corrupt 'objectivity' has become so woven into the contemporary understanding of scientific methodology that S. J. Gould, among countless others, could write extensively on the subject without ever bothering to explicate it, e.g. *The Mismeasure of Man*. It goes without saying that Wright dismisses the Fact v. Theory hypothesis as helpful in the speciation of modern science from ancient; but what is important to us is that Wright is setting up a refutation of the Baconian Method by presuming a Humian Method.[I] In doing so, Wright adheres to Darwin's method.

Wright does not dismiss positivism out of hand, of course, as he adds

> The explanation [of the divergence betwixt ancient and modern science] which, in our opinion, comes nearer to the true solution, and yet fails to designate the real point of difference is that which the positivists find in the distinction between 'objective method' and 'subjective method'.

Wright demonstrates this failure by following the same reasoning he had used to dismiss the false distinctions between induction and deduction, as well as fact and theory; by giving a number of examples wherein ancient science follows the exact course seen in modern science, that of mediating between 'objective' and 'subjective' methodologies. And finally, he comes to the point: the greater effectivity of modern science stems largely from the clearer *motives* of modernism. In reference to the positivist position, he writes: "If we substitute the word 'motive' for the word 'method' we have the terms … on which we wish to insist": (*italics added*)

[I] *Radick, 2009*

> By a subjective motive we mean one having its origin in natural universal human interests and emotions, which existed before philosophy was born, which continue to exist in the maturity of philosophy and determine the character of an important and by no means defunct order of human speculations. By an objective motive we mean one having an empirical origin, arising in the course of an inquiry, *springing from interests which are defined by what we already know and not by what we have always felt – interests which depend on acquired knowledge and not on natural desires and emotions.* Among the latter we must include the natural desire for knowledge or the primitive, undisciplined sentiment of curiosity. An objective motive is what this becomes when it ceases to be associated with our fears, our respects, our aspirations – our emotional nature; when it ceases to prompt questions as to what relates to our personal destiny, our ambitions, our moral worth; when it ceases to have man, his personal and social nature, as its central and controlling objects. A curiosity which is determined chiefly or solely by the felt imperfections of knowledge as such, and *without reference to the uses this knowledge may subserve*, is prompted by what we call an objective motive.
>
> A spirit of inquiry which is freed from the influence of our active powers and the interests that gave birth to theological and metaphysical philosophies – which yields passively and easily to the direction of objective motives, to the felt imperfections of knowledge as such – is necessarily, at all times, a weak feeling; and before a body of systematic, well digested, and well ascertained scientific truth had been generated, could hardly have had any persistent influence on the direction of inquiry.

So the clearer motives of modernism stem, not from some pseudo-Nietschzian will to power (mediated, as it often is, through that Baconian aphorism: *knowledge is power*), but from the opposite – the kenosis of Saint Francis, the selflessness of Meister Eckhart, the humility of Emerson, alongside the willingness to accept the wholeness of one's self as a fragmentary part of a greater whole. But it calls for more than mere willingness, it requires the *practiced ability* to separate one's self from the *a priori* needs of one's self – on multiple scales of '*self*' – coupled with a working knowledge of signifiers capable of facilitating this separation. To reason well, so as to do science well, requires one to ignore personal attachment to biological need – and hence to ignore the contiguous attachment to epistemological presumptions which arise through attendance to subjective transcendence into being (that is, the generation and maintenance of identity). To do philosophy well, according to Wright, is to apply this same detachment to questions of human desires and fears and aspirations.

In Wright's analysis, modern science emerged when "its gestation was completed", that is, when:

> [A] body of knowledge existed, sufficiently extensive, coherent, and varied, to bear within it a life of its own – an independent life – which was able to collect to itself, by its own determinations, the materials of a continued, new, and ever-increasing mental activity – an activity determined solely by an objective curiosity, or by curiosity in its purest, fullest, and highest energy.

Notice that he speaks of the point of divergence as an origination, a birth, differentiation, or speciation, wherein the new wholeness, the new complex, emerges from the old – one with a completion sufficient to generate its own agency, its own capacity, its own being. Of course, even within this new, and newly generative complex: (*italics added*)

> Inductions are still performed for the most part unconsciously and unsystematically. Ideas are developed by the sagacity of the expert rather than by the systematic procedures of the philosopher. But when and however ideas are developed science cares nothing . . .
>
> *Science asks no questions about the ontological pedigree or a priori character of a theory, but is content to judge it by its performance*; and it is thus that a knowledge of nature, having all the certainty which the senses are competent to inspire, has been attained – a knowledge which maintains a strict neutrality toward all philosophical systems and concerns itself not at all with the genesis or a priori grounds of ideas. …It is doubtless true that other motives have influenced this development, and especially that motives of material utility have had a powerful effect in stimulating inquiry … A theory which is utilized receives the highest possible certificate of truth.

For Wright, the utility of a theory does not certify its validity or pertain to its 'truth', but *that it is utilized* does – as within Darwin's Ontology, this means that utility only enters into the equation *after* some specifiable actuality. Utility is a factor not to be ignored, but secondary (and Wright's notion of 'secondary' began to take on characteristics similar to Peirce's subsequent ideation). It is secondary in/to being itself – while yet remaining a necessary precursor to the formation of being. Speaking epistemologically, utility is secondary to the kenosis required of/by/within good science. Utility alone is incapable of generating novelty and/or being, including that being that is human knowing such as the gestalt of an ethical/ideational set. And so again, the depiction of Wright (and

Pragmatism in general) as undifferentiated from Utilitarianism and its associated systems is rejected.

Yet finally we have arrived at the money quote (in italics above), the one statement from this entire essay that receives regular attention among students of the philosophy of science, the one statement that is so often used to invalidate the rest. For our purposes, it is a matter of course that science presumes strict neutrality towards both presumptions and conclusions, and builds on what is known; however likely it is to fail by unrecognized attendance on personal attachments. What is important is that Wright, like Darwin, accepted the actuality – even the functional necessity – of postulating a rational (hence liable to corruption) construction of primary (sensual) data (experience) (however often it is badly or irrationally gathered), for use as a basis from which to refine the gathering of additional data, while simultaneously refusing to place any one hypothetical interpretation generated within this process, at any stage in the process (wherein all conclusions are themselves beginnings) beyond the bounds of interrogation. In doing so, Wright positioned himself so as to claim (like Newton but with perhaps better reason) *Hypotheses non fingo*. In doing so he laid the ground for Peirce and James, as both men invested themselves in developing the consequences of a particular criticism of Descartes (one familiar to Hobbes, Locke, Hume, and the entire tradition of British Empiricism) that doubt cannot be postulated, that doubt must be natural (by almost any definition of the terms involved) or it will remain irrelevant to the outcome of any consideration. Wright's influence on this subject is a central factor in the disparate work of pragmatic thinkers (including many who did not self identify as such), e.g. Santayana, Royce, F.C.S. Schiller, and even (through the mediation of James) Henri Bergson and Cassirer, and the later work of Wittgenstein – and this does not even begin to mention the influence Wright has had as mediated through his 'boxing lessons' with Peirce.

What is of far greater interest to us is the motivations for this neutrality, as stated above, as well as the position that science is a neutral (but *not* neutered!) study of "constellations of causes", which are complexes of integrated factors that (of course) includes – *but is not limited to* – linear and simple chains of cause and effect. In no way does science

necessitate, or even imply, a mechanical running down (or up) of some presumed cosmic eschatology, nor does it necessarily imply that subjective will is a kind of physical capacity whose agency is derived from a metaphysical or supernatural source. By rejecting these socially sanctioned but logically insupportable notions, Wright saw 'neutrality' as a way of working within complexity, and its opposite 'objectivity' as naked presumption written deep into the materialist hypothesis. Thus he rejected it as just another vulgar and unreasoning Neo-Platonism.

Wright's utter disregard, and indeed his opposite commitment, for what Gould would later dub NOMA is part and parcel of this core neutrality; Wright did not differentiate the functionality of objective motivation from the ethics of it – nor did he differentiate its source from that of other ethical concerns. While NOMA may appear to function appropriately well strictly from within a modernist paradigm, Darwin's Ontology refutes it as arbitrary and unnatural. To claim that religion and science are distinct *magisteria* with no 'overlapping' is to draw an artificial barrier (constructed by irrational abduction and defended by an assertion of some super- or un-natural warrant), so as to deliberately (subjectively) interfere with the cohesion of the immediacy of an organism within its environment.

NOMA represents a refusal to reconstruct our selfish knowing into situational coherence; it interferes with inference. It fails to recognize that the 3-phase logic that works into one induction, deduction *and abduction* refutes the very notion of 'non-overlapping'. NOMA is the opposite of Wright's neutrality, which welds together Locke's demand for toleration in first principles with the requirements of Darwin's Jungle wherein a failure to 'fit' (to establish a mutually supportive relationship) can (and very often *will*) kill. That is, it can readily 'cause' the ending of those who adhere to maladapted principles (not merely unsupport*ed* metaphysics which is utterly common and occasionally quite functional, rather unsupport*able* metaphysical presumption functioning as an actual barrier to situational cohesion, to 'fitting'), as well as countless others who suffer some relation to such fools (even one of mere proximity). It is quite simple to step from these

notions to an ethic/epistemic set, drawn from Wright's rigorous and demanding embrace of kenosis, with application throughout the worlds of human experience.

The more we allow the world (the actual, the basis of pure experience) to stick its fingers into our being and play with what it finds so as to shape and reshape our being, the more we are able to stick our fingers into the world, shaping the actuality which shapes us, a process which is practically reactive but pragmatically synchronistic. Likewise, when we refuse to allow our selves to be reshaped by our experiences, we isolate that specific self from that upon which it depends, which is also that upon which, and that which, it is. This results in epistemic, if not immediately physical, death. This principle is quite apparent in the failures of science; e.g. when an Agazzi 'sticks to his principles' rather than allow them to alter when alteration finds. Contrary to Shakespearian poetry (quoted above), love does alter what alteration finds, it alters both the lover and the loved, for love is kenosis enacted, the allowing of one's self to be filled with the being (or object) loved, an epistemic transcendence into being that can only be accomplished by not seeing through subjective (wanting) eyes.

In order for me to be, I must be intertwined, a part of, successfully incorporated into the things, the *being* (including the beings) around me; I must be one with my situation, with as much of existence as is relative (related) to me, and the situation I find myself in must likewise successfully become a part of me. If ever either of these factors should fail, both suffer, as well as any and all other related (connected) being. I draw the world into myself in order that I be – as the world draws me into it. Furthermore, I must successfully eliminate from my being that which was once part of me but no longer contributes to my being, and in fact actively poisons me. And I must do so in a way that does not poison the situation in which I live (and not just immediately, as it has become obvious to all but the most intransigent that human poisons can fill the entire globe) or I will no longer be able to draw from it that which I need to live. This is psychical as well as physical. To live well as self-aware beings, it is necessary (though not sufficient) to apply appropriate sets of signifiers in a manner appropriate to the specifics of our situation.

Nothing in these last two paragraphs should be taken as implying or acquiescing to any intent of dominion; it rather demands the opposite. I am not suggesting that anyone *in* the world should have fiat over our being, dominate it, and turn it to serve his or her own purpose – and yes, this would include any supposed supernatural being. Quite to the contrary, as the other and the self are two sides of one coin, it really makes no sense for heads and tails to go to war. However, this metaphor is hopelessly inadequate to explain the complexity of the situation, rather (as per James) each subjectivity is a complex of selves, a 'society of me'; hence, the death of *one sense* of subjectivity is not necessarily the death of an entire being. This is how a man may be perfectly capable of competent rational thought in one aspect of his life, while utterly incapable in another. For Wright, this is just one embodiment related to the functioning of scale in thinking beings.

To be very clear, the extent of relatedness is a function of scale. There are times when I must include the sun, the comets and perhaps stellar events even further distant in my equations. Likewise, there are times when what is 'relative' includes little if anything beyond the cognitions of my own consciousness. As with everything else, the limits of interrelatedness cannot be determined *a priori*, but inferred *a posteriori*, vis a vis the interplay between the *pragmatic a priori* and the constellations of consequences within/of and through which a specific situation is shaped/shapes its surrounds. William James wrote beautifully on the consequences of failure in this regard … Battles may be lost because the captain spent his time worrying about mold on biscuits in the ship's store …

It may appear that we are wandering again, far from the philosophy of science, but this is not the case. Wright found the signs he needed to clarify his studies through his reading of Charles Darwin. And so our study turns next to Wright's essays on Darwin, first to the essay that drew Darwin's attention, *On the Limits of Natural Selection*, then to the essay that Darwin specifically commissioned, *Evolution of Self Consciousness*, and finally to Wright's last essay, *German Darwinism* – his most direct attack on the illogic of the metaphysical presumption of directional causality in life, and the consequences of allowing such presumptions to influence science.

Limitation

The language of purpose and agency cannot possibly be the right one
for describing the movement of working parts within a whole.[1]

In the same manner as which life does not exist independent of its *a priori* needs and their *a posteriori* fulfillment and as with facts and subjectivities, as well as all other complexes, signs have no 'being' independent of their factors – and no agency beyond their situational relevance. Wright went so far as to describe men who believe that signs have their own 'essence' – or, *being that is capable of agency* (and commonly taken as metaphysically irreducible but not a complex, whole in its oneness, incorruptible, unchangeable, and distinct in both actuality and agency) – as savage, or even barbarian. He had no respect for the concept, emphatically common in his century and prominent in Wallace's work, that there is an actual, inherent and significant difference between 'civilized' and 'savage' humanity. As with his rejection of Comte's progressivism, where he argued that the theological, philosophical, and scientific co-exist, not only within all cultures and at all times,[15] but within all self-aware consciousnesses; 'savage' and 'civilized' co-exist within both the (foolishly designated) 'highest' and the 'lowest' on scales both individual and cultural.

A barbarian is a fool – whatever his claim to whichever station, and whenever and wherever his actual situation – who thinks that while other people's signage has, or at least *may* have, no metaphysical import (no supernatural agent granting warrant to their veracity), his do. For Wright, barbarism is far worse than savagery: a savage deserves forgiveness for his ignorance with no apology necessary for given a chance he can learn, but barbarians express the arrogance of willfully chosen ignorance. Such a fool is dangerous to the extent to which he believes (to the extent of his willingness to act) as if his ideas are not *his* ideas, but 'facts' backed by some absolute, as if his semiotic set is not derived from his methodology under the influence of his individual minding of a specific set of individual situations, but transferred directly from some absolute source.

[1] *Midgley, 1980, pg. 91*

The truly barbarian seem always to envy the assurance of a dog who has no doubts as to the value his bone.

Of course, signs are actual things, and can – indeed *must* – be isolated as a factor of and within the various syncopations of cognition in the origin of subjectivity (that is, the cognitive differentiation of *sign* from *significant* is a necessary, but not sufficient, factor of the emergence of subjectivity); but they haven't 'essence of sign' for in absolute isolation, in and of their own agency and being, they cease to be signs. And despite whatever barbaric pretensions remains in the world, there is no evidence of a direct transmission of 'objective' signage. There are signs, but there is no 'being a sign' without at least three externally contingent factors, relationship, referent and reader, none of which depend on any kind of metaphysical warrant. All that is necessary to be (or become) a sign, is that, in at least one instance, a thing must be 'read' as pointing to some other thing, which is to say, be used by some (at least nominally) sentient being to locate the second thing within his or her own cognitions (in such a way, a Pragmatist would add, so as to generate a distinction, to specify a set of consequences sufficient to differentiate whichever factors of whatever situations are however related to that specific signage). This action is by its nature (its undirected functioning agency) generative of relating; the differentiating of this action is generative of knowing; to know well is to relate well.

Wright, working alongside and with his close friends, read the signs of these distinctions which are implicit in Darwin's basic thesis and subtly apparent through out his proofs, distinctions which will become increasingly important as we work our way through Wright, and on to James and Peirce; but for now, this is all just a sign of things to come. For Darwin, however, this was point of Wright's work, writing in *Descent*:

> A great stride in the development of the intellect will have followed, as soon as the half-art and half-instinct of language came into use; for the continued use of language will have reacted on the brain and produced an inherited effect; and this again will have reacted on the improvement of language. As Mr. Chauncey Wright* has well remarked, the largeness of the brain in man relatively to his body, compared with the lower animals, may be attributed in chief part to the early use of some simple form of language,- that wonderful engine which affixes signs to all sorts of objects and qualities, and excites trains of thought which

> would never arise from the mere impression of the senses, or if they did arise could not be followed out. The higher intellectual powers of man, such as those of ratiocination, abstraction, self-consciousness, &c., probably follow from the continued improvement and exercise of the other mental faculties.[1]
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> * "On the Limits of Natural Selection," in the North American Review, Oct., 1870, p. 295

This essay, reprinted in *Philosophical Discussions* as *Limits of Natural Selection*, was written as criticism of Alfred Wallace's human exceptionalism hypothesis, as stated in his *The Limits of Natural Selection as Applied to Man*, (which Wallace re-issued in 1870 as the concluding chapter of his *Contributions to the Theory of Natural Selection*). This is the postulation that human consciousness, human subjectivity, could not have resulted of natural selection, and is therefore evidence of an unnatural act of creation by an unspecified supernatural being, a theory often referred to as theistic evolution, and which Wallace called, Natural Theology. (Though it is important to note that this 'natural theology' has almost nothing but the name in common with that of Charles Hartshorne for whom the supernatural emerges from the natural – however Wright may have dismissed both). It is basically identical to the argument offered in pretense by the so-called Intelligent Design movement. I say pretense because this movement does not advance itself intellectually but socially and politically. It focuses on *a priori* postulation defended by rhetoric and sophistry rather than *a posteriori* refinement of testable evidence. And despite protestations to the contrary, ID is not a neutral study, but an attempt to attain Christianist theocratic control of public education.[16] We will return to this contemporary issue when appropriate to our study of Darwin's Ontology.

Wright opens this 1870 essay by commenting on the "cordial reception" Origin had received in the scientific community, as well as the "revolution in general philosophy" accomplished by Darwin's basic thesis, adding that this is quite a wonder as "by the rigorous test of scientific induction it will yet hardly be entitled to more than the rank of a very probably hypothesis."[17] This is no cause for concern, however, as science is not accomplished by induction alone (see above). What is important to us at this time is that, "the skillful combinations of inductive and deductive proofs with hypothesis, though a

[1] *Darwin, 1882, pg. 511*

powerful engine of scientific discovery, must yet work upon the basis of a preceding and simpler induction."[I] What Wright here calls a simpler induction (both proceeding and preceding) is perhaps better described as an expression of Darwin's 'first philosophy', his Ontology; and the essay primarily concerns Wallace's inability to grasp the full consequences of the theory to which he rightfully claims co-discovery, by failing to grasp the fullness of his colleague's intuitive abduction. To get there, Wright made much of the evolution of signage within the consciousness of humanity.

But first he comments on the focus of Darwin's Ontology: (*italics added*)

> [T]heir theoretical discussions … have been of still more importance in … creating a new and most stimulating interest in the external economy of life, -- *in the relations of living beings to the special conditions of their existence.* And so the discussion is no longer closet work. It is no web woven from self-consuming brains, but a vast accumulation of related facts of observation, bound together by the bond of what must still be regarded as an hypotheses, -- an hypothesis, however, which has no rival with any *student of nature in whose mind reverence does not, in some measure, neutralize the aversion of the intellect to what is arbitrary.* (Italics added)

Drawing from his distrust of 'self-consuming brains', Wright understood that the vitality of the Natural Selection hypothesis lay in its study of the interaction of specific living beings and their immediate environment, that Wallace's claim that mankind is (at least so far as the origin of her mind is concerned) exempt from this creatively dipolar continuum, stemmed from an utterly subjective motivation (and is closely related to what Hartshorne would later call specie-ism, and develop as a significant element within his reconstruction of religion[II]), and that this resulted in Wallace's acceptance of a supernatural arbitrariness, and hence of unnatural causation, in an otherwise natural world.

Wallace saw (quite correctly) that natural selection (as well as selection in whatever form) establishes as heritable certain habits, tendencies or predispositions that are useful in living, and hence generate success in propagation; he even saw this as capable of

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[I] *All citations this chapter, unless otherwise noted, are: Wright, 2000, vol. 1, pgs. 97-128, Limits of Natural Selection*

[II] *Hartshorne, 1987, pgs. 83-94*

generating novelty (of originating species). However, he also saw (quite incorrectly) this function (of the 'agency' of utility) as limited to necessarily direct, linear and immediate causation and necessarily present in every variation. This is to say, he did not grasp that there is a confluence between what Gould would later dub spandrels and Darwin's correlated variations, or that there is a sharp distinction between the origin of a variation and its subsequent utility, or that not all variation is necessarily adaptive, or that traits are sometimes 'carried along' independent of utility; – and he certainly did not see that emergent complexes might act on multiple scales upon their own parts in such a way to preserve even a dysfunctional variation, as well as originate a new one as complex as human consciousness. This was perhaps due to the manner in which, like so many others of his time, Wallace appears to have seen no sapience in the world that was not human – and little that was not both fair skinned and male.

To be fair, Darwin and Wallace were both working with a simple depiction of heredity (which in the light of 19th century science is quite understandable); however, Darwin's Ontology – as seen by Wright and explicated in this thesis – did leave room (establish the potential) for a future development of the idea of complex emergence, whereas Wallace did not. E.g. *Origin*: "I mean by this expression [correlation of growth] that the whole organisation is so tied together, during its growth and development, that when slight variations in any one part occur and are accumulated through natural selection, other parts become modified."[I] It is perhaps due to his misapprehension of certain key features of Darwin's thought (such as this vital center of Darwin's Ontology) that Wallace mistakenly held that natural processes were incapable of generating consciousness; e.g. the very title of one relevant section: *The Origin of some of Man's Mental Faculties, by the preservation of Useful Variations, not possible*, and emphasized by the concluding question therein:

> How could "natural selection," or survival of the fittest in the struggle for existence, at all favour the development of mental powers so entirely removed from the material necessities of savage men, and which even now, with our comparatively high civilization, are, in their farthest developments, in advance of

[I] *Darwin, 1985, pg. 182*

> the age, and appear to have relation rather to the future of the race than to its actual status?[I]

Whereas Wright argued: (italics added)

> Upon this point the doctrine of Natural Selection assumes only such general anticipation of the wants or advantages of an animal or plant as is implied in the laws of inheritance. That is, an animal or plant is produced adapted to the general conditions of its existence, with only such anticipations of a change or of varieties in these conditions as is implied in its general tendency to vary from the inherited type. *Particular uses have no special causal relations to the variations that occur and become of use*. In other words, *Natural Selection, as an hypothesis, does not assume, and, so far as it is based on observation, it affords no evidence, that any adaptation is specially anticipated in the order of nature.* From this point of view, the wonderfully intricate system of special adaptations in the organic world is, at any epoch of its history, altogether retrospective. *Only so far as the past affords a type of the future, both in the organism itself and in its external conditions, can the conditions of existence be said to determine the adaptations of life.* As thus interpreted, the doctrine of Final Causes is deprived of the feature most obnoxious to its opponents, that abuse of the doctrine "which makes the cause to be engendered by the effect." But it is still competent to the devout mind to take a broader view of the organic world, to regard, not its single phases only, but the whole system from its first beginnings as presupposing all that it exhibits, or has exhibited, or could exhibit, of the contrivances and adaptations which may thus in one sense be said to be foreordained. In this view, however, the organical sciences lose their traditional and peculiar value to the arguments of Natural Theology, and become only a part of the universal order of nature, like the physical sciences generally …

So while Wallace concluded (via his structured complex of *a priori* interest with badly reasoned *a posteriori* judgment of experiential phenomena) that, according to the Natural Selection hypothesis, consciousness *must* stem from some willful act of a teleological agent (which many would call God), Wright argued that the existence of consciousness, by itself, does not necessitate Wallace's arguments, as teleology is not an actual principle of nature but an abstracted absurdity, and hence, has no agency beyond that of mentation. And he nails it down with excellent use of 19th century academical snark on Wallace's selective use of the same argumentation. In a likewise manner, Wright dismisses all Wallace's efforts to establish an unnatural source for such variants as opposable thumbs, upright posture, and the very existence of scantily haired primates, as well as all virtue, morality, civilization and etcetera. E.g. regarding veracity:

[I] *Wallace, 2008, pg. 351, The Limits of Natural Selection as Applied to Man*

> It belongs rather to that social and intellectual part of human nature from which language itself arises. The desire of communication, and the desire of communicating the truth, are originally identical in the ingenuous social nature. Is not this the "mystical sense of wrong," attached to untruthfulness … ?

At the heart of Wright's argumentation lies Darwin's Ontology with its focus on the varying ecosystems of interactions (in the instance above, this would be human society), and also its presumption that while any interaction is necessarily *conditioned* by the inherited predispositions (limitations) of the various relevant factors, no interaction concerning a living being is necessarily *determined* by any individual factor (including natural selection) or even any grouping of factors within any such interaction (structure). It is this very lack of absolute domination by any singular factor, this presence of indeterminate (accidental) effect that generates true novelty, and this includes the existence of subjectivity itself as well as any 'mystical' sense registered therein; and this is/happens sans any premeditation or willful agency. As Wright saw it, it is this very lack that generates at least the potential for, if not the actual occasion of, as well as habituate the potential within, the naturally occurring complexes we call life. Part and parcel to this, and evident in the passage above, lies a central concept that James would charitably dub the 'principle of Peirce', or Pragmatism – that 'there can be no difference anywhere that does not make a difference somewhere.' This is seen in the above passage as the lack of consequential distinctions found in the origin of the motivation to communicate, and the motivation to communicate truthfully.

It should be noted that this depiction includes within its scope the properties of physics, however absurd it appears when studied from the perspective of a living being. Everything in the preceding paragraph is ultimately limited by the capacity of the specific individual involved in an exact situation to continue to live, to incorporate and excorporate when and as necessary. Obviously, the outcome of an interaction between a living warm-blooded mammal and the hard vacuum conditions of extra terrestrial space is, for all intents and purposes, limited to just one: the death of the mammal. However, this is an issue of experience, not logic. I refer you to the classic: are all blackbirds black?

(Some yogi may some day breath vacuum, or a cold corpse might get up and walk. And I might flap my arms and fly. While it is correct to argue that 'pure' logic cannot prove otherwise, I rather put my faith in experience. I argue that it is wise, even 'logical', to limit my opposition to the wisdom found/generated within experience, avoid leaping from the roof of any tall building vainly flapping my arms, and count birds as I see them.)

And so we keep searching for the hinge of Wright's argument against Wallace's human exceptionalism hypothesis, and find it rather blatantly presented in hierarchies of race and class. (Perhaps he carried a chip on his shoulder over his relatively low class status within England, and thereby suffered from a distorted motivation – but I speculate.) Wallace makes much of the supposed differences between civilized and savage man, claiming that savage man has a much larger cranial capacity than, according to Wallace, is needful or useful in his 'degenerated' state. Wright responds thusly: (*italics added*)

> Of what significance is it that his [uncivilized man's] brain is twice as great as that of the man-ape … so long as we have no real measure of the brain power implied in the one universal characteristic of humanity, the power of language, -- that is, the power to invent and use arbitrary signs?
>
> … [A] psychological analysis of the faculty of language shows that even the smallest proficiency in it might require more brain power than the greatest in any other direction. *For this faculty implies a complete inversion of the ordinary and natural orders of association in the mind, or such an inversion as in mere parroting would be implied by the repetition of the words of a sentence in an inverse order*, -- a most difficult feat even for a philosopher. "The power of abstract reasoning and ideal conception," which Mr. Wallace esteems as a very great advance on the savage's proficiency, is but another step in the same direction… It seems probable enough that brain power proper, or *its spontaneous and internal determinations of the perceptive faculties*, should afford directly that use or command of a sign which is implied in language, and essentially consists in the power of *turning back the attention from a suggested fact or idea to the suggesting ones*, with reference to their use, in place of the naturally passive following and subserviency of the mind to the orders of first impressions and associations. By inverting the proportions which the latter bear to the forces of internal impressions, or to the powers of imagination in animals, we should have a fundamentally new order of mental actions …

For Wright, language is a developed consequent of a turn of attention from an object, to awareness of the object, thereby reversing the flow of perceptions. The mind, as William James would later make much account of, is the faculty of perceiving, of 'feeling out' the

situation wherein the perceiving organism pertains, which is to say that 'mind' is a phenomenon in need of no supernatural warrant, as it is as common as life. Though it sometimes seems that sponges *mind* more readily than man (our abstractions seem to commonly fool us), both must do well at it if they want to survive. While the two differ vastly in terms of the complexity of this feeling capacity, both sponge and man must identify that which they need to incorporate (so as to live) out of the barrage of objects it encounters, (the vast majority of which are either inadequate for such incorporations or actually harmful to the organism), both sponge and man 'mind' their needs. But in doing so without a pro-active use of the sign function as its own object – without at least some use of signs-as-signs, the sponge's mind passively follows sequence from one event to the next. By contrast, a turn of attention to signs-as-signs allows a man's mind to follow consequence, to separate it from sequence and hence, to differentiate probabilities so as to make possible willful (premeditated) choice.[I] To the extent to which willful choice proves to be a beneficial variation, it will adapt, develop, and take on new and greater powers, the greatest of which may be subjective awareness.

It is important to note that this particular development (subjective awareness) of this specific agency (mind) is neither determined nor necessary, and perhaps not even likely. As we have seen above, it is the practiced ability to distinguish between significants and their signs (between an object and reference to it – or, as Korzibsky would say, between a map and its territory), which generates successful differentiation in the subject/object coordination commonly called the subjective self, and not the use of signs alone. Likewise, this process is so often corrupted by subjective motivations that it commonly disrupts awareness of actual living (pragmatic *a priori*) need (e.g. how often how often an individual's actual experience conflicts with his self ideation, not to mention how often I 'need' a cigarette); an event which results in astonishingly maladaptive behavior so very common to that exact variant of the species Wallace holds so dear: so-called civilized man. But to see this is not to practice naïve romanticism; 'savages' can be just as ignoble.

[I] *James, 1890, ch. 2, The Principles of Psychology*

One could fairly ask, given's Darwin long friendship with Wallace, whether he would agree with Wright's dismissal of Wallace's notions. The answer is already obvious from our earlier reading, but as we are talking about Darwin's ontology, the base metaphoric structure of his self, it bears fruit to seek evidence from within Darwin's life: e.g. his decades long commitment to ending slavery (he was banned from Fitzroy's table onboard the Beagle for arguing that scriptural defense of slavery was an abuse of the Bible and for many years he encouraged his well-connected extended family to contribute to efforts to end slavery in the British Empire), his published anguish at the plight of the indigenous Tasmanians and the loss to humanity engendered by their genocide at the hands of British settlers, and also the respect and friendship he developed with the Amerindian man who traveled aboard the Beagle, Jemmy Button, as well as the understanding he developed of Button's situation. These are just a few of many examples, add to them the fact that Darwin published Wright's critique of Wallace as well as cited Wright in his own support, and it is reasonable to conclude that Darwin, the man, dismissed Wallace's arrogated position. But the question remains, would Darwin, *in his argumentation*, agree with Wright's depiction of 'barbarism', or with Wallace's human exceptionalism argument? We read his concise answer from the conclusion of *Descent*: "He who is not content to look, like a savage, at the phenomena of nature as disconnected, cannot any longer believe that man is the work of a separate act of creation."

Darwin and Wright use the term 'savage' in precisely the same manner, as depicting people who are poorly, horribly, or just wrongly educated but never *inherently* inferior. Wright went one step further in his use of 'barbarian' to depict willfully ignorant people, that is, people in whom cognition dysfunctions, not as a result of the situation in which they find themselves and over which they have no direct control, but because of their own damn pride. And so, at least in this way, Darwin perhaps considered Wallace rather savage, whereas Wright publicly called out Wallace for his savage ways, and labeled him quite the barbarian to boot!

It is on a similar note that Wright takes the time to eliminate another of Wallace's central arguments for his human exceptionalism hypothesis: the belief that reason, as well as the

"power of conceiving eternity and infinity, and all those purely abstract notions of form, number, and harmony", the so-called 'higher' powers of man, are so very far "outside the world" of savage man they must have been especially anticipated in the development of man. Alternatively and if Wallace has his presuppositions correct, 'savage' man may have degenerated from a previously 'civilized' (dare we say, Eden-like) condition. And again, we see Wallace applying his own reason unevenly, whereas Wright returns to a strictly neutral adherence to scientific principles for which he is known and to the objective motivation he aspired to maintain:

> The fact that it does not require Natural Selection, but only the education of the individual savage, to develop in him these results [the ability to reason well], is to us a proof, not that the savage is specially provided with faculties beyond his needs, nor even that he is degenerated, but that mind itself … involve and imply such relations between actual and potential faculties; just as the elementary laws of physics involve many apparently, or at first sight distinct and independent applications and utilities. Ought we to regard the principle of "suction," applied to the uses of life in so many and various animal organisms, as specially prophetic of the mechanical invention of the pump and of similar engines? Shall we say that in the power of "suction" an animal possesses faculties that he does not need? Natural Selection cannot, it is true, be credited with such relations in development. But neither can they be attributed to a special providence in any intelligible sense. They belong rather to that constitution of nature, or general providence, which Natural Selection presupposes.

There are many philosophies which presuppose that as existence is both conditioned and conditional, it must therefore be secondary to some unconditional essence or law, but this way of thinking has consistently led its adherents into an ideological (ideational) cul-de-sac; we can reasonably presume it will continue to do so. But in the quotation above, we see Wright the Pragmatist (writing, it should be pointed out, years before Peirce codified the pragmatic principle, and decades before James would distill it). The principle 'suction', like that of all other principles, including the supposedly purely rational *a priori*, mathematical or otherwise, are actually secondary to and conditioned upon existence, rather than the other way around. And so, Wright takes the time to clarify how empirical knowing comes to be posited as *a priori*:

> They [certain sets of belief] are tendencies, however, which become so involved in intellectual developments, and in their mutual limitations, that their ultimate

> results in rational beliefs have very naturally appeared to most philosophers as purely intellectual facts; and their real genesis in experience has been generally discredited, with the exception of what are designated specially as 'empirical beliefs.'

The presumption here is that species of 'natural law' are derived from our best understanding of what is, rather than prefigure it. They, like everything that is, develop with and within an ecosystem; they evolve *a posteriori*, through interaction between a specific subjective awareness and its environment; truths evolve. Eventually Peirce would go so far as to suggest that physical properties themselves exhibit what Jaroslav Flegr has come to call Frozen Evolution: this is to say, early in the existence of the universe (perhaps for only a few milliseconds) the properties behind such 'laws' were fluidic (adaptable, changeable) only to become habituated, to concresce into stable – even determinable – patterns of interactions; and that the stability of these 'laws' are derived from the high degree of 'inter-locking' within an extensive 'pool' of extant potentiality. Peirce goes on to hypothesize that what is often and falsely labeled 'natural law' (the actuality of existence, as opposed to our many interpretations of it) may actually revert to a plastic state (though he admits he cannot imagine what kind of conditions this would require). And for James this same ideation becomes apparent in his criticism that far too much philosophy fails to properly distinguish between truth and being, that the signifier 'truth' is merely descriptive – accurately or not – of what is, rather than identical to it.

But we will return to these themes when we get to Peirce and James as they remain central to everyone else who has worked with Darwin's Ontology; for now, it is enough to establish that Wright drew from Darwin a map to guide him around numerous age old metaphysical pitfalls, and open pathways for more and greater knowing. And so, back to the issue at hand …

Having eliminated Wallace's natural theology, and a whole host of prejudices contained therein, as just such a cockeyed and narcissistic embrace of teleology, Wright moves on to another great philosophical shibboleth: the origin of sensation in the mind/matter conundrum. And again we see Darwin's Ontology opening a new niche, a new set of possibilities in the metaphysics of the self, but here too we see how easily Darwin's

Ontology can be misrepresented variously as mere reductionism or, alternatively, obnoxiously picayune 'relativism'. Perhaps the most frequently misunderstood lines in this essay are the money quote: "Matter and mind co-exist. There are no scientific principles by which either can be determined to be the cause of the other." And again, it is only by ignoring the rest of this essay, can one limit this statement to merely Cartesian, and only by ignoring how this very statement fits within the entirety of the essay can Wright be said to fit well with the very movements he considered to have slipped quickly and deeply into dogmatic slumber, those precursors of behaviorism and staunch allies of reductionism; Utilitarianism, Scottish Realism and Associative Psychology.[I]

Darwin and Wallace had indeed opened a new niche allowing the formation/discovery of a way of understanding, a new ontology, a new default metaphysical setting upon which the fruits of society could flourish. But while Darwin was primarily interested in its stolid establishment, Wallace sought immediately to limit its exploitation/fulfillment. By what we have already seen, it is quite apparent that the aspect of Darwin's Ontology that Wallace considered sufficient justification to end his otherwise cohesive study in favor of an embrace of irrationality, was its consequences within the study of consciousness; however, Wright was having none of that: (*footnote original, patience, we will get to it*)

> But if we mean by "consciousness" what the word is often and more properly used to express, -that total and complex structure of sensibilities, thoughts, and emotions in an animal mind, which is so closely related to the animal's complex physical organization, -- so far is this from being beyond the province of Natural Selection, that it affords one of the most promising fields for its future investigations.[4] Whatever the results of such investigations, we may rest assured that they will not solve; will never even propound the problem peculiar to metaphysics (if it can properly be called a problem), the origin of sensation or simple consciousness, the problem par excellence of pedantic garrulity or philosophical childishness.

From our perspective, what Wright at this moment calls Natural Selection, we rather see as Darwin's Ontology; but yes, it will never put forth for discussion the question of the origin of sensation because there is no problem to be solved, no point to be discussed; an organism and its environment are continually forming/becoming (incorporating)

[I] *Wright, 2000, vol. 2, pg. xii*

(making) each other, they *are* each other (the differences between the two being of scaling complexity rather than essence[18]); sensation is an object (a noun designating a subjective event) abstracted of the process 'sensing' (a verb designating an objectifiable action) which occurs at (is a function of) the point of interplay, the junction within the complex oneness of what is; there is no gap to be bridged. Though experienced internally to the organism, sometimes even occasioned so (i.e. memory, fantasy, etc.), sensation is in no way indicative of perception, nor comprehension, nor any greater complex of experience; it is a necessary factor within, though not independently sufficient to be *the cause* of any such complex. It is not you grasping the world, it is the world grasping you; and if it didn't, you would not be.

Sensation is the basic element of minding. As Wright puts it: "The attempt to reduce sensation to anything but sensation is as gratuitous and as devoid of any suggestion or guidance of experience, as the attempt to reduce the axioms of the mathematical or mechanical sciences to simpler orders of universal facts" – of course, this is not to claim that no concepts can ever be reduced. Rather, reduction is itself one of those principles that can (abstractly) 'stand alone', however, like all principles it is only as true as it is applicably relevant to an exact situation.

To put all this together is to say that some specifiable (however long we may argue over which, where, and how to so specify) factors of being cannot be reduced, because there are situations in which reduction itself becomes absurd; here, sensation is the point, ever peaking so long as time and life exist, the crescendo of the rhythm of in- and ex-corporation which is life itself. To bicker over the wherewithal is the domain of a rational mind, but to postulate an arbitrarily placed chasm betwixt subject and object demanding an equally great feat of metaphysics to overcome it, and then to refuse to allow any *a posteriori* reconstruction of such an abduction (that is, to claim that such ideation is logically (deductively or inductively) conclusive) is to replace Wright's objective motivation with one far more subjective, and to prioritize the maintenance of an abstracted identity over continued cognitive growth – and quite possibly even continued

living. It will necessarily interfere with continued cognitive (subjective) maintenance as *he not busy being born is busy dying*.

The rest of Wright's arguments against Wallace's rationales follow a similar vein, and while we needn't slog through every one as we have already touched on the core of the matter, some bear relevance and to them we shall shortly turn. Before we can, however, there are some issues now before us that we best not ignore.

Wright frequently ascribed to the Natural Selection hypothesis that which more appropriately would fit within Darwin's Ontology. I would argue that by whatever happenstance, Wright shared with Darwin some elements of his operational gestalt, metaphysical predisposition, or first philosophy; as such he 'read into' Darwin's work much of Darwin's own mindset. This would explain Wright's ability to, as Darwin wrote, "know my works as well as I do myself". I further argue that the continued vitality of *Origin*, in spite of its basic irrelevance to working biologists today,[19] stems from Darwin's basic Ontological premise (beautifully embodied within his 'one long argument' and woven throughout subsequent theoretical and philosophical development) but not from adherence to his exact formulations of the mechanics of selection, natural or otherwise.

In light of 150 years of continued development of biological theory, much of what Darwin had ascribed to Natural Selection has become nuanced; more to the point, much of it has been shown to be mistaken; Phyletic Gradualism gives (grudging) way to Punctuated Equilibrium – and then to Frozen Evolution. Hawks and Doves and Streetcars and Prisoner's Gambits have risen out of contention over the Regulators (Steam or otherwise) and Replicators that have variously replaced Darwin's hypothesized gemmules. Monsters got happy and Hedgehogs got frisky; but also Genes got Selfish and an entire revolution of conceptual synthesis turned its back on Darwin's Ontology in favor of the same modernistic bifurcation of living object from motivating subject that Darwin, in his basic ontology, rejected.

The Neo-Darwinian synthesis has greatly expanded on Darwin's relatively simple understanding of the function of heritage in transmutation with massively productive consequence, however – especially when motivated by yet another incarnation of Wallace's human exceptionalism hypothesis (e.g. Watson's oddly 'geographic' focus on IQ) and/or moderated through some recent version of Wallace's control hypothesis – it has also rejected Darwin's Ontology, ignored the input of 150 years of influence that Darwin has had on philosophy, and led evolutionary theory back towards a Neo-Cartesian cul-de-sac, (though quite possibly veering awful close to, if not sometimes strait over the edge of, the Hobbesian cliffs); fortunately, the methodology of science – as well as the definition of truth applied therein – is relentlessly and utterly pragmatic, and hence, functionally capable of changing direction when and where experience, focus and true need demand. We are witnessing this now with the conceptual development of bio-semiotics (alternatively bio-hermeneutics et al.), and other variants of the philosophical 'schooling' of theoretical biology. (It should go without saying that this in no way invalidates the 'schooling' that biology has offered and continues to offer, to philosophy.)

Speaking metaphorically, philosophy is the mother of science; and like all mothers it matters not how her child has grown; she will always (so long as she is a good mother) maintain both the ability and the right to chastise science, to cheer her success while schooling her in her faults, and to set before her more fruitful paths. Though, to continue the metaphor, in order to be a good mother, to function well as a mother, philosophy must listen to her child, learn from her, and value her unique contributions; i.e. for this metaphor to work any number of ideas – e.g. the Aristotelian concept of the child as the property of the parent, the common Medieval concept that the child is, essentially, an extension/copy of the parent, Locke et al.'s concept that the value of the child pertains primarily to her future social worth, and especially Piaget et al.'s utter rubbish that growing children are incapable of cognitive function and moral evaluation; all this, along with all sorts of Calvinistic ideation that children are inherently evil (dysfunctional) and must be 'broken' (metaphysically as well as physically reduced) so as to be reshaped 'rightly' (better adapted, more functional) with premeditated adherence to one particular teleology chosen (specified/defined/shaped/generated within and without, and commonly

abducted sans cognitive coherence) by the parent (or worse, by some 'pope', or a council of church 'fathers'); all these philosophical abstractions, along with every variety of poisonous pedagogy, must go into the dustbin of the history of ideas, to be replaced by the conceptions of childhood found in the work of Alice Miller, as well as throughout the Philosophy for Children movement, an ongoing development of the work of one of the most fervent proponents of Darwin's Ontology ever to focus on pedagogic philosophy: John Dewey.[20]

To take this metaphor one step further, religion is – as Comte said but not at all in the manner he intended – the mother of philosophy; as such, she has the right and the ability to school philosophy. However, (and this is a very important *however*) this metaphor can *only* work when we have similarly discarded dysfunctional concepts of religion. There is no doubt that, like Wright, Darwin endeavored to be that certain kind of "*student of nature in whose mind reverence does not, in some measure, neutralize the aversion of the intellect to what is arbitrary*." There is no doubt that Wright, like Darwin, was singularly unimpressed by what passed for the religious motifs of his day – and of all the ages of which he was familiar. Darwin's Ontology makes no call for theocratic influence on science. Not. At. All. Quite the opposite, if she is to be a good mother and grandmother, religion bloody well needs to learn to value the unique contributions of her progeny.

To postulate a particular hypothesis, then to refuse and refute all subsequent reconstruction of said hypothesis, is not to be religious, it is to be irrationally arbitrary; it is to abandon reason in favor of know-nothingism, nihilism. It functions, as James oft remarked, as the opposite of religion. For religion is rooted in the very subject/object continuum of which we have been speaking; it is the re-cognition of the re-binding that, in a contrary complement to Aristotle's syllogism, is forever allying (forever both) A and not-A, one *with* other into a novel oneness that is always unknowable to prediction. This is why a coherent mysticism, a rational acceptance of the indeterminism of existence, must always play a part within reason. There are aspects here that best be remembered; its roots are not in abstraction, (arbitrary or otherwise) but incorporation, and it functions

as both cause and effect in the minding of sensation, and as an avatar of that minding which is also a first philosophy, an ontology, the ground of an existent being.

To develop this point, we turn to Wright's hagiographic essay on John Stuart Mill, where he opines on the subject of the function of a properly adapted expression of religion (that is, a functioning religio, or binding into cohesive subjectivity):

> His hopefulness, generosity, and courage, and a chivalric, almost romantic disposition in him, seemed to those least acquainted with him inconsistent with the utilitaria philosophy of morals, which he not only professed, but earnestly and even zelealously maintained. The "greatest happiness principle" was with him a religious principle, to which every impulse in his nature, high or low, was subordinated. It was for him not only a test of rational rules of conduct (which is all that could be, or was, claimed for it in his philosophy of morals), but it became for him a leading motive and sanction of conduct in his theory of life … Unlike Bentham, his master in practical philosophy, he felt no contempt for the claims of sentiment, and made no intolerant demand for toleration. He sincerely welcomed intelligent and ernest opposition with a deference due to truth itself, and to a just regard for the diversities in men's minds from differences of education and natural dispositions. These diversities even appeared to him essential to the completeness of the examination which the evidences of truth demand. Opinions positively erroneous, if intelligent and honest, are not without their value, since the progress of truth is a succession of mistakes and corrections.[I]

Any honest religio, however incorrect in its abstractions, is to be valued as contributing to the ongoing binding of inchoate experiencing into coherent, structured, (subjective) being. The real problem with religion is not the inherent leaps of faith, which are always present in any religious postulation as well as woven throughout all abduction. Rather, the problem of religion manifests whenever an adherent, having once found some ground under his feet, refuses to budge or even to just look around, however precarious his perch.

The point here is that institutionalized religious motifs are stale, left over relics of previously successful bindings (which nevertheless maintain real potential at being again breathed (incorporated) to (within) life: very often this happens to our great detriment). While Wright seemed to have a great respect for Mill's well functioning religious

[I] *Wright, 2000, vol. 1, pg. 417*

principles, he, like Darwin, appears to have given fair consideration to, but invested nothing of himself in, the moldy remains of such so-called 'religious' practice. They found it too dry, unfruitful, not even good for compost – not even good as fertilizer.

And yet, the Latin etymology of the English word religion is strikingly close to what is implied when speaking of it within Darwin's Ontology: *religio*, to attach together, to connect again (consequentially) two (or more) into one (and to do so in such a way which is generative of greater incorporation, that is, can successfully accomplish – or at least assist in – transcendence); it is to yoke a beast with a plow so as to till a field. In fact, religio shares its etymological meaning with both the Indo-European 'yoke' and the Sanskrit 'yoga', the practiced removal, or the studied process of removing the various 'coverings of the atman' not merely to bind 'thou' with 'that' or even to rebind them, but to *knowingly utilize the existent binding* (of I and not I) that is the essence of life. The process of religio is, in many ways, that of which all reality consists, the binding together of an individual consciousness into its living situation – including all those parts of 'reality' (the subjective map) left unrecognized (and outside knowing intent). (This is important because P.K. Dick was right: reality is that which will kill you if you don't pay attention to it.)

To continue on the theme, Philosophy is an accidental variation, neither determined in its aspects nor necessarily provident in any particular actuality, of this religio – this more fundamental but almost universally misunderstood factor of life which has come into being consequentially through the indeterminate development of subjective awareness out of the function of minding that is a necessary but contingent factor of the quale of organism-in-its-environment. While all of religion's knowable guises – as attachment to a presumed metaphysical 'good' or as personal or institutional structures of either social or individual prestige, but also as some opiate or shiny expression of egoism, etc. etc. etc. – come into actuality as themselves accidental variations to stand or fall based on their ability to 'fit' whatever situation wherein they find themselves, the basic principle of 'religio' exists woven into the nature of life habituated within an ever unfolding existence. Any specific aspect of any specifiable religion *may* or *may not* have much of

value to contribute (after all, *Science asks no questions about the ontological pedigree or a priori character of a theory, but is content to judge it by its performance*), and so one never knows, and neither science nor philosophy cares one whit, from whence a good or useful idea comes; what matters is how it functions in the cognitions of an individual mind. Rational discussion (even discussion that is, at best, barely hypothetically rational) is not possible without established and continuing binding (religio) into subjective awareness, itself a variant complex, potential but not necessary and certainly not prefigured, preordained or even predictable at any point in the process of its development out of the very necessary minding of an organism within the immediacy of its situation, incorporating and excorporating so as to be; shaping itself and its surrounds as it is being shaped, accidentally, within indeterminable and individual transcendence into life.[21]

This binding is, on varying scales, both integral to the existence of subjective minding and a functional component of life. On the level of human cognition, it functions variously as cause and effect within the psychological ecology of an individuated self; and of course, malfunction within, or maladaption to, a pertaining situation can result in the destruction of both individuals and lineages, and can do so in terms of both cognition and actual existence. 'Religio' depicts the abstracted function of this metaphysical binding, whereas 'religion' depicts the relics of this process that have come into being individually, via inherited (previous and relevant) predispositions through accidental incorporations of experience into a specifiable metaphysical transcendence (emergence into metaphysical, that is, abstracted, conscious, self-aware being). These religions then survive (as individuals and lineages) only if they are 'true' (functionally cohesive, useful, and generative of greater possibility of both stability and extension in both time and space), and relevant (relative, related to both the 'subjective' believer and the 'objective' actuality of the believer's life) bindings. It is not any individual religion, but the binding itself (the religio that is the essence of religion), which has the ability to demand the respect of Philosophy, and indeed to school her in her faults. And Philosophy would do well to listen. If any specific philosophy functions well and does not privilege herself with willful arbitrariness or damage herself with subjective motivations (if she is a good parent able to respect and learn from her offspring as she is a good daughter able to

respect and learn from her parent), then she will adapt and evolve so as to fit well enough to survive (she will become a providential though accidental and in-determining but foundational well-spring of future incorporations, and part of a Darwinian History of Ideas): and if not, then not.

To make this clear, parents are not required to accept whatever demands their children make. If the child is not functioning well (is making arbitrary demands, refusing to listen and learn from her situation, etc.) then the parent has an obligation not to listen to her. Reciprocity is not, after all, a one-way ticket. And what is true of every child is true of every parent. And it is true of every variety of philosophy and religion, true of every single one of the potentially and practically infinite number of individual psychological (that is, metaphysical but possible only through expression within some complex organic structure) bindings of mythic sets (along with all attendant ritual and dogma, societal, sexual and epistemic norms, etcetera), which currently or may someday exist.[22]

While all this may appear to be stepping further and further away from Chauncey Wright, the supposed Positivist, and his explication of Darwin's Ontology, in fact, it is square at the center of it. His fourth and final footnote to this essay (placed as seen within the quotation on page 58) consists of an extended demonstration of the manner in which he saw ideas originating in individual minds as irrational (not knowingly constructed of cogent sources) and immediate (not resulting from reflection, introspection or any sort of psychological awareness) beliefs (claimed knowledge of the believer's 'objective' situation); to Wright, a belief is an accidental habituation (both as psychic habitats, niches in the ecology of the mind, as well as habits, predispositions built into the metaphysics as well as the physics of the thinking being) which only henceforth falls into the province of Natural Selection, and is 'tested' on the anvil of nature. But also, it is henceforth that belief becomes capable of speciation into various forms. In the middle of much explication, he writes:

> It may be objected that the generative process we have here described bears only a remote and fanciful analogy, and not an essential resemblance, to Natural Selection in the organic world. But to this it is, perhaps, sufficient to reply (as in

> the case of the origin of language), that if "the survival of the fittest " is a true expression of the law, … then the development of the individual mind presents a true example of it: for our knowledges and rational beliefs result, truly and literally, from the survival of the fittest among our original and spontaneous beliefs. It is only by a figure of speech, it is true, that this "survival of the fittest" can be described as the result of a "struggle for existence" among our primitive beliefs; but this description is equally figurative as applied to Natural Selection in the organic world.

Here, Wright is not being metaphoric, and he is not confusing the natural selection hypothesis with Darwin's Ontology. He is precise in what he says; 'survival of the fittest' is a *figurative* depiction of the evolution of physical structures in the organic world, which is *equally* applicable in the metaphysical 'world' of science and ideation, of religion and philosophy (as well as the where-can-I-find-a-toilet, I-am-hungry-what-is-there-to-eat, and the oh-my-god-what-a-lovely-dress-it-must-have-cost-your-husband-a-bundle, – not to mention the perennial you-talkin'-to-me, quales of human metaphysical mapping). To draw such a connection is to define (depict, grasp, corral for later use) 'fitness' according to Darwin's Ontology, it is to reconstruct the concept through the incorporation of Darwin's ideation so as to remove the taint of teleology. This is a necessary reconstruction, and one not accomplished by Darwin. "Survival of the fittest" came to us from Spencer, who clearly did see 'fitness' as an ideal (essential) good, pre-ordained within existence and maintained by supernatural fiat. Darwin did not initially use the phrase, and added it only twice within the sixth edition of *Origin*; however, he did so in such a way as to retract its significance – he clearly did not buy into Spencer's framing but sought to co-opt his terminology. While Darwin was less than successful at this, we can readily use Darwin's Ontology so as to retrofit the phrase.

My clothes 'fit' me when the relationship between my body and my clothing 'works'; when the size, shape, material and color of both the clothing and my body compliment each other such that they are capable of developing a 'look' or 'feel' that expresses some (intentional or not) aspect of my self so as to generate a positive (consequentially benevolent and inclusive) response within whatever social fabric is relevant to the situation in which, at that moment, I find myself (which must then also take into account non-human situational factors such as the weather). And, no surprise here, fitness is

relative in at least two very different ways: first, situations are always individual; what works for you might not work for me, and likewise, what works for you on holiday in Goa might not at all fit your office in Bristol, etc. And secondly, relationships are always situational; Charlie Chaplin's trousers were overlarge and his vest undersized, but the 'look' worked, it fit the character intentionally placed on screen for our appreciation and elucidation; and so, something may appear to fit badly (to be maladapted) in some aspect and from one perspective, only to work extremely well in some other more relevant aspect, more relevant perspective. In any case, fitness itself, like religio, is a function of complexity; it depicts a sufficient degree of interaction capable of signaling the emergence of a transcendent wholeness, an individuation or speciation, *into* existence; fitness describes (in terms of more or less, though not with scientific accuracy) the quantity of the potential of emergence in a complex in development.

In a similar vein, if you are physically fit, then all the various parts of your body are functioning well in their internal relatedness such that the wholeness (the complex gestalt) of you functions well with no inherent factor or aspect weakening the whole; and if you are psychologically fit, then the various parts of your psyche are likewise whole. So too, for Wright as for us, 'survival of the fittest', means that those individuals and species will continue to exist (will continue their extension in time and space), which relate to their situation externally and internally, and strongly and well, in such a way so as to generate or extend scale thick wholeness (transcendence into being), so as to support the maintenance of established patterns (habits or methodological predispositions) of incorporation as well as the potential for greater incorporation or for novel forms of incorporation, and likewise to deal well with the remainders of the excorporation that is equally necessary for life to be. And this depiction is equally applicable to metaphysical nature as to physical.

There is yet one more aspect of the relativity of 'survival of the fittest' that deserves a flat negation: it is not, and can never successfully be, interpreted as 'survival of the strongest' – or at least so long as written by Darwin or read through Darwin's Ontology. Evidence for this can be found throughout the life work of both Darwin and Wright– but more to

the point, it can be found in their lives. Neither of these men had any respect for any order of imperialism, slavery, and the like; nor had they time for philosophical apologetics for oppression of (almost) any kind (the obvious exception being Darwin's rather sexist ways). Both of these men were dedicated to their community, and worked for its betterment. Any reading of Darwin that pretends otherwise is based not in Darwin, but in the reader's claim to power, and in the corruption of their subjective motivation.

And before we continue to Wright's Evolution of Self Consciousness, and then on to James and Peirce, let us first look at yet one more shibboleth embraced by Wallace but slain by Wright, an issue more basic than, and integral to, the 'free will' which Hume succinctly defined as "the most contentious question of metaphysics": will itself. Wright turned the question on the issue of force, and uses it to exemplify the absurdity of the human exceptionalism hypothesis; we can use it to exemplify Darwin's Ontology.

By applying Darwin's Ontology to the question of Will, Wright isolates what Gilbert Ryle would much later call the Ghost in the Machine hypothesis, (brilliantly developed into full metal assault on Behaviorism, by A. Koestler in a book of the same name). By so doing, Wright accuses Wallace of resorting to mere sophistry so as to avoid the full implications of the first philosophy of evolutionary science. For Wright, the doctrine of free will as causal agency in an otherwise mechanistically determined universe is merely a cheap out; it is an arbitrary and irrational conclusion that allows no novel generation of knowing (it is a classic Neo-Cartesian cul-de-sac) rather than one which is simultaneously capable of functioning both as an ending (a knowing conclusion) as well as a new beginning (a testable hypothesis), so as to further the origination of knowledge. He notes that to make this hypothesis 'work', Wallace must (as with many before him) presume some continuing 'leak' of some force from some non-physical or supernatural source – with no evidence to support such a claim and no reason to even make such a claim outside Wallace's subjective motivation to maintain his self ideation, as well as to bolster, to extend, his own self identification as uniquely preordained beyond the course of natural events; the very idea of which Wright abusively dismisses. The heart of Wallace's argument, that: "unless we can attribute to the Will some efficiency or quantity

of energy, its agency must be regarded as nullity", struck Wright as equally silly; and even worse is any "sort of fatuity" that would incline any sort of body to blithely assume that "FORCE is a product of MIND" (emphasis original).

By contrast, in Darwin's Ontology, Will is not a physical force but an organizing principle. Its agency is real, and results (so far as experience has yet shown) only from certain kinds of identifiable and isolatable physically integrated structures – which do resemble machinery in many aspects, but are not. Simply put, a machine can be turned off and it is still a machine, turn it back on and it is yet again capable of the same agency it had previously attained. Furthermore and whether on or off, machinery need not incorporate into its being and excorporate from its being in order to be. A car that has run out of gas is still a car, it just isn't going anywhere; fill it up and it is fine (but notice that the fuel is burnt off, not integrated; and the residues that accrue are actually problematic). But stop the living (incorporative, excorporative) processes of a life, and it is no longer a-live and will never again exhibit agency.[23] (And what we mean by 'fuel' must radically change when we apply the word – as we often and casually do – to a living system. I don't just burn my food; I ingest it. I do 'fuel' my body, and I 'burn' the calories I ingest but not at all in the same manner in which I fuel a car, or in which the car burns fuel.)

Force maintains its basic Newtonian meaning when applied to physicality (that is, as efficient cause); and bodies are physical. Efficient cause is not banished from consideration but becomes something otherwise and must be redefined when applied within living complexes, particularly when relative to volition – the *a priori* questing for extended living (incorporating) in time and space (whether or not such volition occurs in conjunction with subjective awareness); just as *mind* is a function necessarily existent in the situated coordination of an organism in its environment, so to *will* exists as a necessary component of the subject/object complex. In and of itself it is neither sufficient nor efficient causation, (and certainly not final – but formal? …well sometimes, maybe …) but only part of the complex of life. Its agency is not regulative of, nor does it control, or have any agency in – the physical world. This does not diminish its impact however it redefines its agency. In Darwin's Ontology, the function of will is strictly

metaphysical, that is merely subjective mapping, (though again, this is not necessarily – and in fact is quite seldom – a self aware process). However, the internal is the external; the subjective is writ by as it writes the objective and vice versa; an organism and its environment are distinct, but distinctly conjoined elements of one being – which is to say they cannot exist without the other as they have evolved and their existence continues only so long as they remain bound in oneness. Likewise, the map is not the territory but does influence its user's movements therein, and it needs no physical force to do so – beyond that required in the physical functioning of the living complex, which do.

To rejoin 'will' with its most commonly placed adjective 'free', changes nothing in this conceptualization, as will is as indeterminable in its aspects as any other factor of life (this is to say, its transcendence into being is not determined by the factors out of which it emerges though the potentiality for emergence, and the potentials within emergence, are). Will is always free, so long as we are willing to pay the price it demands of us. One such cost is that we stop fetishizing our agency, that we give up the arrogance that comes from the attachment to the idea that our being is pre-ordained and essential, that we are somehow special in an otherwise shitty place, or that we must 'master' our environment so as to 'set it right' (in accordance with our presumed position at the top of the heap).

Nowhere is this clearer than in the contrast of Darwin's Ontology and that of his contemporary evolutionary theorist, Samuel Butler, for whom, the situated quality of life seems to be irrelevant to any discussion of free will.[I] What is of importance to us is not Butler's famous aphorism: *a chicken is an eggs way of making another egg*, which is familiar enough and so easily read into the Neo-Darwinian idea that a person is a gene's way of making another gene. This is a tempting distraction, but not at this time germane; we rather notice Dawkins' *Extended Phenotype*, wherein artifice becomes an element of phenotype, not through any mutuality but from directionally specific extension of control.

[I] *Willey, 1960*

As read through Darwin's Ontology, evolution proceeds as mutually interactive incorporations within scale thick wholenesses (ecosystems or umwelts); this is absolutely alien to Butler's Ontology wherein evolution is accomplished by deliberate accretion – and in the supposedly special case of humanity, by the extension of the self through intentional mechanical tinkering under the direction of this thing called *will* that has somehow, magically, appeared to supply the *oomph* for the necessary directing of stuff. For Butler, the objective becomes the subjective by falling well under its premeditated control (a crutch extends the agency of the physically infirm thereby becoming an aspect of a subjective self – a process which extends to the intentional formation of libraries and carriages, forks, guns, and every conceivable kind of artifact[24]), but the subjective somehow stands above the process, forever isolated in its superiority over the objects it attempts to direct. In this Ontology, the world is something of a Frankenstein's Monster, a cobbled leviathan forever lurching out of control; except somehow, inexplicably, Hobbes' Ontology also reigns, and so the subjective is somehow or other shaped by the objective, again as a contrivance but this time of causality rather than of agency. None of it really makes sense, nor can it. As with Wallace and Spencer, that from whence the subjective sense originates remains shrouded in the alter cloths of the temple of the self. For Wright, this is just wrong; it redresses science in a priest's frock. It is barbarian:

> The doctrines of the special and prophetic providences and decrees of God, and of the metaphysical isolation of human nature, are based, after all, on barbaric conceptions of dignity, which are restricted in their application by every step forward in the progress of science. And the sense of security they give us of the most sacred things is more than replaced by the ever-growing sense of the universality of inviolable laws, -- laws that underlie our sentiments and desires, as well as all that these can rationally regard in the outer world. It is unfortunate that the prepossessions of religious sentiment in favor of metaphysical theories should make the progress of science always seem like an indignity to religion, or a detraction from what is held as most sacred; yet the responsibility for this belongs neither to the progress of science nor to true religious sentiment, but to a false conservatism, an irrational respect for the ideas and motives of a philosophy which finds it more and more difficult with every advance of knowledge to reconcile its assumptions with facts of observation.

Here, Wright has neatly summed up both his scientific neutralism and his religious devotion and wrapped them together into a whole expression of Darwin's Ontology. There are other issues of great relevance to our thesis which Wright touches on, but does

not fully develop in this essay, not the least of which is a reconstruction of cause and effect; however it seems fitting to leave them aside for now as we have just quoted the conclusion of *The Limits of Natural Selection.* However we will shortly take them up, as well as return to and further develop his semiotics, as we turn to *Evolution of Self Consciousness*. But to take us there, a teaser: the meaning of Wright's statement "strictly speaking, natural selection is not a cause at all, but is the mode of operation of a certain quite limited class of cause" is mediated (abstractly and hence liable to rational corruption) through recognition that:

> Simple, absolute, invariable rules of succession in phenomena, both physical and mental, constitute the most abstract conception we can have of causal relations; but they appear under two chief classes, the physical laws which determine the possible relations of the forms of force, and those which are also concerned in the still further determination of its actual orders of succession, or which, by their combinations in the intricate web of uniformities in nature, both mental and physical, determine the events in particular that in relation to the laws of force are only determined in general. The proper laws of force, or of the conversions of energy, are concerned exclusively with relations in space.

And so it is as Mary Midgley tells us, that: "The language of purpose and agency cannot possibly be the right one for describing the movement of working parts within a whole." Midgley gives us yet more insight into the manner in which Chauncey Wright may have developed his understanding of Darwin's Ontology in her *Evolution as a Religion*, wherein she quotes from John Stuart Mill's *Essay on Liberty*, which she then develops:

> As it is useful that while mankind is imperfect there should be different opinions, so it is that there should be different experiments of living; that free scope should be given to varieties of character, short of injury to others … Human nature is not a machine to be built after a model, and set to do exactly the work prescribed for it, but a tree, which requires to grow and develop itself on all sides.

> Why, however, do we need genetic engineering to supply this many-sidedness, when we already have (as Mill pointed out) a bewilderingly wide range of options genetically provided, most of which we never even glanced at owing to the narrowness and repressiveness of our cultures? In order to have reason to call in the engineers here, we would need reason to believe that human nature had

> failed us. Mill's whole book on Liberty is a celebration of human nature, a declaration of faith that it will *not* fail us.[1]

Wright's admiration for J. S. Mill is well documented, but the common reading of this influence is to diminish his importance in the development of Pragmatism (see the earlier comment on Rorty's review of Madden), which is in part accomplished by reading both Mill and Darwin with the eyes of Samuel Butler and thereby attributing evolution (and in a larger sense, all development of powers and interests) to effort, intention and control, or alternatively, to effect, impaction, and control. Thereby the understanding of living reciprocity is limited in favor of mechanistic action (the agency of which is, as with Butler, most often attributed to some ultimately supernatural source – either in a macro sense as a cosmic daddy, or a micro sense as a ghost in the machine). Here, in the quotation above as in Midgley's reading of it, we see Mill's influence on Wright differently, as a celebration of the organic.

Furthermore, the outstanding feature of the concept of origination by descent through modification is not the mechanisms of it. The *coordinated* manner in that novel life originates – as phyla, species, individuals, as well as cellular and sub-cellular, molecular and possibly even sub-molecular – as well as planetary (and even the highly improbable but theoretically feasible panspermian interplanetary) complexes – is of far more importance than the individually identifiable factors contained therein. These scale thick phenomena contain within their uninterrupted processes the continued tik-tok of such and other mechanisms. Moreover, the outstanding feature of the Natural Selection Hypothesis is *not* in the promulgation of some narcissistic accomplishment proclaimed therein (the 'victory' of being). Rather, it is that living 'mechanisms' *are* the society of events of which they emerge and which they shape, and wherein the wholeness of the society can act as to effect its own causation without a shred of the teleological agency which would, but only at first blush, appear to be implicit in any such claim. But again, we are ahead of ourselves.

[1] *Midgley, 2002 pgs. 51-2*

We will return again and again to such reconstructions as demanded by Darwin's Ontology, as in fact we regularly do within living our daily lives. Thus we return to the life work of Chauncey Wright: ("to contribute to the theory by *placing* it in its proper relations to philosophical inquiries in general"). And indeed we will see ever more truthfully that contrary to Dawkins' trite and quite untrue refrain that philosophy has learned nothing from Darwin, some philosophers (i.e. those which incorporate Darwin's Ontology) have. Moreover, entire philosophical genres have actually speciated (come into being, become distinct in aspect, agency, etc.) exactly through the study of Darwin. Obviously the most relevant of these to this thesis goes by the name of Pragmatism.

The Accidental Way

The most I can do – the most I can hope to do – is
to make a number of physical entities as plain and vivid as possible,
and to make a few guesses, a few conjectures;
and to leave to you much of the burden of realizing in each of them
what I have wanted to make clear of them as a whole:
how each is itself; and how each is a shapener.[I]

There are those who argue that Pragmatism is but a methodology, but isn't all philosophy but an assist for the minding of an organic being within/to its embedded situation? All philosophy is mere method to aid in the revelation of actual situations to a knowing mind (that is, a minding *rationally* constructed out of a history of *empirical* in- and ex-corporations, the conjoining of which is necessarily structured by the shape and flavor of sentimentally selected *ideals*). Pragmatism's unique feature, which forces it to refuse that respectable appellation 'Philosophy', is that it necessarily does not attempt to construct an alternative to any particular mapping of any particular territory (think of the normative use of the phrase: *my philosophy is* . . .); rather, it functions merely to add consistently to our mental mappings, and force the recognition of specific errors within particular mappings. And so, in another sense, it is almost pure philosophy – that is, an attempt to do philosophy sans religious postulation, sans that religious claim that so often confuses with ontology with epistemology, being with attempts at its depiction. At the same time, (with James,) I hesitate to say that Pragmatism offers a system intended to uncover the truth (though Peirce would nuance the refutation) as 'truth' is itself a rational construction with no actuality beyond its functioning within a particular mapping of what actually is.

I must hasten to add, however, that both James and Pierce did attempt to construct such a 'philosophy'. James used pragmatic methods to tool up just such a map, Radical Empiricism, which differs from classical empiricism in its very core in that it defines experience as necessarily two directional (an experience begins when a subjective

[I] *Agee, 1988, pg. 110*

knower focuses on, or identifies for subsequent reflection, some specifiable aspect of his immediate situation (which includes his own body as well as the actionable aspects of his own ideation, which are his beliefs), rather than via an impact of some particle of 'other' upon a knowing self. Likewise, the Pragmaticism of Peirce (his use of this awkward moniker followed James's appropriation of 'Pragmatism' as a methodology) is also an extended metaphysics of incorporation, and both his semiotics and his new list of categories are attempts at constructing a rational critique, a map to check our mapping that redraws itself as we use it. James and Peirce, like Wright and Darwin, treat issues of truth with due diligence, and take special care to avoid getting caught up in idolizing it.

In a way, Pragmatism and Science are (as we have and will again see) identical; for either to be 'true' (to function well, that is, with objective motivation, in the maintenance and extension of the mapping of a knowing mind's actual situation), both must refuse (and refute) any claims of a finished product (metaphysically warranted and/or absolute knowing). In Darwin's Ontology, this is a consequent of the realization that an organism and its environment are two sides of one coin – they are aspects of a singular being. Any transformation of/within one aspect of being (such as some new knowing) necessarily transforms other aspects of the same being (necessitating a new knowing) – an interaction that ends only with the end of living (or at least with the ending of knowing). It makes more sense to speak of the subjective/objective divide as one of scale than to speak of it as one of opposition; to go from one to the other is to shift scales ('subjective' is of a smaller scale than 'objective'). This is in stark opposition to the 'objectivity' that generally revolves around the impossible pretense of ignoring one's subjectivity ('stepping outside one's self' so as to 'objectively' know), or that generally involves some presumed claim of objective position, an 'angelic perspective' or perch convenient for the surveying of eternity. In this normative use, the term is absurd. Rather, 'objectivity' is better described as the knowing inclusion of the subjective (so far as possible within some specific situation) within those larger complex of being – the so-called 'objective' – upon which the continued existence of subjectivity utterly depends, and without which *you could not exist*.

In a contrary compliment to the Buddhist ethos, we can say that life is 'attached', and no amount of pretense can ever change the fact. However, we can focus our attachment outside our 'selves' and away from the painfully natural desire to attain the needs of the self; we can focus it toward whatever phenomena we encounter with a practiced kenotic focus to our will and our way, so as to encounter transcendent consequence, the coming into being that is for it's own sake, and not twisted to serve our own … if – then, we may transcend our selves, and take part in the generation/creation/emergence of wholly new being. Psychologically and cognitively, that new 'truth' may be, but certainly is not limited to, our little selves; socially, it becomes science and philosophy, art and culture, all expressions of some binding embedded within the ongoing quickening of being itself.

The consequences of this realization form a central argument of Peirce's famous early essays – as well as a formative principle that interweaves his life's work; but they also center the vision of James' streams of consciousness and willful belief, and settle the foundations of both his psychology and philosophy. It is a mistake to focus exclusively on Peirce as the sole (or even primary) progenitor of Pragmatism, though James did for personal reasons. At the time of his California lectures in which he began specifically depicting the Pragmatic Methodology (which he credited entirely to his old friend), James was a highly successful distinguished professor, wealthy and settled, while Peirce was an occasionally homeless 'former' prodigy who had long since become something of an embarrassment for most of his former colleagues, and who survived on charity organized by James and bit work writing. With this in mind, we forgive James his preoccupation with helping his old friend, and look differently at the origination of Pragmatism. In light of Darwin's Ontology, with its complex emergent depiction of origination, it would seem a more credible to point to the entire umwelt, and study the structure of the relationships therein, rather than cleaving to some great man hypothesis. Yet also, and despite the fact that neither Peirce, nor James, nor Chauncey Wright, (nor any of the countless others involved) deserve sole credit, the development of Pragmatism was made possible (and that possibility made actual) through Wright's study of Darwin. And Darwin's Ontology provided the palate.

As with his closest friends and colleagues, and following Darwin's lead, Chauncey Wright did not *presume* (refuse to allow immediate – hence both situational and relative – *a posteriori* reconstruction of a hypothetical postulation) any kind of metaphysical speculation (including that of strict materialism as well as the easy/sleazy eschatological speculations of either Spencer or Wallace's theologisms) but neither did he claim to have entirely escaped questions of metaphysics. Wright established the Pragmatic tradition of *not* settling; he choose *not to decide* on a metaphysical cosmology on which he could *rest* his theories; quite the opposite, he clearly preceded Dewey in positing reconstruction as knowing. This is to say that while he did make use of metaphysical speculation, he did not aim this speculation at his own ideation self-fulfillment, but at the fulfillment of the ideas themselves. This approach is powerfully consequential to science.

Darwin knew this, as is evident in this well-known passage from his autobiography wherein he describes the value of theoretical speculation:

> We spent many hours in Cwm Idwal, examining all the rocks with extreme care, as Sedgwick was anxious to find fossils in them; but neither of us saw a trace of the wonderful glacial phenomena all around us; we did not notice the plainly scored rocks, the perched boulders, the lateral and terminal moraines. Yet these phenomena are so conspicuous that … a house burnt down by fire did not tell its story more plainly than did this valley. If it had still been filled by a glacier, the phenomena would have been less distinct than they are now.[I]

Compare Darwin above with Wright below:

> Mr. Spencer is mistaken in supposing that any middle ground is possible between empiricism and metaphysics, or that the characteristic ideas of these two philosophies can be reconciled by the hypothesis of organized experiences, anterior to the life of the individual mind. In these experiences, as in those of the individual life, particular facts are the real authorities, as is evidenced by what Mr. Spencer cannot deny, that such facts are competent to overthrow the most settled beliefs. It avails nothing to say that such facts cannot be experienced, the mind being, *ex hypothesi*, unable to conceive them even if they exist; for this is to convict natural beliefs and the mind itself of incompetency, not to establish these beliefs as competent authorities.[II]

[I] *Darwin, 1958, pg. 70*
[II] *Wright, 2000, vol. 1, pg. 63, The Philosophy of Herbert Spencer*

Earlier in this work, I postulated that Wright would sometimes attribute to the Natural Selection Hypothesis concepts that are better attributed to Darwin's Ontology; however, such presumption is unnecessary here; though still, we are now and not then (and you are there reading and not here writing), as such still we need to reinterpret his words, effectively 'translate' his 19th century 'philosophese' (the there, then-ness of his signage) into contemporary terminology (the here and now-ness of ours). The metaphysical hypothesis to which he refers is not just any postulation that "has no experiential consequences"[I] as per Comte's formulation, but also the specific hypothesis that no combination of natural (incorporative and un-premeditated) organic causation (wherein cause and effect are, pragmatically speaking, mutually interactive) and inorganic causation (wherein effects are more or less habituated, or cascading within previously determined, or 'settled' sequencing) is sufficient to explain knowable (via mediated attention) phenomena.[II] If this is metaphysics, then the living world is inexplicable to either logic or reason, and subjectivity a neat work of some kind of magic – but Wright thought otherwise.

Rather, like Darwin, Wright celebrated metaphysics by contextualizing it. Theories are mere metaphysical abstractions but nevertheless quite necessary to find even the nose on your face. According to *all* extant records,[25] Darwin clearly denied himself the comforting act of clothing his abstractions in divine robes. He did not, however, deny the need for a quality mental map; but he found that his map got better as he 'downgraded' his metaphysical claims, limiting deliberate (willful) speculation to the postulation of testable theories – and focusing his deliberations with an objective motivation. And then, having postulated a theory, he questioned it. And questioned it. And questioned it. Having accomplished all this, he went back and questioned his theory again and himself (that is, the temper of his motivations) along with it. What he did *not* do was construct a system that could not be challenged by experience (the *a posteriori* minding of an immediate situation) or that could, by fiat, refuse any challenge whatsoever – either

[I] *Peirce, CP 7.164-231*
[II] *Wright, 2000, vol. 1, pgs. 405-413, A Fragment on Cause and Effect*

naked (via so-called verification by 'facticity') or clothed in abstraction (via alternate hypotheses – including but not limited to the postulation of some deity or deities).

The very possibility of such a systemization, however appealing to the subjectively motivated, is refuted within the open-ended processes that Darwin detailed throughout his long argument, and throughout his life's work. Exactly said, Darwin was not a Fundamentalist,[26] not even of the Darwinian variety. He was quite willing to explore, and value, alternatives to natural selection as factors in evolution – in how the shapes of both today and yesterday came to be what they are or were. He seemed unimpressed by the finality implicit in the quanta of so many just-so stories (the so-called Darwinian Histories), and continued to seek new interpretations, new significations, long after most (damn near all) of us would have called it good and gone home.

Clearly Darwin did 'believe' in the natural selection hypothesis, his theory of origination by descent with modification. However, this statement only makes sense if we define belief *not* as a presumed, false, unreasoned, irrational, and improvable or merely unproven claim of knowledge – but rather as the propensity to action. This comes to us from Hume's contemporary, Thomas Reid, and was championed within the Metaphysical Club by Nicholas Green (whom Peirce dubbed the 'grandfather' of Pragmatism,[27]), Belief is in no way *necessarily* in conflict with reason – and indeed is a necessary component of rationality as thought is itself an action and the constructive nature of rationality depends on the impetus of belief. And so believing, Darwin worked to adapt his theories to whatever circumstances he encountered – to alter his 'beliefs' as need required; and in so doing he allowed himself the space for speculation and discovery. And in this, he came to see that evolution works in ecosystems, which are complexes of situations involving multitudes of potential agents interwoven in such a way to demand factors other than 'just-so' which require our active interpretation.

Through the work of Stephen Jay Gould, one such factor has come to be known as spandrels. It is important to note that Gould did not invent the concept developed in his famous essay (co-written with R. C. Lewontin) titled, *The Spandrels of San Marcos and*

the Panglossian Paradigm. Though he gave it no name, Darwin saw the necessity of the concept; however, perhaps due to his refusal to draw conclusions unsupported by evidence coupled with the inability of the scientific methods of his time to isolate a specific mechanism of inheritance, he did not expand upon the terseness of mere recognition. E.g. *Origin*, chapter 5, amidst a myriad of examples, Darwin speculates on the relationship between deafness and cats with pure white fur and blue eyes. Is the connection strictly causal, in the sense of a 'classic' 'Darwinian' history? That is, are practically all such cats deaf as a strict result of natural selection – functioning causally on a reducibly material basis; or does this correlation result from an 'by-product' of adaptation, rather than being itself an adaptation? He answers no, no, and yes.

> [M]odifications of structure, viewed by systematists as of high value, may be wholly due to the laws of variation and correlation, without being, as far as we can judge, of the slightest service to the species.
>
> We may often falsely attribute to correlated variation structures which are common to whole groups of species, and which in truth are simply due to inheritance; for an ancient progenitor may have acquired through natural selection some one modification in structure, and, after thousands of generations, some other and independent modification; and these two modifications, having been transmitted to a whole group of descendants with diverse habits, would naturally be thought to be in some necessary manner correlated. Some other correlations are apparently due to the manner in which natural selection can alone act.[I]

Both speculation that would *reduce* such correlations to a simple genetic level mechanism and seek simple causal links (functioning via unilaterally oriented agency) capable of identifying simple 'determining' factors (atomic bits that alone have agency), as well as speculation that would *educe* from such interactions some vast horizons of 'absolute' or 'final' cause, *both* deserve to be labeled pseudo-Darwinian. This includes that incredible narcissism implicit in the very idea that the stars, the planet, and all life (including, not incidentally, any life which may possibly exist on other planets circling other stars) – with the *possible* exception of our fellow man – was 'created' for the expressed use by that pinnacle of nature: us. As in, Just. Us. Normally signifying only the

[I] *Darwin, 1985, pg. 127*

single moiety of whoever is making the claim. No one who knows anything of Darwin's life could honestly accuse him of such behavior.

Rather than reacting to complexity by positing causal dominion, Darwin saw that at least sometimes the interactions of multiple factors working both independently and mutually (that is, reciprocally), allow for the possibility, the potentiality, of/for an emergence of a third factor (in the above quotation, a simple correlation) whose existence is not necessarily derived from strict causation within the natural selection of genetic determiners, nor limited to mere proximity in association, but bound together and mutually structured. Neither is it necessarily a caused result of some supernatural action. Ontologically speaking, this recognition lead Darwin far from the barren 'billiard' fields of Hobbes and La Mettrie (vast plains that generate/suffer unpredictable storms, inexplicably random tornadoes of minding), past the mountainous agnosticism of Hume and Locke (stunning peaks that shape/expose/limit exquisite vistas of personhood) and beyond the lonely islands that dot the river *I* (fogged in, choked by, and made of masque upon masque of swampy self) of Aristotle and Kant, Leibniz and Berkeley; by a winding route Darwin avoided the divisive mysticism of Descartes and Plato (broken canyon lands riddled with insurmountable escarpments and huddled vortices, where sudden death lurks in caverns of shadow and gold), all the while fleeing the proud embrace, the bold mapping and narcissistic blinders, of teleology. Pragmatically speaking, this new/old ontology opened a way for Darwin to do good science concerning the primary focus of that narcissism, the place of humanity within the oneness of life. And this leads us back to spandrels – as science is naught but a spandrel – and the role they play in explaining the existence, the persistence, of true novelty.

Never mind that Shakespeare plagiarized. He took plots and characters, scene by scene, often lifting paragraph after paragraph – even stealing titles if he thought them good. He lumped bits taken from Cicero together with bits taken from his contemporaries – even well known ones such as Thomas Kyd and Ben Jonson. But the fact remains that each of Shakespeare's plays, not only represents, it actually is, an entirely novel entity. The analogy does not stop here of course; every production of each of the man's plays is

utterly unique – and even each performance of each and every production is unlike any before or after it. A performance is not a reproduction, but an embodiment, an incorporative event which, unlike a naturally evolving living being, suffers the limitations of having been intentionally designed – even as it remains 'improvised' (that is, re-interpreted) and also, at least potentially, 'improved' (further adapted within/to it's ever changing ecology/audience) with and within each and every subsequent telling. Those who state that there is nothing new under the sun have not thought through their claim.

Likewise, those who argue a strict adaptionist program, while avoiding the Scylla of teleology only to crash headlong into the Charydbis of baseless metaphysics, have also situated their arguments within an unthinking refutation of novelty. The fact that the bits and pieces that come together in a new being, abstracted or actual, as a work of art or a biological entity[28] (always specifiable as individual but also identifiable as both a cohort in its own right as well as itself a member of a cohort) have themselves an origin, or have themselves come into being through some other previous emergence, does not imply that Sam West's Hamlet was merely a reproduction (through Simon Russell) of Laurence Olivier's. But more! The strict adaptionism of Dawkins as applied to social theory vis a vis his memetic replication hypothesis, would claim that all these different 'Hamlets' are merely vehicles for copying the basic elements of the Hamlet of some unknown actor of Elizabethan Theater (this argument is not that distant from that of those who necessitate some kind of 'Shakespeare' to set the whole thing rolling – without noticing the vastness of his collaborations). And for all those who suffer the misfortune of never having been a theater geek, I respectfully posit: this is patently absurd. Rather, it is as Whitehead put it, "Mere repetition is the baffling of opportunity".[I 29]

To add confusion to absurdity, we have extant three very different 'original' versions of the play, all credited to Shakespeare and well authenticated; also, the title, characters, setting, and plot were very likely to have been taken from an earlier but still contemporary play of an unknown author, now called 'Ur-Hamlet', which is not extant and which itself, of course, drew its devices both from popular contemporary

[I] *Whitehead, 1958, pg. 23*

mythologizing (the social ecosystem) as well as the long tradition of European story-telling in dramatic form, the longer human tradition of story-telling, the origin of language, etc. (the evolutionary history). Finally and only slightly off topic, the ways and means in which endless strings of unsupported and unsupportable theorizing that Francis Bacon, or some other character of the era, wrote the plays that were, in his life, attributed to Shakespeare, invites all sorts of comparisons to the 'science' of intelligent design.

As with science and philosophy done well, as well as works of art whatever its quality, biological inheritance cares not a whit about the source of whatever structure is under consideration – whether that consideration come via white lab coat and elaborated theory, or within a struggle of life and death. To the contrary, heritable structures (whether signified through words and bits of ink printed in a folio and performed on a stage, or sequences of carbon molecules 'published' in a genome and 'performed' via individuals within a population) are either breathed to life anew (not only within each and every generation, but also and equally, within each and every moment) or that particular inheritance ceases; this happens on scales ranging from that of the individual to that of the lineage, as well as at level of cohorts, ranging from random association to organic wholeness. In life as in theater, the audience participates in all individual co-creations.

This metaphor, of course, requires of us yet another caveat; a work of art is relentlessly disconnected from the subjective origination of the motifs employed therein. While the success or failure (the consequences) of an individual work of art depends on its capacity to fit well within the umwelt it pertains (it's 'objective' being), the subjective motives of the artist are unrelated to the quality of the art she produces. This is due to the utterly abstracted-immediacy quality of 'art' itself (which is, as Peirce might say, it's firstness as thirdness), as opposed to the objective nature of the relics of the process of art typified by the things we hang on our wall and mistakenly call 'art' (its thirdness as firstness). While cultures tends always to 'grow' irrationally (each as though it were its own subject), science and philosophy are grounded in careful attenuation to defects within 'objective' knowing, objectively motivated, rationality as the practice of kenosis. Art, on the other hand, is relentlessly subjective, it is the pouring forth of the individual into the larger *I*.

And yet, art also requires kenosis. The working artist must also eliminate his 'self' from his work (and allow the work to 'complete' *itself* – the poem to write itself, the painting to shade itself in, etcetera). Like science and philosophy, like every religion that ever existed, art is a willful interpolation constructed by living beings acting with *a priori* interest and intent. It is designed (even when accomplished 'subconsciously'), and like all such acts, it suffers when the motives behind the act suffer (whether from the badly understood self-ideation refuted by Darwin's Ontology, or mere fiduciary concern). But this is only part of what is going on.

As with science and philosophy, the 'truth' of a work of art is its own endeavor, not that of the artist, philosopher or scientist. This truth is measured twofold, by its capacity to open pathways to more and greater truth, and by its relatedness to other, previously established (inter- and intra- connecting) pathways. This twofold measuring multiplies itself by establishing its own inter-relating (in Peircian terms, its firstness enters into secondness and the secondness takes on thirdness), and thereby generating at least the potential, if not an actual realization, of further emergence of greater being, including the 'merely' epistemic. And this is actually the point of the endeavor. Truth is to it's own making, but if it fails therein, then it can no longer be. This is to say that when no longer generative of new truths, the old 'truth' is no more. As with life and living, truth exists only so long as it continues 'truthing' (a concept is true so long as it continues trueing). Accordingly, science does not 'discover' truth existent in the world, but generates truth by re-generating it. Art does the same, but with a very large *however*. The 'truth' of a work of art stands apart from its source in a manner quite similar to the irrational abductions of religion, but very different than that of philosophy or science. Art and Religion are outburst of subjectivity, and therein their motivation lies – they 'give birth' to the self in acts of transcendence inexplicable to the study of the situation of their birth. By contrast, Science and Philosophy – hinges upon letting go of (or rather, holding as 'loosely' as the situation will allow) the very subjective sense that art and religion 'intends' to develop – by studying that very situation. But again we are touching on a subject, or rather, subjects, that demand their own book-length treatment.

Rather than wandering off into theory of art and all its irrational tendencies, we instead turn back to spandrels and the irrationality inherent therein, and find a necessary corollary of Darwin's Ontology. Spandrels are mere "secondary epiphenomenon representing a fruitful use of available parts, not a cause of the entire system".[I] Yes, absolutely, but they are not merely possible in the scheme of Darwin's biology, they make it possible.

As we have seen, the ontological presumption of Darwin's Ontology is that in living systems, causality works within an eco-system via the transcendence into being of intertwining layers of 'wholeness', wherein the 'parts' exist (continue to generate being) as persistent and consistent, reciprocally generative inter- intra- and trans- action within/through a natural (random, uncontrollable) world wherein heredity is as vital as need. This is not in any rational sense 'pre-figured' (as 'nature' presumes no teleology) though it may so sometimes appear. Agency is not always linear; causation both effects and affects even itself. Again, cause and effect are not always reducible to mechanical determinism, as each and every living being (from the microscopic to the planetary[30]) draws its own circle, seeks its own completion via the innate processes (incorporation and excorporation) of living. Each incorporation (be it only a breath, or just a fleeting thought) results in the formation of a novel, indeterminate 'subjectivity', and each excorporation (be it only a shit or even the most coherent and benignly intended action) results in the formation of a novel 'objectivity' that is as vulnerable to scientific guess-work as it is immune to prediction. This is continuous creation, the re-formation of/within undetermined, indeterminate and immediately perishing actuality, which is represented by *living*, and is mutual becoming and the embodiment of specific (hence quantifiable) reciprocities.

Think of it this way, when you upload a file to your flash disk, that file does not alter any of your other files there. Each truly is solipsistic – unless programmed otherwise. Like Paley's watch, your flash disk was designed; it is an unnatural object. And it was never alive, capable of furthering itself via an individualized continuity of incorporation. *You*

[I] *Gould and Lewontin, 1979, pg. 584*

however, are not. A living mind is different in that nothing you learn/experience/shape-into-thought remains in isolation. You do more than merely 'input' data, likewise, you do more than merely reconstruct yourself (or self-adjust your 'programming'); rather, with every (re)formative experience, you (your subjective sense of being yourself) actually perish and rebirth yourself rhythmically throughout the entirety of your life. However, success at/within the second of these twined events is clearly conditioned upon the fitness of your epistemic grasp of the first). Though he is writing here of physiology and not psychology, Darwin presages this most clearly: e.g. from *Descent*, "When one part is modified, other parts change through the principle of correlation, of which we have instances in many curious cases of correlated monstrosities."[I] These monsters, happy and not, transcend into a wholeness and emerge as distinctive phenomena in both the realm of biology, as well as that of our own minds.

The reasoning here is that these necessary incorporations are not merely additive; they actually regenerate the whole being, shuffling the genetic structure as well as, and as the organically external factors such as food sources or habitat, which can massively alter entire ecosystems. Whether for good or ill depends on the situation, but always each regeneration is permanent in that it cannot be 'taken back'. Even breathing is dangerous incorporation, as the residents of the earth's cities can attest and as verified by statistical correlations between lung cancer, asthma and other respiratory ailments, and localized air quality (not to mention the fact that oxygen itself, in and of itself, is poison).

Furthermore and stronger to the point, each act of incorporation is akin to the generation of a diploid cell (the merging of two disparate though complimentary strands of structured carbon into one unique, novel unit of DNA – the utmost beginning of our particular scale of organism) in that it is at this moment in the life of an organism that its basic foundation – warts and all – transcends into being. It is at this moment (in which the organism has no individual history) that the random-ability, the raw incorrigibility, of that spark of life peaks, but this same moment of random potential occurs with each original thought, in every epistemic incorporation, in knowing every moment that is.

[I] *Darwin, 1882, pg. 910*

The next step in the origin of true novelty is that of selection. As the past concresces into the present (all the while looking to the future), some aspects (future potential) drop off (possibilities end, extinction as well as epistemic death occurs, and every day some fool earns himself an honorable mention in the so-called Darwin Awards). If the selection is 'natural', that is, if it happens *without intent* – without claims of *a prior* or absolute (metaphysically warranted) knowing and/or *without* the external imposition of a subjectively motivated, purposeful (willful) design – then the subsequent complex retains a greater capacity of 'spontaneous' emergence, which is the origination of novel being. If the selection occurs *with selfish intent* (whether we call it human narcissism or just badly adapted wetware) then true novelty (which includes all true knowing) is less likely to emerge. (Think of the lessons of Gould's Mismeasure of Man, the scientist who 'knows' what he will find before even beginning his study, will conclude knowing no more than he did at its onset.) This does not preclude that both knowing and being can and do emerge from controlled circumstances, or that there is an element of control in all structured situations, only that such being is *less capable* of generating a true binding descent than being that results from natural, unintended and uncontrolled, selection. (Think of the poor health of narrowly bred variations of domesticated animals.) Epistemologically considered, this is directly analogous to the difficulties inherent to subjectively motivated action, which Wright argued has barred progress in science for generations beyond our comprehension. Like most of his peers, Wright identified *science* with all successful "objectively motivated" rational knowing, and so this critique extends even from the original differentiation (the species level equivalence to the generation of a diploid cell) of *Homo Sapiens*. But this science is based in habituation, not intention – and the only *determination* it needs is in the thinker's passion for following the facts of his situation, to whatever end they lead.

Science is a spandrel, a portent but unpredictable shape in the transcendence (into being!) of human culture; culture is likewise a spandrel of reason, reason a spandrel of consciousness, consciousness a spandrel of language, language a spandrel of memory and memory a spandrel of mind, and mind a spandrel of life and living itself[31] – a heritable

habit-structure whose twining pillars are the living need to incorporate extant phenomena, and the subsequent necessity to acquire the actual ('objective') matter capable of incorporation into specific ('subjective') living structures. Spandrels always have (at least) two 'pillars' – call them structural necessities – which are actualities of existence (that is, *specifics*) *intertwined* – in relationship which each other. It is the relating – the relationship – of these interactions which both limits and creates the potentialities of the 'space between', a framed empty space whose original structure is in some way 'determined' by an ongoing interaction, but only if by the use of the term 'determine' we really intend to signify: *to shape the 'space', and the availability thereof, for future, indeterminable, interactions*.

So, really, this is not determination, not in any sense of the word – any more than an improvisation is 'determined' by the contours of the chording that supplies the base riff. Speaking metaphorically and stretching the metaphor, a spandrel is an improvisation – limited yet 'called forth' (or rather, 'allowed for') by/within an established situation. An embedded novel response, it is composing while performing (yes) but *not* by one's self (as a complete act of willful design), but rather within some grouping wherein successful improvisation is generated through and by *fitting in* with what already is (or rather, has been), but not *dominating*; as such, it is by necessity, limited. *And it is the limitations that create the possibility of novel origination and shape its actualization*. (Think of this when reading Wright, below – the "universal properties and laws" such as the "mechanical principles of locomotion" are typical of such limiting necessities.) Once begun, such improvisations then 'complete' their selves (transcend into being), through further interaction (in- and ex- corporation), which is the taking on of the possibility of being heritably structured – and extend this structure in time and space (or not, and die off). A spandrel is a potential become actual, having taken on a new agency, capacity or form, which is subsequently capable of participating in the epic of natural selection and becoming subject to empirical study, as well as generating yet more spandrels through participation in greater organism. This includes those bits of the subjective/objective continuum we call *our* selves and *the* world.

The distinctive feature of spandrels, which must not be lost in the seeming tik-tok of that first sentence two paragraphs ago, is that spandrels are un-necessary; that is, there is no 'reason' behind their emergence; they do not result from a presumed eschatology any more than they do from mere causality. Ontologically speaking, spandrels are as much a refutation of Hobbes as they are of Plato; furthermore, spandrels do not come to exist as a mechanically reducible effect of an identifiable cause (or set of causes), this is to say, the origination of a spandrel is not a direct result of natural selection (and the principle of utility) – nor does it result from any sort of merely imaginable 'cause', natural or otherwise, (e.g. a classic *unmoved mover* within an equally classic *ontological argument*). Rather, a spandrel is an irreducible newness (a new wholeness) emerging within and through an ecosystem composed of (but not determined by) that specific yet practically infinite number of interactions ("constellations of causes") we so very often romanticize, and anthropomorphize, as Mother Nature.

> Spandrels—the tapering triangular spaces formed by the intersection of two rounded arches at right angles—are necessary architectural byproducts of mounting a dome on rounded arches…. The system begins with an architectural constraint: the necessary four spandrels and their tapering triangular form.[I]

In architecture, from which Stephen Jay Gould took this useful term, the space-between formed by the necessities of a relevant structure but unnecessary to their function could as easily have been left blank; however its existence is necessitated by the 'constraints' of what already is. In biology, the 'space' between the varying structures of living (the i/e cycle plus all incidentals) shapes a potential that is necessarily filled, if filled at all, *randomly*. Moreover, niches are not always exploited; but even more, established niches often 'close' (very often by any accounting of the history of extinction, at least within a geological sense of time). Perhaps often enough this results from failure within the opposing corollary of Darwin's Ontology: that excorporations must be successfully incorporated within the immediate situation upon which that organism depends lest it poison its own dinner (this is that vulgar but venerable rule: *don't shit where you eat*).

[I] *Gould and Lewontin, 1979, pgs. 581-2*

The ‘space’ generated betwixt an existent culture (an actual and heritable structured complexity) and the living need to locate phenomena capable of incorporation into living structures (the ‘need’ of living beings to live), could likewise be left ‘(un)fulfilled’ – in a relentlessly wide variety of ways! Likewise, science does not necessarily develop (or maintain itself) within any given culture; though its persistence and refinement clearly are, its existence (in the sense of ‘quickening’, or coming into being) is clearly *not*, driven by natural selection (and therefore by the principle of utility, however it is sometimes signified epistemologically as ‘*the* truth’ and sometimes as ‘just what *is*’). Likewise, such human features as an upright posture or a big frontal lobe need not *necessarily* develop through the course of evolution – and so cannot be the result of efficient causation. Yet still, they are heritage of novel events in time and space: our general incapacity to signify such a thing has contributed to a disregard for Darwin’s Ontology.

> Evolutionary biology needs such an explicit term for features arising as byproducts, rather than adaptations, whatever their subsequent exaptive utility... Causes of historical origin must always be separated from current utilities; their conflation has seriously hampered the evolutionary analysis of form in the history of life.[I]

The need for such a term long preceded its existence, notice how Chauncey Wright addresses this exact same concept back in 1873: (*italics added*)

> [T]he word "evolution" conveys a false impression to the imagination, not really intended in the scientific use of it. *It misleads by suggesting a continuity* in the kinds of powers and functions in living beings, that is, by suggesting *transition by insensible steps* from one kind to another, as well as in the degrees of their importance and exercise at different stages of development. The truth is, on the contrary, that according to the theory of evolution, new uses of old powers arise *discontinuously* both in the bodily and mental natures of the animal, and in its individual developments, as well as in the development of its race, although, at their rise, these uses are small and of the smallest importance to life. *They seem merged in the powers to which they are incident, and seem also merged in the special purposes or functions in which, however, they really have no part, and which are no parts of them.* Their services or functions in life, though realized only incidentally at first, and in the feeblest degree, are just as distinct as they afterwards come to appear in their fullest development. *The new uses are related to older powers only as accidents*, so far as the special services of the older powers are concerned, although, from the more general point of view of natural

[I] *Gould, 1997*

> law, their relations to older uses have not the character of accidents, since these relations are, for the most part, determined by universal properties and laws, which are not specially related to the needs and conditions of living beings. Thus the uses of limbs for swimming, crawling, walking, leaping, climbing, and flying are distinct uses, and are related to each other only through the general mechanical principles of locomotion, through which some one use, in its first exercise, may be incident to some other, though, in its full exercise and perfection of special service, it is independent of the other, or has only a common dependence with the other or more general conditions.
>
> Many mental as well as bodily powers thus have mixed natures …[I]

Here are spandrels, phenotypic characteristics which first occur as a side-effect of the existence (as agency within interaction) of efficient causation and not as a result thereof. Spandrels exist because adaptation exists but do not result through it; a spandrel emerges specifically correlative to adaptation, rather than directly out of selection. Once existent, of course, a spandrel can maintain its character for a time, upon the passing of which it will either pass into a Darwinian Heritage, or 'die out' and leave no descent. But always spandrels transcend into being spontaneously (they emerge conditionally but not controlled); lack of both necessity and precedence, *in combination with the absolute predetermination of what was* generates possibility through/of/in novel origination.

As to predetermination – that definitive necessity of design – we call it: *the past*. And through having a past *in coordination with the potential of having a future*, or rather, the potentialities possible within the ongoing interaction of an immediate situation, being becomes capable of 'standing in coordinated opposition' with and to its situation; self organizing so as to take advantage of and through the specific actualities experienced with the only 'purpose' of reciprocal incorporation with and within some 'other' existent structure (being). All this is to say that always a spandrel is a something that occurs in-between, both constrained and created within the interactions of structures (habits of being) that are integral to the being of the whole and which then join in re-construction of the entire being, which occurs co-incidentally with the emergence of that utterly novel aspect or form randomly coming into being, random origination. (And by now it ought go without saying that this occurs on multiple scales of being).

[I] *Wright, 2000, vol. 1, pgs. 199-200, Evolution of Self-Consciousness*

But as promised, throughout this argument we step further and further from Gould and towards Wright's variation of this same hypothesis. (For all his brilliance, Gould remained firmly entrenched in the bifurcations of Modernism: reference our discussion of NOMA). Gould's definition above certainly leaves room for masculinized female hyena genitalia and shoulder humps on the extinct Irish deer, as well as "certain key features of human mentality";[I] but with all due respect for this master of popularizing excellent science, I would warn against defining this wonderfully exaptive term too narrowly by restricting its interpretation to a modernistic paradigm. Throughout this section, science has been listed as a spandrel of reason, but the other 'pillar' forming the space of this new agency is equally present *in* both the form, and the formation, of the new agency: this is corollary to our postulated definition of life, and the rhythms of the processes therein, incorporation, excorporation: Eating, shitting, becoming.

And this likewise implies a 'devaluation' of reason that is a direct consequence of the two-fisted rejection of essentialisms and determinisms, eschatologies and teleologies, which is at the heart of Darwin's Ontology. Wright described evolution as "the co-operation of natural selection with indefinite variation".[II] There are two keys here: *co-operation* and *indefinite*. Within Darwin's Ontology, it is reciprocal interaction (co-operation which is a kind of co-ordination of various factors) combined with an absolute lack of teleology (the indefinite nature) that forms the vaunted pillars of human knowing. As such, the achievement of sapience occurs 'causally' only in the sense that it contains antecedent factors; however not one of these factors, nor any complex thereof, can be said to *determine* the subsequent effect (as such 'casually' may be more aptly descriptive). A viable effect such as sapience is an achievement of transcendence, emerging through reciprocal interaction (transaction) wherein subjective and objective co-operate (perhaps co-ordinate is a better depiction) in their mutual becoming (in order to be). The mechanisms (the indeterminate method of functionality) of Darwin's Ontology, particularly relative to the evolution of consciousness and both the value and

[I] *Gould, 1997, The Exaptive Excellence of Spandrels as a Term and Prototype*
[II] *Wright, 2000, vol. 1, pg. 401, German Darwinism*

function of reason, show it to be a rejection of the absolutism of the modernist eschatology, while it's scale thick quality shows it to be a rejection of the absolutism of eschatological theism.

After all, we badly named Homo Sapiens are not the only living beings with memory – with sapience; even the lowliest bacteria 'members' what it eats, by eating! To teach (or train) bacteria what or where to eat truly would be akin to 'teaching gramma to suck eggs'. We need not direct others to their dinner or inform them of their choices. They just find their dinner (locate and incorporate according to their need), and do it again, and again, until each individually looses the ability of life. Living things do this seemingly without awareness, yet this is the definitive quality, the minding sapience required, of all life: repetition as the mother of wisdom and the font of mindless dogma; repetition as the rhythm, as well as a 'filler' that is both a result and an intertwining of 'this' and 'that', subject and object, integral and extant (spirit and substance, I and Thou, Brahmin and Atman, Etcetera and Etcetera.) Memory is implicit in living; it is an agency that is incidental, accidental, in and to its own formation, but a necessary result of the circumstances of *being alive* (the cohering structures that intertwine the supposed but essentially absurd subjective/objective divide). Generations of thinking beings have by now grappled with the concept that there may well be no 'point' to life, that life itself would be the point. But I am beginning to repeat myself, and must turn quickly back to the texts so as to avoid "baffling" the opportunities this exact situation (whether me writing or you reading) this study might otherwise afford.

For all its shortcomings, there is no better book on Chauncey Wright than Edward Madden's *Chauncey Wright and the Foundations of Pragmatism*, and no essay comes closer to explicating Darwin's Ontology than chapter 7: *The Metaphysics of Self-Consciousness*. Perhaps the highlight of this essay (and for our purposes, the most telling) is the third footnote, in which he includes an entire student essay circa 1852 by Wright on the topic: 'Whether the faculties of Brutes differ from those of men in kind or in degree only?' Madden says of this essay:

> Toward the end of it he [Wright] emphasizes the origin of human intellect in capacities already existing in lower animals, while in the beginning he argues for the other half of the thesis of continuity, viz., that the instinctive reactions of animals have some counterparts in the mental life of man.[I]

As we already know from our previous reading, Wright studied mathematics formally under Benjamin Peirce, and throughout the decade following the completion of his Masters degree, he studied Kant and Hume informally (but intensively) with Charles Peirce (additionally, he devoted much personal study J.S. Mill, as well as the correlative philosophy of Sir William Hamilton); but as a matter of course, he took some philosophy classes while at Harvard.[32] According to Madden, he wrote this essay (taking a position opposite that of the professor), in his senior year, on behest of a Professor James Walker who typically used this topic as a forensic of student ability. Madden adds:

> Heretofore it has been assumed that Wright, being convinced of the truth of Darwin's views, was led consequently to an attempt to solve the problem of bridging the supposed evolutionary gap between animal instinct and human intelligence. However, if Wright wrote the unpublished essay around 1852 then he had embraced a continuity view before being led to it systematically via Darwinism. Wright's early essay on continuity, an adumbration of his later essay, would explain why he so readily became a convert to the theory of natural selection; natural selection afforded potential support for the general position he already held.
>
> In the early essay Wright not only adumbrated the general continuity thesis of his later essay but, in the last paragraphs, prefigured a particular point in it. He wrote that it is evident that brutes "cannot distinguish their acts into right and wrong ones until they have reflected upon them simply as acts. They probably regard their actions always in conjunction with the objects which they had, since by their strong instincts these objects [of acts] are made paramount." In his later essay [Evolution of Self-Consciousness] Wright characterized the sign reasoning of animals and men in a manner similar to this description of the actions of brutes. The attention of the organism, he said, is carried away from the sign to the thing signified, and thus the sign by itself is never attended to. Organisms react to outward objects and events as harbingers of future events without recognition of the nature or function of the sign in this relation. Reflective thought, on the other hand, is the recognition of signs in their capacity as signs.

It is here that Madden finds the center of the essay that Darwin had specifically commissioned from Wright – an ideation already stemming in Wright's schooldays; and,

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[I] *All citations this chapter, unless otherwise noted: Madden, 1963, ch. 7, The Metaphysics of Self Consciousness*

as per Darwin's comment on Wright (quoted in our previous section), this is also what Darwin saw as most valuable in Wright's work. Moreover, it is a true center (that is, it is a vital center – one which leads to greater potentiality in the mapping of actuality). Likewise, it looks forward to James, "Man's chief difference from the brutes lies in the exuberant excesses of his subjective propensities".[I]

Yet for all this, Madden does not focus on the first philosophy, the basic abduction, which inspired/opened the way to Wright's dedication/ability "to contribute to the theory by *placing* it in its proper relations to philosophical inquiries in general" – due, perhaps, to the fundamental imprecision of the explicit vector of Wright's will and way, which was the umwelt named Chauncey Wright. (By so doing – or rather, by so *not* doing – Madden graciously left for me the work that is now in your hands.) In this way, Madden failed to notice a significant error in his assessment – both of Wright's work and of his heritage – in his claim that James, Dewey, and the 'functionalist' school of psychology "gave a teleological interpretation to this new view which was utterly foreign to Wright's interpretation"; moreover, this error is compounded by his claim that they did this "for philosophical reasons". By so claiming, Madden shows a misconception of Darwin – as according to our ongoing investigation into the efficacy of will, the nature of cause and effect, and our definitions of nature and life.

Again, life in- and ex- corporates in order to be, in order to *extend* its 'self' in time and space – to do so, a living thing (an event in time and space wherein being is dependent upon *ongoing* successful incorporation and excorporation within an umwelt that is, in its own way, its own greater self), which is to say that life as dependent on the potential of future incorporation (to extend in time is to reach into the future, to posit the potential of future incorporations) as it is on the past fulfillments of immediate need. As living beings are these sets of ongoing and dynamic transactions, one is always hungry for one's future self: it is a mistake to call this teleological.

[I] *James, 1956, pg. 131, Reflex Action and Theism*

To apply this, for example within Dewey's socially oriented philosophy, we can metaphorically leap to speaking of a *culture* as a living thing, an event in time and space (a thing) which must draw into itself from outside itself in order to be, as well as eliminate from within itself maladaptive traits which develop necessarily as a consequence of the specifics of the culture – and this happens in a series of performances, or the reading into being of some specifiable metaphysical potentiality (check out Charles Tilly on this one). Of course, a culture is not alive (is not *life*) – as it is not a physically coherent structure, yet still the metaphor pertains.

Coming back to Madden, his defense of the statements above is a demonstration of his modernist leanings; we see this in the passage below:

> The part of James's chapter that is philosophically most significant is his teleological interpretation of reasoning. James illustrates reflective thinking by a man's refusing to buy a rug because "it looks as if it will fade." If the man is basing his conclusion on previous experience with rugs that looked similar and had faded, his judgment is purely empirical. But if he extracts from the total rug (S) some element, a certain dye (M), one of whose attributes (P) he knows is chemical instability, then the judgment is reasoned. Success in reasoning depends upon the sagacity with which one analyzes a thing (S) into an essential property (M). James argues, however, that a property of S is "essential" only relative to individual interests and purposes. There are thus many "essential" ways of conceiving a thing, none of which is truer than others but some of which are more serviceable. Reasoning consists in finding that property which, related to another property, leads to the one conclusion that it is the reasoner's temporary interest to attain. And thinking is first and last and always for the sake of doing.
>
> It is this characterization of reasoning as a teleological instrument of action that particularly influenced the instrumentalists. It is the most original part of James's chapter and that for which there is no counterpart in Wright's essay. The only discussion at all similar is Wright's insistence on the working-hypothesis nature of scientific principles. Wright, of course, would agree that reflective behavior has adaptive value; it is naturally selected just because it has utility; but this is not saying anything unique or special about it, for the same is true of any other behavior that has survived.

By contrast, if we think of life as *only* existing within reciprocally consequential nature, of reason as *only* consequential within reciprocal (mutually becoming) situations, then the working-hypothesis nature of science is not teleological, but emergent (however much agency is derived from the possession of a functional map – for more on this, think back

to our analysis of Wright's *The Philosophy of Herbert Spencer*). If, however, we insist on using an ontological map wherein each 'sign' stands absolutely demarked from each other, then we must concede that the postulations of Dewey and James can only make sense by presuming that teleology itself either has metaphysical agency, or is itself a metaphysical agent. Likewise, we would be forced to posit solipsism as a default setting to subjectivity. However neither James nor Dewey, nor any who have worked with Wright's legacy, have taken this position, as (it is by now obvious to the careful reader) within Darwin's Ontology, teleology and solipsism are both dismissed as absurdities.

Furthermore, I must point out the presumption implicit within that last sentence by Madden above – Yes! Reflective behavior has adaptive value, and the same is true of any other behavior that exists (by fact of its survival, its continued transcendence into being). Yes and again yes. But this says nothing as to the origin of behavior (of any kind), only to its subsequent survival. And so it says nothing to the issue at hand. Madden writes in the classical, and classically modern tradition – as if human consciousness has a magical source. By contrast, Wright's philosophy of science only makes sense if we redefine the 'teleological' qualities inherent within organic relatedness (commonly called subjective will), as the minding of a pragmatic a priori. Organisms 'seek' to extend their selves in time, to project their selves towards some future. This is *not* what the historical usage of the term *teleology* indicates; it is only that organisms 'know' their dinner. Madden is wrong. Wright, Perice, James and Dewey *all* held that the presumption of teleology (in its traditional form) *impedes organic relatedness* by artificial (unnatural) selection of favored (presumed superior) attributes. This organic a-teleology is relevant to both knowing and of being, which is to say, it is both metaphysical and physical.

The psychology of James, Dewey, Mead, Schiller, et al (the so-called functionalist school) begins with the living organism, and proceeds organically (with and within a study of the subject/object complex rather than by any presumed stolidity, be it the Wundtian style atomically psychical bricks or Jungian style archetypes – or any 'set' form, be it Neo-Aristotelian or Neo-Platonic); and yes, it likewise rejects any assumed Neo-Cartesian divide between physical and psychical extension (other than functional,

that is, a posteriori) and goes so far to deny that the psychical, that 'consciousness' even 'actually' exists – except as a 'function' of living being (this is especially prominent in James) – including and especially (but *not* limited to) the fabled metaphor of the ghost in the machine. I would contend that by focusing on Wright's rejection of the Neo-Cartesian paradigm, while still employing Neo-Cartesian ontology, Madden misreads the ontological features of Wright's work, and thereby posited a fundamental misconception of its subsequent development.

The naming of the so-called functionalists school is also a mistake, but one that would need its own book to fully explore. However to ignore it would be unwise. Briefly, using Dewey as an example: while the metaphor of function is both implicit and explicit throughout Dewey's work. But it is woven together with, and indeed a subset of, the metaphor of instrument, a thing which *generates value through usage* (that is, by being part of a reciprocal relationship which engenders the emergence of novel phenomena). This can only happen through/within the structure of some situation, the actions of which function as part of the 'set' (population, really) which is the 'setting up' of what may be, but yet, not at all prefigured within its 'own' being (except through the generative yet limiting potentiality of *what was*). This is again, a scale-thick generation of novelty through reciprocal incorporation (as blended with the 'objective' enfolding of the product of excorporation). As such, Dewey's Instrumentalism is far closer to Wright's reading of Darwin than Madden seems to credit.

So what does Madden get right? That for Wright, psychical phenomena originates within/by reciprocal fluctuation between/within (which is the interactions of) reflective thinking and enthymematic inference as mediated within the habituation of signage:

> "The former, which is peculiar to the minds of men and distinguishes them from the minds of other animals, brings particular facts under explicit general principles or major premises. The latter goes from minor premises to conclusions, skipping major premises. In such cases the data of experience, which if consciously formulated would be the major premises, are causally effective in suggesting more or less clearly, conclusions from minor premises. Enthymematic reasonings are exhibited in inference from signs and likelihoods as in prognostications of the weather and in orientations of many animals. In

> enthymematic inference signs are harbingers of events without recognition of the relation between the sign and the thing signified; in other words, the semantical capacity of the sign is unrecognized. In scientific inference, however, signs themselves are objects of reflective attention, and a sign "is recognized in its general relations to what it signifies and to what it has signified in the past, and will signify in the future."

Moreover, Maddens offers this spot-on comparative analysis of Wright and James (which is now cogent, yet also points us toward our upcoming discussion of James):

> While Wright and James shared a neutral monism, there is no trace of James's relational analysis of consciousness in Wright's essay. Further, while subjective-objective is a functional and not a metaphysical division for both of them, Wright thought that the distinction is always present in an individual's experience as an instinctive classification or division, whereas James thought it is a classification arising within experience itself. Finally, James claimed that the classification, according to different sets of relations, holds both for percepts and for their remembered images, whereas Wright thought that the classification implies an awareness of the difference of memory images and their signification from present percepts and their same signification.
>
> Apparently, then, the similarities between Wright and James on this problem are orientational and programmatic, not a matter of detail. They both denied that consciousness is a substance and that "objective" and "subjective" are irreducible characteristics of phenomena, and they agreed that the basic reality is neutral or pure phenomena.

This is straight forward and supported recognition of Darwin's Ontology, unfortunately, the rest of this same paragraph takes a sharp turn towards its denial; the problem lies in Madden's failure to grasp the metaphysical consequences of Darwin's science:

> However, there is nothing unusual in their sharing this view, for many of the empiricists of the time -- Grote, Renouvier, and others -- also held a neutral monism; and this position, as Gail Kennedy has pointed out, was already involved in J. S. Mill's empiricism and phenomenalism. On this particular issue, I think, the historical relation is a three-way affair with Wright mediating between Mill and James. Wright skillfully brought to bear on the young James the English empirical tradition, particularly J. S. Mill, and the seed he planted bore fruit long after Wright was dead and after James had spent the fury of his reaction against Wright's agnosticism and unemotional philosophy in his will-to-believe and tychism.

I agree that there is nothing unusual in this cohort sharing a common view, though the view is itself original for its time; but I do not at all agree with Madden's interpretation of

the relationships here. To defend this takes our argumentation away Wright (not as if we haven't done that before) but not from Darwin's ontology. And so we again cross ways with an issue that cannot, here and now, be fairly ignored: so now, to it.

First of all, I find nothing in the literature anywhere that suggests that James carried any kind of fury over Wright's agnosticism, rather the opposite – he shared it strongly. (E.g. James' *Varieties of Religious Experience* explores the phenomena of religious experience without postulating any 'object' of such experience). Second, both Wright and James worried over the phenomena of sentiment (or emotion) concurring within philosophy (see our earlier discussion of the origin of modern science). While the conclusions they drew were not at all identical, they were certainly both in line with each other (contrast Wright above with James' infamous essay, *Does Consciousness Exist?*). Third, James postulated the Will to Believe as a necessary consequence of abduction, as part and parcel to the process of rationality, as function within the minding of a living organism – not as mere egoism or cheap escapism, and *not* as a presumption of theism. Fourth, James' tychism was a furious reaction against Wright's tychism? This just makes no sense at all. And fifth, to describe James as "furious" over damn near anything is a gross misrepresentation of the man. His closest friends mocked him as a saint, the legacy of his private mail as well as his public writings all defend this mockery. It appears that little could shake the man's much practiced equanimity. Was James *furious* over philosophy? Any philosophy? In a word, the answer is No. (Peirce, on the other hand, met with little philosophy that *didn't* infuriate him … but more on all this at a more appropriate moment.)

Furthermore, accepting Gail Kennedy's analysis of Grote, Renouvier, Mill, et al. does not in any way refute our analysis of Darwin's Ontology but rather confirms it. Incorporation is not limited to establishing 'replicators' but also involves maintaining 'cultures' (in the humanist sense as well as the microbiotic and cellular sense). Cultures defy modernist rendering of teleology (as that strictly tik-tok routine established by pure mechanism itself working its way to a pre-set conclusion, established by the sky-god implicit (if only as a deistic unmoved mover) within much 'pure' materialism); they manifest as emergent 'wholenesses' that have transcended into being (and are thus

continually becoming self supporting structures, for so long as they are able to support their 'selves'). This is as true when speaking of bacterial cultures as it is of human cultures. And even bacterial cultures act in ways that seem to presume teleological intent, but actually negate it in its classic sense (as that pre-ordained intent that lies behind the very concept of design as well as the ends that lie pre-ordained in the beginnings). The very notion of teleology as evidence of design (that is, as evidence of the application of an external will) emerging from smelly lumps of kitchen mold perfectly wraps up the Darwinian/pseudo- and neo- Darwinian divide. The appearance of teleology is itself an illusion created in the manner in which subjectivity is presumed to be both atomic and limited in scale.

And so, rather than accepting Madden's account, we see that Darwin, Wright, Renovoir, et al. were all part of a 'communicative network' (ala S. Kauffman) which is itself an inherent aspect of culture – on every scale wherein culture takes place – functioning as/in a classic hermeneutic system (see Marcos, Anton Readers of the Book of Life). Of course there were shades of similarities between these thinkers that cannot be reduced to the tik-tok of mechanical agency! Why would we expect otherwise? Moreover, why does Madden expect otherwise – unless his consciousness is operating strictly within the modernist paradigm that Darwin's Ontology refutes.

We will touch again on James's relational analysis of these issues later, (but yes, there is little if any of it in Wright's work – and yes, James went further in his analysis of instinct than did Wright, and not always in the same direction, but these are built upon Wright's work, not a rejection of it), for now, we turn back to more of what, exactly, Madden got wrong. Look again at the extended quotation from several pages ago, Madden correctly contends that for Wright: "Organisms react to outward objects and events as harbingers of future events without recognition of the nature or function of the sign in this relation. Reflective thought, on the other hand, is the recognition of signs in their capacity as signs." This is exactly correct, and exactly where Wright begins explicating the epistemology implicit in Darwin's Ontology, but dig a little and we have a problem. Madden also appears to be operating with a classic modernist conception of empiricism;

i.e. he consistently treats these "outward objects and events" are *actually other* (that no being is shared), as though the ontology here were Lockean, or even Hobbesian, (with that implied Neo-Cartesian bias towards the 'ghost in the machine') – that things happen *out there*, they happen *to us*, and we subsequently cognize them *in here*. This is not Wright's position, nor does it explain the *umwelt* of Darwin's Ontology.

By contrast with classic Modernism, within Wright's philosophy and throughout Darwin's Ontology 'things' (more precisely, *living* things – though Whitehead famously extended this to include *all* things) are events that exist only through reciprocal becoming, they happen mutually, they *are* only as they *interact* – and this includes you and I, and all our attempts at knowing. Experience (from which we learn) begins with us minding our environment, we cognize 'things' interactively vis a vis organic sensuality. While far too many of us may think that we do our knowing in some totally abstracted sense, (a rendering of a wholly 'objective' 'it' wholly within a 'subjective' 'individual'), and that we do so within a self-contained mind (metaphysically irreducible container of thoughts, that is, some kind of *soul*); Darwin believed nothing of the kind. He did not *act* as if this were descriptive of anything to be found in nature. In casting aside (psychically discorporating) notions such as these, we find Wright's evolutionary ontology within the soul of the Pragmatic reconstruction of religion, at the center of Pragmatic epistemology, sociology and pedagogy, and within the foundations of Peirce's metaphysics (which, as J. Esposito has argued, stem from the idea that concepts "literally 'participate' in the reality of what is conceived"[1]). But again we are ahead of ourselves, there will be more on this as we move towards the core ideations of James and Peirce; our job now is to locate *in nature* the point of differentiation of consciousness, and establish its unique identity.

Getting back to *Origin of Self Consciousness*, Wright gives us 66 terse pages, which constitute an utterly radical (though far from novel) sense of self-in/of-other previously unknowable to scientific explication (however common to/within expressions of religious devotion). It was the recognition of this not so simple sense of self that informed Chauncey Wright's unpacking of Darwin's Ontology – and, through his dogged dialectic,

[1] *Esposito, 1980, pg. 42*

settled the chording of Pragmatism. Of course, he did none of this alone (differentiation is always a social event), but through/within his long conversations, and longer friendships. But more, differentiation is not determined action, but natural. It marks an event of novel origination, which combines dumb luck with the capacity to establish heritage.

As we have already seen, both life and Pragmatism, as well as the foundational essay *Evolution of Self Consciousness*, turns on the question of spandrels. For Wright, a true novelty is not reducible to previously existent phenomena, as the one cannot be depicted as causally derived from the other without rendering into utter absurdity all our notions of causation. This includes the emergence of the phenomena of consciousness (both individually and as a class), and follows from Wright's definition of nature itself:

> [T]o the scientific imagination, *nature* means more than the continuance or actual repetition of the properties and productions involved in the course of ordinary events, or more than the *inheritance* and reappearance of that which appears in consequence of powers which have made it appear before. It means, in general, those kinds of effects which, though they may have appeared but once in the whole history of the world, yet appear dependent on conjunctions of causes which *would always* be followed by them.[I] (*italics original*)

Nature is not mere replication, nor is it the repetition of *certain* effects from certain causes – rather it involves *kinds* of effects, even those that are singular in all of existence (like *you* and *me*) which necessarily follow from *specifiable* "conjunctions of causes". This is not, of course, Laplace but Maxwell, for Laplace allows for no new novelty – certainly not for the natural novelty of self-consciousness. By contrast, Maxwell recognized that necessity is constrained within complex situations, which, as such, can be neither merely repetitive in their processes, nor simply mechanical in the causation of their being. In this, Maxwell brilliantly foreshadowed the possibilities of Chaos, Complexity and Emergence – theories which all stand intertwined, with each other as well as all of Darwin's Ontology. (But to clarify, my claim is not that Maxwell worked on or within these contemporary theories, merely that his scientific agnosticism, and the workings of his 'wee fellow' both helped point us in the direction of their development.)

[I] *Wright, 2000, vol. 1, pg. 202*

As he wrote the sentences cited above, Wright was speaking specifically of chemistry (not psychology), and generally of the "physical constants" which function as the predetermined '*was-ness*' which is but one 'pillar' in the emergence of what *may be,* out of the embedded immediacy – the reciprocal incorporation – of what *is*: but already he is making the leap to "the latent kinds or natures which mystical research contemplates (erroneously, in some, at least, of its meditations) under the name of 'the supernatural' ". This includes consciousness (which is, after all, the stated subject of this study); as Wright put it: "no act of self-consciousness, however elementary, may have been realized before man's first self-conscious act in the animal world; yet the act may have been involved potentially in pre-existing powers or causes."[I]

In complete contradiction with much of the long heritage of religious and philosophical speculation, in Darwin's Ontology, self-consciousness is not something explicably willed into being by something inexplicable. It is rather the telling into being of the story of how something inexplicable could emerge from the explicable – through complex interrelating made possible through the development of signs (relators, which are indications of potential relating, the probing mechanisms of reciprocity) as those things (events in time and space) that mind the growth, the transcendence into being, of their own conscious self. It may look, again, that I am taking us far a field from Wright's special purpose, but still we sit square in the center of the philosophical implications of Darwin's Ontology.

In contrast to the long voiced creationist opinion, the focus of Darwin's long argument did not, and does not, have anything to do with any notion of deity or divinity having any kind of agency in the world; Darwin did not write of God, not even in opposition, not in any way. He did not exalt himself by pretending great status (even as a sinner). *Origin* is humble. Darwin believed – that is, he acted as if it were true – that there is no 'higher and lower' in evolutionary development. And he was outright dismissive of the idea that there exists divinely ordained scheme to place English Gentlemen (or anyone else for that matter) at the crown of creation. Rather, by positing origination by descent with

[I] *Wright, 2000, vol. 1, pg. 200*

modification, *Origin* argues against the absurdly contra factual claim that humanity (or indeed any individual or group of the genus or species) falls outside nature's purvey.

To be clear, a notion is absurd if it is cannot be used to make more sense out of one's furthering experience. Without the notion that the earth is round and circles the sun (the Copernican Theory) nothing in astronomy makes any sense. Never mind the many elaborate schemes that can and have been drawn up to explain the movements of the planets as seen from the earth by the naked eye. Never mind that these systems are always (radically) empirical in their origination, idealistic in their orientation and rational in their construction. Never mind the level of artistry or the religious practicality of all these varied schemes … If they do not adequately describe the *actual* situation, they are far, far less competent at quickening into *profitable* (successful in furthering living across multiple scales) *belief* (action) – at least outside a very limited psychological sense of generating some sensation or 'impression' of some experienced 'good' (which ought not be discounted, but cannot, in and of itself, pass as sufficient either as reasoned evidence, or empirically as the breadth of the matter at hand).

By contrast, Copernicus accounts for traveler's tales of strange stars, visions of sailing masts 'sinking' into the sea, the movements in the sky by day and night, the turning of the seasons, the catholicism of mathematical reasoning, and so much more. By not discounting any perceived experience, and by *a priori* refusing to dictate the perceiver's status and perspective, his theory 'grew' strong, and 'birthed' countless new understandings. But more telling than the web of complexities that all point to the 'truth' of Copernican reasoning is this fact: this reasoning can be used to find more reasoning. With the absurd exception of those so intransigent they still believe the moon landings were faked, it is impossible to deny that Copernicus has taken us places, and promises to show us even more. If this is an affront to Your God, then so is breathing.

With Darwin, it is no different. Biology without evolution is like flat-earth astronomy; it just does not work. As the theory of glaciation (which has long since lost all its controversy – except among young-earth creationists), assisted Darwin in telling the story

of Cwm Idwal, so too the theory of origination by descent with modification assists us in telling the story of us – along with all our cousins in life. By so doing, it distinguishes the heritage we can honestly expect from that which the exuberances of our subjectivity so often pretends.

To Wright's friend, former professor, and occasional colleague, the Harvard biologist Asa Gray (who was one of only 4 men whose scientific opinion Darwin valued highly, and who, as you no doubt remember, first introduced Wright's work to Darwin), Darwin wrote:

> Your question what would convince me of Design is a poser. If I saw an angel come down to teach us good, & I was convinced, from others seeing him, that I was not mad, I should believe in design. — If I could be convinced thoroughily that life & mind was in an unknown way a function of other imponderable forces, I should be convinced. — If man was made of brass or iron & no way connected with any other organism which had ever lived, I should perhaps be convinced. But this is childish writing.[I]

To Darwin, it is childish to wish one were some kind of pink unicorn or pearly treasure, and equally childish to think of one's body as some remotely operated solipsistic thing, be it of brass or meat. He likewise thought it childish of anyone to claim they were created distinctly, specially chosen or divinely provident, or in some such manner superior to all else that exists. Moreover, Darwin thought it ridiculous to think that any living thing – man most definitely included – *can* exist unconnected from the rest of life, present and past. I argue that within Darwin's Ontology all such claims are irreligious. And this is the focus of our next chapter.

[I] *Burkhardt, 1985-2010, letter 3256*

The Many Problems of German Darwinism

Our deeds determine us, as much as we determine our deeds;
and until we know what has been or what will be
the peculiar combination of outward with inward facts,
which constitutes a man's critical actions,
it will be better not to think ourselves wise about his character.[I]

I am but a sign of me, a poor player perhaps, (and clearly insufficient as causal of all that is me) but still, strutting and fretting the ethereality, the resounding chord that is me – and all respect to the Bard aside, whatever its scale of sound and fury, not even the lamest song signifies nothing as even the sourest sound reverberates. However insignificant I may be, I am the sign of me that is a chorus of me, singing my experience, signaling my actuality, signing my own metaphysical warrant. I am my own transcendence, the arcing circle of me echoing into the world the consequences of my having been, which is my own claim of and to being, my own divine claim, that simple recognition that I, too, am.

But again I am putting us ahead of ourselves – much of this is only apparent as poetry or in fiction. (This is not, of course, limited to the avowedly fictitious as it would include a wide variety speculation including much of what is commonly dubbed religious, philosophical and/or scientific, and would remain limited to fiction right up until Charles Hartshorne[33] developed his ideation of divine fragmentation, which was not, of course, cut from whole cloth but adapted through his study of two other great proponents of Darwin's Ontology, Alfred North Whitehead and Charles Peirce, as well as both derived from and dyed in generations of mystic contemplation.) It is not until that other lifelong friend of Wright, William James, developed much of Wright's essay *Origin of Self-Consciousness* into a major component of his *Principles of Psychology* that we even see this concept speciating (taking on a 'life' of its own as according to Wright's philosophy of science) into being (as that part and parcel of that cohort of rationality called on one hand Pragmatism, and Science on the other).

[I] *Eliot, 1859, pg. 491, Adam Bede*

Though of course this ought not be read as merely reactive, reductive, or simply linear; Peirce had long since penned his early essays, which for odd reasons, actually hurt the acclaim already afforded him – at least within the academic/political circles, including both those of his father and his father's academic/political opponents, which generally constituted the entirety of the very 'scientific community' Peirce took so very seriously, and which generally revolved around one or more of the many people Peirce had managed to personally offend. Meanwhile, James was studying neural anatomy while laying the foundation for his psychological laboratory with intent to explore metaphysical anatomy. Others of their circle were involved as well. Oliver Wendell Holmes Jr. had come out of the civil war, with the scars to prove it, intent to study the body of law and bind together her broken body; alongside his colleague Nathaniel Green, he had found within the tradition of English common law, 'chains of causation' that operated with a unique kind of transcendence. Even Wright's old friend the geologist was already writing about words in a way unheard of just a decade before.

The differentiation of Pragmatism into its own species, which proceeded from the day Wright first picked up Darwin's *Origin* (one of merely 1200 first edition prints), was (as with the origination of all such novelties) an organic differentiation; and occurred not through simple causation – *not* as the result of some design, but as complex emergence. There were in this origination (as with all origination) more factors present than can ever be compiled, let alone collated within a single mind. (Though this does not, of course, justify a know-nothing attitude – including that of 'relativism' in any of its many permutations – nor does it justify any variety of metaphysical over-reach, i.e. claims of dominion, both theistic and causal.)

Wright, James, and Peirce, along with Holmes and Green and countless others drawn from countless a-concentric circles, together formed this new niche, which is of course, rather larger than our opening metaphor, and opens more possibilities than could have been known in its first formulations. And this niche was not opened by plan, by any organized intent of its members. It was not designed, it was not willed into being, an active intention (supernatural or otherwise). Likewise, it did not come into being as a

caused reaction, a result of efficient causation or even by counter-punctuation. Moreover, there was then, as there is now, no cosmic signifier writing its importance into the stars, no metaphysical warrant, no absolute, nothing more grand than one breath after another after another –(*ah, but there is grandeur in this view of life*). For that matter, Pragmatism did not get *named* until roughly 30 years after its differentiation was essentially complete.

Though we may recognize all this and more, there were in fact members of Wright's inner circle of friends who argued otherwise; we do find a few early *pseudo-proponents* of Darwinism as welcomed members of the famed Metaphysical Club, the foundational meet-point of Pragmatism. The most accomplished of which was John Fiske, a quite popular and highly successful 'science' writer of his day who carried his devotion for 'Darwinism' to the heights of Mount Spencer and beyond.

In striking similarity to Wallace, Fiske (like all pseudo-proponents of Darwinian thinking right up to the present day) actually served to limit the fulfillment/exploitation of Darwin's basic theory – though (as a Spencerite) he did so in an opposite manner to Wallace, by interpreting it (from wholly within a Neo-Platonic rendering of Neo-Cartesian modernity) as a teleology that is rather also an eschatology. He sought to prune, metaphysically of course, in favor of his own mythos; and he found ways to imbibe his mythology with Darwin's science. But again, mythic systems enter the realm of Darwin's Jungle (which is the Peircian secondness) *in service to the fragile self*. They extend the self in time, project it into action, and thereby shape events around it in space. By this, they maintain the self by 'protecting' it from the sustaining vicissitudes of life. In this, careless mythologizing generates buffer zones of unreality, which isolates adherents from their actual experience, from the source and sustenance of their actual selves. Mythic systems are necessarily subjectively motivated and become dysfunctional the moment they are taken as 'fact'. That Fiske treated evolution 'religiously' demonstrates that he understood neither Darwin's Ontology nor his Biology, and that his labor would limit/guide others likewise. The fortification of his self-ideation served Fiske in the (religiously) subjective motivation of his 'science' and the 'objective' (absurd) stance of his 'religion'. By contrast, Wright reversed Fiske's self-interested pose. Fiske seems to

have been one of those thinkers who presumed greatly and parsed lightly; certainly Wright considered his *Cosmic Evolution* quite barbaric.

While both Fiske and James readily admitted to not having grasped all of Wright's ideation (or that of Peirce for that matter); the difference in response could not have been greater. While James took this 'cognitive irritation' as an excellent source for problem solving and indeed turned the whole concept (both of Wright's development of Darwin's Ontology and of cognitive irritation itself) into a central component of his own work, Fiske did not. Rather, he interpreted Darwin's work as evidence of a Cosmic Hand in Celestial Evolution and Wright as "nearly in harmony with Mr. Mill in methods and conclusion" and looked no further; essentially, generating in real time the bifurcated framing through which Rorty (among many others) have viewed Wright's work. Of course, unlike countless others, Fiske knew Wright personally, writing this of him in 1900, a full quarter century after Wright's death:

> A mind more placid in its working, more unalloyed by emotional prejudice or less solicited by the various temptations of speculation, I have never known. Judicial candour and rectitude of inference were with him inborn. On many points his judgment might need further enlightenment, but it stood in no need of a rectifying impulse. No craving for speculative consistency, or what Comte would have called "unity" of doctrine, ever hindered him from giving due weight to opposing, or even seemingly incompatible, considerations. For, in view of the largeness and complexity of the universe, he realized how treacherous the most plausible generalizations are liable to prove when a vast area of facts is to be covered, and how great is the value of seemingly incongruous facts in prompting us to revise or amend our first-formed theories.[1]

And so the strict neutrality for which Chambliss, Wiener, Madden and many others have lionized Wright was obvious to Fiske, as was some fair portion of the reasoning behind it. However, somehow and unfortunately for his philosophy (though intriguing, exuberant – even ecstatic – as mythic rendering, filled with fairy tale qualities and grand vistas, but sadly telling of his subjective motivations[34]), it seems Fiske felt that the schooling of such 'objectivity' did not apply to him. And despite having been witness/participant to its birth, the speciation of Darwin's Ontology (that is, its embodiment within a school of

[1] *Fiske, 2006, pg. 50*

thought, its becoming of itself within/through becoming part of, a Darwinian history of ideas) and the subsequent transcendence into being of a new philosophy, was not apparent to him. Using Dewey's language, I would argue that Fiske was so willfully busy in the construction of his ideation of his self in the world (that is, in *practical* religiosity) that he had no time to reconstruct the actuality of his self in the world. In so doing, he did not notice, and did not take part in, this emergence.

For his part, Wright praised Fiske's *Cosmic Evolution* as far exceeding Spencer's *Biology* "in readableness and skill at exposition" even as he dismissed both of them from scientific consideration as "unequivocally of the speculative class"; this from an article published in *The Nation* some months before his death titled *Books Relating to the theory of Evolution*, wherein he tellingly described such speculation as "practical and religious, and opposed to theories of evolution". Wright also gives us a list of books he considers to contain some reasonable science but remain fatally flawed in their undue mixture of science and speculation, which includes Mivart and Wallace, as well as a list of books which he considers to be as scientific, a short list consisting of two by Huxley (*Origin of Species* and *Man's Place in Nature*) and two by Darwin (*Origin* and *Descent* – though it may be safe to presume that, had this been a longer article, he may have likewise listed Darwin's other work). As with our earlier discussion of the origin of modern science, he distinguishes a divergence of motivation as the proximate cause of the divergence of method. To clarify, he adds this more general description of the distinction between the two motivations:

> The essential characteristics of properly speculative as distinguished from scientific method is, that the former seeks to expel doubt by the furcular force of the dilemma that unless one accepts as having universal validity certain axioms, which it is true are only illustrated, not verified by inductive evidences, one is not entitled to hold any beliefs at all with any certainty. Choice axioms are therefore presented, *illustrated*, and a universology is deduced from them. True scientific on the other hand, is to balance evidaences, and to bring doubts to civil terms; to resist the enthusiasm of these aggressive axioms, and to be contented with the beliefs which are only the most probable, or the most authentic on strictly inductive grounds.[I]

[I] *Wright, 2000, vol. 1, pg. 396*

Despite what Wright clearly holds as its shortcomings, it is my contention that he does give an off-handed recommendation for Fiske's work – so long as one recognizes that such work is not science, but myth making, which is a practical activity with real world consequences.[35] It is the postulation of a religious attitude, which is to say, a prevailing sentiment towards experience; it is a presentation of bias rendered into operatic story-telling; it is the habituation of *religio* into religion, and as such it is not, and indeed cannot be, objectively motivated. Moreover, this holds true whether or not any of the thousands upon thousands of objects of religious devotion actually exist.

Myths, those stories that we tell ourselves to explain our experiences to ourselves, function to render our otherwise immediate – and hence inchoate – experience into recognizable form. They are the pen that draws our mental map, the shovel that shapes the ground of our being (that is, our metaphysical ideation of our being in the world); they serve to generate/support, (develop and maintain) subjective identity and are necessarily subjective in all their permutations. The key to individuation, 'a' myth is always personal – even a shared cultural icon finds use individually and as such, must be thought of as bereft of objective functioning however objectified it may become, however instituted it is within some particular society. Yet subjectivity remains a social event, and so too the furthering of myth is the collective embodiment of some specifiable set of myths into that thing we call *a religion*.

A religion is an objectification of *religio*, it is the objective (objectify-able) functioning of the minding of a living *a priori*. And so, religious is the word we ascribe to things (events in time and space, including all physical and psychical phenomena) that 'fulfill' our selves, extend/maintain our selves; it is whatever closes the circle of our psychical being so by habituating transcendence and actualizing some possibility. Without success herein, we are unable to think at all, without success herein, we achieve *neither* psychical *nor* physical existence; without this binding, we are unable to mind our environment so as to live therein. As religio (binding into being by re-binding within being) is a necessary component of life, it is of rational thought. So too does its objectification, religion, make an appearance in scientific thought as a prevailing sentiment towards experience, a bias

that is necessarily present in all cognition. This depiction of 'religion' would, of course, include in its greatest definition a great variety of bindings – including those founded critically upon/within a strictly materialistic hypothesis as well as those postulated without awareness in an unreflective mind. For Wright, it is of the utmost importance that such biases are openly acknowledged and (so far as is possible) taken into account. To do so is to allow the processes of science thrive; to deny that such sentiment exists, or to presume that some religion or other is exactly (*objectively*) true, renders a thinker less capable of constructing the objective motivation so very critical to epistemic success.

For Wright, and indeed for all of us (whether we know it or not), religion is a purely practical affair. It does stuff, stuff with real world consequences. It is the shaper of your self. To the extent to which you use football metaphors to explain your experiences to yourself, your social life revolves around some local franchise (especially if you met your significant other fresh off some victory therein), and your self-ideation is 'completed' within football fandom (which is to say, the turning of your self is structured therein), then football is (at least part and parcel of) your religion. But as with life, so to with religion, it does not exist in and of itself. All of us, even the most dogmatically attached to one little sect, incorporate and make practical use of a vast constellation of potentially religious ideations. Believers today tend to blend football with parochial, professional, national, ethnic, class and sexual pride – and then add a few scientific metaphors along side what ancient tales still 'work' for them. However great a claim of historicity any such believer may claim for his beliefs, no singular *belief* is older than the believing self (and our own individually various selves are necessarily much younger than us).

Our 'religions' are always a grab bag of the most seemingly disparate notions. We mix family tales with tall tales with our own personal experiences of (getting and/or not getting) tail; and we mix it with the music our mothers hated and our memories of good teachers, how we ran from bullies and/or how we stood and fought, the companionship of fishing alone and the loneliness of a crowded pub; we take all these things and more, sprinkle in a dash of ancient (and/or alien) fable, and use these metaphysical concoctions to 'make sense' out of our experiences – by so doing, we create our selves. In the story of

us, those metaphors that adhere within ourselves become a mythic component of our own individual 'religion'. By contrast, those things we commonly *call* 'religions' are but one tiny (and frequently closed off) aspect of our religious selves. In many, many ways, agnostics are the most religious of all – for they continue to *do* religion, to bind their selves ever further into/within the greater being that is our shared world. By contrast, 'believers' tend to settle in at some convenient point, and do their damndest to never allow that self of that time and place to ever change (or grow) again.

A full critique of Fisk's religious epic deserves its own book (as does his unwitting brilliance at science fiction/fantasy); here, we are looking for what Chauncey Wright garnered from his friendship with John Fiske and we find it in the very manner in which Fiske mythologized evolution. All religions bind themselves to/within experience, and must therein function well; failure to do so will damage their adherents chances at psychical and epistemic success by misdirecting them in their 'Wundtian' quest (their need for a coherent *I*) – hence limiting their survival options. And this binding is always a rebinding, an origination that is a differentiation. To argue that religions must originate somewhere, somewhen, and somehow, is also to say that religions must adapt, evolve, continually come to be something truly new. And Fiske was doing just that: taking an active part in the differentiation/origination of a new religion, an action for which Wright expressed both admiration and contempt depending on the context of the moment.[36]

Questions of the origination of subjectivity lie at the heart of this attitude towards religion, as do questions of the maintenance thereof. So too, with Fiske, we also see the very danger the later Pragmatists would hold as inherent in any refusal to *re-interpret*, or otherwise willingly abandon, any and all religious precepts in the face of contradictory experience. And such experience is practically coeval with the habituation, the transcendence into being, of any specifiable religion. But at that time (their friendship lasted from its fitful beginnings as fellow students in the 1850s until Wright's death in 1875 – Fiske found Wright after his stroke, and stayed at his side till his death), Fiske *was* constructing religion anew by self aware (willed and 'rational') *reconstruction* of the old, through acts of wild speculation specifically on issues dear to Wright: the

consequences of Darwin's biology. This conflict (conundrum) that lies between (expresses a dipolar continuum of) the ontological notions that lay the foundations for the divergences in practice between Science and Religion, are the central feature of Wright's last essay, *German Darwinism*, and likewise remain a recurring theme throughout the philosophical tradition of Pragmatism.

The argument that Pragmatism is indistinguishable from Utilitarianism is as old as Pragmatism, and it is a classic straw-dog, (to anyone with an inkling of what these philosophies actually entail, it is obviously and blatantly incorrect). The argument that Wright did little more than re-write Mill is likewise wrong. What Wright did take from Mill included an admonition against the simplicity of the very kind of materialistic metaphysics that Chambliss and Madden, as well as Fiske, Rorty, and countless others have consistently and falsely attributed to Wright. But Wright's works contain a very different kind of neutrality: one in which science is not based on *any* arbitrarily presumed metaphysics. This includes *all* rational constructions, but especially focuses on any rationality constructed upon/within a circularities of evidences knotting together the knowable and the unknowable, calling it all one and claiming to know it. To whit, Wright gives us the following passage from the previously mentioned book review of *Recent British Philosophy*, by David Masson; Wright's article was of the same name, with a subtitle added: *A Review, With criticisms including some comments on Mr. Mill's answer to Sir William Hamilton*: (later published as *Masson's Recent British Philosophy*)

> A question is closed when we have a knowledge precluding the possibility of evidence to the contrary, or where we are ignorant beyond the possibility of enlightenment. An ontological knowledge of the supernatural, or even of the natural – that is, a knowledge of anything existing by itself and independently of its effects on us – is, according to the experiential philosophy, a closed question. But a phenomenal knowledge of the supernatural is nevertheless a question still open until it be shown, beyond the possibility of rational or well-founded doubt, that the law of causation is, or is not, universal, and that absolute personal agency or free undetermined voluntary actions have, or have not, determined at any time the order or constitution of nature – difficult questions, it is true, but still open ones. Mr. Masson implicitly identifies theology with ontology – the supernatural with the non-phenomenal – and thus implicitly denies that anything can be known of the supernatural, unless it be known absolutely, or in itself. This is to stake all religious inquiry on the truth of transcendental ontology, a position Mr.

> Masson, as a liberal historian of philosophy, cannot affirm as the final conclusion of his inquiry, or as warranted by any reasons he has advanced.[I]

It is again important to remark on the notion (which, I would argue, is incorrect) that ontology is necessarily linked with some super- preter- or a- natural assertion, (as discussed in our opening pages). In the passage above Wright is arguing the absurdity of *knowing* itself within such abduction. Eliminate this bugbear, and transcendence is not an *a priori* phenomenon, (neither is it, as we have already seen, merely a metaphysical affair), rather it is a function of being. Specifically, it signifies the process of coming into being (of taking part in, or emerging into, actuality). As such, transcendence as knowing is both *a posteriori* (as a realization of a potentiality) as well as *a priori* (as a specifiable ontology, *first philosophy*, or initial – that is, un-reflected – abduction), depending largely upon scale (as well as multiple other aspects of the viewer/participant's perspective which, in addition to scale, is also shaped by size, object and method of incorporation, and the immediate, temporally relevant specifics of an individual umwelt).

So again, transcendence is not a problem to knowing, however its misinterpretation commonly is. Likewise, it isn't religion per se that is a problem, but the arrogance with which so many of us (especially the so-called religious among us) refuse to *do* religion, to treat religion as a verb, as an ongoing process functioning within specifiable limitations, and to do religion consistently and well, with humble recognition of all the limitations implicit therein. These include but are not limited to: that all religious postulation is done by individual (limited) beings, and has limited applicability within limited situations, and that *religio* is not only subjectively experienced, but inherently subjective – it is a consequence of the minding of an organism within its environment. Religions, as a class, have no 'objective' being, and indeed, outside some subjectively some postulated abduction instituted within some society (including, but not limited to, the society of an individual minding), religion has no being. Religion, like consciousness, is not 'stuff' but function. (I deliberately paraphrase James, for the Jamesian attitude towards both religion and consciousness are careful development of/within Darwin's Ontology – and soon we turn to James and defend this statement.)

[I] *Wright, 2000, vol. 1, pg. 348*

Subjectivity transcends into being (some level of self aware thought is successfully abducted) through successful, ongoing religio; such transcendence can only occur coupled with existential risk, this is as true in metaphysics as it is in physics. And so it is that perhaps the greatest impediment to the successful emergence of a transcendent self is pride (as all the world religions have taught, but few of their adherents have practiced), which is an incapacity for kenosis (an inability of being filled/(fulfilled) by the vastness of not-I). Pride disallows the other to influence the *I*, whereas kenosis mitigates the (functional) solipsism of the self, keeping the abstracted identity alive by assisting its reciprocal transcendence into/within/through the world. Kenosis is (at least metaphorically if not by definition) the action of psychical incorporation/excorporation (the excorporation of some dysfunctional self that is part and parcel of the incorporation of the not-self). It is that humility which allows a student to learn, a master to listen, and both saints and scientists to wonder. Kenosis allows incorporation to refigure/feed the subjective self, by removing egoistic impediments to the minding of the world (that is, by getting some arbitrary set of self ideations 'out of the way'). But also, we are limited and cannot incorporate indefinitely at no cost to the self; Kenosis is necessary as that psychic excorporation which prefigures/grants the 'space' necessary for future incorporation, (for a renewal of the self that is feeding and caring, maintaining and extending, the *I*). It is a malfunctioning within the kenotic processes that leads us to substitute objective motivations with subjective. As kenotic dysfunction increases so does unreason; and at the extreme limit of this tendency, the subjective mind itself shatters and unreason rules.

Steep pride in a sauce of inherent confusion concerning the origin of the subjective self and the efficacy of will, season well with unrecognized presumption, mix in certain consequences of the incapacities of rationality, add a healthy dash of successful science (just enough to subtly dominate, but not overwhelm the other tastes) and you have the perfect soufflé of the fundamentalisms of metaphysical realism and reductionism. Thinkers capable of identifying such a thing tend to call it the 'objectivist fallacy', which is the simple presumption that what subjective eyes see when they look 'out' on the world is objective, 'factual' 'reality'. As with all fundamentalisms, it is predicated on the

idea that interpretation plays no part in knowing. (And again we are reminded of the way in which Wright differentiated the civilized from the barbarian … the later being those who claim that while all sorts of ideation are, or may be, mere interpretation, their own are decidedly 'real'). Apply this to the transformation of Darwin's science into Darwinism (which, pragmatically speaking, necessitates an utter rejection of Darwin's Ontology), and what we have is not science, but abuse thereof. (With absolute respect for Philip Kitcher's *Abusing Science* – and a whole host of similar studies, it is not just Creationism that abuses science; bullheaded 'Darwinism' can be just as absurd – witness John Fiske, Francis Galton, Ernst Haeckle, etcetera.)

Again it is worth remembering that *fundamentalism* is a refusal to recognize the necessity of interpretation; it is the believed (acted upon) postulation that an object of study (such as a collection of ancient manuscripts or some experienced phenomena) presents itself for our viewing pleasure as an (or worse, *the*) 'objective' truth, which carries with it/stems from the corollary that *Truth is What Is*, and we know it just by *Looking* (a position soundly rejected by pragmatic thinkers). Fundamentalists believe that *their* theories are not theories to be explored, interpreted, mined for their useful properties and used in furthering life (including but not limited to epistemic success in life), and appropriately discarded when they fail to do so. To the contrary, a fundamentalist thinks of their theories as finished actualities, as Truth Incarnate, as 'objective' fact.

Likewise, the 'Darwinism' that necessitates an empirically unsupportable metaphysical assertion of absolute reductionism is equally absurd – and also leads to conclusions that may oppose continued success in science, and contradict the *first philosophy*, the base level speculation, of Charles Darwin. I cannot put it more succinctly than Mary Midgley:

> In his own [Darwin's] mind, the general, positive, life-giving aspect of empiricism was dominant over the narrower, more exclusive atomizing tendency; this is his characteristic greatness. But among those who followed him, the usual effects of controversy worked to produce just the opposite orientation. The claim to be a 'Darwinist' has increasingly been equated with a determined atomizing position, an *a priori* refusal to believe that there are any real connections in the world.

> It is important to notice that this is not in itself a parsimonious view. It is not just negative. The belief that the world – or any special series of events within it – is actually made up of separate units having no real connection with one another is itself a positive belief, which needs its own supporting reasons as much as any other general belief does.[I]

Again, Darwin's Ontology presumes that origination is scale thick emergence, made possible but not determined by interaction within scale thick ecologies (cultures). Thus, a 'Dawkinsesque' Darwinism, where genetic level competition of 'replicators' becomes 'the true' scale of determination, bears no closer resemblance to Darwin than the oddly white Tree-of-life of Ernst Haeckle, the Cosmic Evolution of John Fiske, the Human Exceptionalism of Wallace, the Near-Hegelian Absolutism of Herbert Spencer, or the arrogant murderous presumption of Francis Galton. Moreover, this criticism stands even though Dawkins, like Wallace before him, has and does offer useful (true) ideas. This marks a contrast with the *practical* (however misguided) religiosity of Fiske or Spencer (or Rudolph Steiner, or Chopra, etcetera), and takes us back to Wright, functionality, and metaphysics.

Turning at last to his last essay, *German Darwinism*, Wright tells us that:

> The essential error of metaphysics, or "realism", is not merely in attributing to an abstraction a truly individual, thing-like existence, or making it a "realized abstraction," but in treating it as if it had such an existence – in other words, as if it had a meaning independently of the things which ought to determine the true limits and precision of its meaning. Thus, to apply the mechanical law of the conservation of force, which, as a scientific truth, has no meaning beyond the nature and conditions of material movements (whether these are within or outside an organism) – to apply this law analogically to all sorts of changes – to the "movements" of society, for example- is, in effect, metaphysics, and strips the law of all the merits of truth … We remember, as its most characteristic feature, this attempt in Mr. Spencer's "first Principles" to eke out his barren "system" of abstractions by wresting and corrupting the very type of unmetaphysical scientific truth to the vagueness of a principle of the "unknowable." The principle of the "conservation of force" does refer, indeed, to what thus appeared to be hopelessly unknowable to such a mind – namely, to the experimental and mathematical measures which determine its real meaning and proof. The climax of the speculation was capped when this principle was declared to be an

[I] *Midgley, 1991, pg. 202, Wisdom, Information and Wonder*

> undemonstrable but irresistible axiom – what we cannot help believing when we have once conceived it![I]

Here is the problem of "Darwinism": it is a rationalization and an institutionalization of subjective presumption; it is an individualized cultural habituation of a postulated semiotic set (representamen as a Peircian thirdness), presumed actual (semiotics as firstness, signage as process, as the event of relating). In other words, Darwinism is (or can be used as) a pretense of 'science' treated religiously. Fortunately, their peers have largely rejected those scientists who have ascribed to it; they have lost out largely due to the unrelentingly pragmatic demands of their discipline. E.g. the Cosmic Evolution of Fiske shares its ontological presumptions with the answers Ernst Haeckle offered for the riddle of life, and the towering, slender and perfectly symmetrical tree of life (crowned by the majesty of *white men thinking*) he put in place of Darwin's musty shrubbery. They both used Darwin's work, but lacked Darwin's kenosis. And while Haeckle still figures prominently in the history of both biology and philosophy of life (and justifiably so – though for reasons both good and bad) and while contemporary science can still draw from his work competent abductions (inspiration is not hemmed in by the validity of its source), his embryonic drawings do not figure in modern biology and his postulation that the various human 'races' evolved separately (and thus have utterly unique capabilities) has been soundly rejected (and is now openly ridiculed within the scientific community, whenever some fool makes some such blatantly narcissistic claim, e.g. James Watson).

Moreover, Haeckle's entire approach to biology as eschatology has likewise been dismissed. As with Fiske's 'scientific' theology, Haeckle's Darwinism has been rejected and remains a closed question in science (no Virginia, the world is not flat, and yes Virginia, we know this beyond any reasonable doubt). Science has moved on, but 'scientism' has not: the mythic ideation which Wright called German Darwinism varies in form from the blatantly religious (Spencer, Fiske, Chopra et al.) to the speculatively scientific and occasionally, when fortune shines, quite insightful (Wallace and Haeckle, Dawkins and etcetera). It offers visions that range from the truly inspirational to the utterly deranged, but far too often it carries a close resemblance to the so-called 'Social

[I] *Subsequent citations unless otherwise noted: Wright, 2000, vol. 1, pgs. 398-405*

Darwinism' that so grotesquely parodies Darwin's actual work and does remain a very real problem. But this is a failure of religion, not science.

In Galton's biology (and so-called Social Darwinism in general) we see little or nothing of Darwin's Ontology wherein the weaving together of living complexities into emergent wholeness is both the yardstick and the goal. Fiske on the other hand, could make a claim at the depiction, but not well and with little to show for having tried. I too read science fiction, but I do so to cast imaginatively, not to parse closely and well. Casting widely in time and space, crossing scales and dimensions in search of distant vantages, even dreaming the impossible, is more than just useful in the transcendence into being of novel self ideation, it is mythic postulation, awe of/within those moments of transcendence; it is Shangri La and Frankenstein come to life within/as the ground of our being to therein act as guru and/or foil, angel and/or devil, inspiration and/or threat exposed. But it isn't science, nor is it philosophy – however much of the two may be woven within. Unlike the hair raising tragedy of Galton's eugenics, Fiske's religious epic was clearly patterned upon the conception that evolution is integrative *a posteriori*. As such, he offers a tip of his hat to Darwin's Ontology. But what little validity there is in his effort lies in its subjectivity, in the utter subjectivity of its motivation. To pretend otherwise is to pretend the works of Mary Shelley or James Hilton only have value if they are 'factually' 'actual' and that to generate knowing requires no interpretation, no incorporation of subject with object and object with subject; it is to claim that being can exist without interaction, and that there are no such things as trolls to haunt the shaky bridgework of our being.

But even in a form benignly intended, there are problems galore inherent to the functioning of any such reading/binding into being, or religious epic – problems capable of metastasizing. Fiske's *Cosmic Evolution*, for example, is beautifully syncopated with an arching story line meant to inspire, rational arguments meant to persuade, and a vision of history meant to assuage; and yet it retains (and therefore remains) a ridiculously sexist, classist, and racist vision of 'progress'. And yet despite its serious difficulties, his cosmology still 'works' in that it is functional of generating future integration of subject and object. Though of course the same could be said for the mythic undertones of

Galton's eugenics. Ditto Haeckle's biology. Ditto Watson's 'geographic' distributions of 'intellectual capacity'. Ditto the notion that some giant stone-age whatsit watches over the souls of sleeping babes. Ditto Dawkins' memetics with their updated rendition of Wallace's control hypothesis (based, as it is, in an absolutist rendition of efficient causation ala Hobbes). All these ideations remain, which means they maintain the capacity of generating mythic response/resonance (and this clearly includes those 'sects' 'dedicated' to the Flying Spaghetti Monster).

As myths are stories that we tell ourselves to explain our experiences to ourselves, and as our rationality depends upon the ongoing incorporation of experience into/within/through an unfolding, enfolding, subjective self, which is derived from interpretation and known allegorically; two things become clear. First, that all claims to knowing, and especially all claims of self knowledge (the foundation of '*I-nicity*'), rest upon/differentiate within 'a' ontology that is itself, in some way or other, mythic; and second, our myths must function well in binding into being a coherent self, one that competently fits its actual experience, or else we, our neighbors, and indeed all creation will suffer.

The question then becomes: how do we rate the truth-value of such mythic postulations? And the answer to the question is, as always: with our lives.

The pretense that our individual (and individually cultural) mythos are 'objectively true' or that our knowing is a caused (yet somehow also willed) *reflection of* or a *transmission by* some *actual*, self-contained *thing*, that is *essence*, perfect in its (his/her) *wholeness(es)*, some *being* (not just 'god' but also 'reality') that is independent of and ontologically unaffected by the existence of any postulated knower, is itself a phenomena to consider. It may, in certain circumstances, endow our belief (propensity to action) with a great effectivity, generating success in some specific situation; but the greater the reliance upon such pretense, the tighter the blinders. This pertains equally to diestic triumphalism and epistemological reductionalism, and indeed, to any presumed factor of ultimate control.

And so, pragmatically, we retain our final allegiance from any and all outcomes of even our own closest deliberations, and judge others by the outcome of their ideational allegiances as encountered via the consequences of their actions (as best as we can ascertain – as we and they are co-joined/inter-becoming within a greater umwelt). We endeavor to never forget that within Darwin's Ontology we are part of one being; without participation within scale thick emergence, we cannot be. If we are sane, we seek greater relatedness, internally as individuality, and externally as wholenesses within greater wholeness. And we experience a moral obligation, a psychical crisis threatening the survival of a particular (fleeting) *self*, whenever we witness/participate in slaughter, wholesale rendering of living complexities, the grinding into nothingness of an ancient lineage of a once thriving emergence. The truly sensitive feel this obligation with every mouthful. (Murder is as universal as it is intimate and every individual organism, be it only a carrot, is its own unique heritage and just as irreplaceable as an entire clade; and yet food is good.) This obligation draws its authority from the same objective motivation that is the basis of all successful knowing: survival; ontologically speaking, this is a question of how to be. We will return to the interpretation of these and other ethical conundrums as demanded by Darwin's Ontology, but for now it is enough to recognize that the differences of between the ethics of Darwin's Ontology and that of the so-called Social Darwinism, is that the later succumbs to the anti-Darwinian notion that individuals exist in their own right while the former presumes that an individual existence is a social occasion. In this we see that rights (including the 'right' to exist) are drawn from the *umwelt* to which that individual belongs and from which that individual emerges, and that the loss of the other is the loss of the self.

Returning again to German Darwinism, Wright acknowledges that his depiction of this Darwinism as being 'German' is, at its best, badly metaphorical; rather, the range of this ideation is as co-extensive that of Darwin's biology (though not at all with Darwin's Ontology – as you may well have already surmised). Likewise, he does not name all such pseudo-Darwinian speculation 'German', but focuses on the whole idea of 'ism' as it relates to the (then) brand new 'Darwinism' – and specifically in its influence on science in Germany, where Darwin's patient study first came to inform a distinct 'ism'. The essay

is a contrasting review of two books on evolution: *The Doctrine of Descent and Darwinism*, by Oscar Schmidt (1875), and *Outline of the Evolution-Philosophy*, by M.E. Cazelles (1875). The later is basically a defense of Spencer's claim of having established the 'doctrine' of evolution prior to Darwin; Wright points out that the logic used to defend this claim is itself based in religious postulating. Meanwhile he describes the former as "essentially scientific" yet decidedly mixed in intent (motivationally corrupted) and therefore insupportably speculative. Both turn an actual study of concrete situations into a vague generality (an "ism"), but the two offer a radically different range of potentiality, and potential risk. Of the two, for Wright, the latter has more of both.

In my study of Chauncey Wright, I have found no reference to William Blake; as such, it is mere speculation on my part to presume it likely that Wright knew his work. But in reading Wright, and particularly so with *German Darwinism*, I was continually reminded of Blake's admonition: *To speak in generalities is to speak as an idiot*. It is no stretch to take this as an essential point of the essay (or even an essential element of Wright's ideation in general). To this point, Wright contrasts the propensity of German science to that of the Baconian tradition; and herein you can see precisely what he thought of such 'isms', as well as his oft-repeated criticism of Spencer. In the following passage, Wright first speaks of Spencer's claim to have offered a philosophical 'system' of evolution prior to Darwin (a claim which Wright contemptuously dismisses); he then proceeds to the problem of such systems in general, which takes us right back to the problem of 'isms'. Beginning with the 'honor' that Spencer claimed and Youmas defended:

> This honor is really awarded to the scientific proofs and arguments on the subject, to which many other naturalists besides these more eminent ones, and especially those of Germany, have materially added by their contributions of observation and criticism; so that the theory as it now stands, which the sketch by Professor Schmidt sets forth very lucidly, is really a scientific theory only, and bears no necessary relation to any "system" of philosophy. It is worth noticing here that this sketch, though treating the subject historically, and canvassing the merits of various contributions to it in this century and the last, in Germany, France, and England, no where mentions the name or Fame of Mr. Herbert Spencer.
>
> But in Germany, where the theory first got the name of Darwinism, it is much more of an "ism," or connects itself much more intimately with general

> philosophical views, than in England or America, except where in these countries it has got confounded with Mr. Spencer's speculations. It is to the significance of this fact – the character of Darwinism in Germany – that we wished especially in this review to call attention, as an interesting phenomenon in the history of modern speculation, determining the true place and the essential influence of Bacon and the Baconian philosophy. German systematic historians of philosophy were never able to make out where to place Bacon's so-called philosophy, or indeed to discover that he had a philosophy, or, what has appeared to their minds as the same thing, a "system". And indeed he had no system; but by marshaling the forces of criticism known to his time, and reinforced by his own keen invention, against all systems, past and prospective, he aimed at establishing for science a position of neutrality, and at he same time of independent respectability, between the two hostile schools of the Dogmatics and the Empiricists, though leaning towards the tenets of theology just so far as these had practical force and value. He thus secured the true status for the advancement of experimental science, or of experimental philosophy, as it came to be called. He had less need of doing, and deserves less credit for what is more commonly credited to him – namely, laying down the rules of scientific pursuit, which the progress of science has itself much more fully determined.

If you will kindly recall to mind our discussion of the differentiation of modern science from ancient – and note that he ends this particular section on a similar note. Also, Wright again makes a case for the kind of scientific neutrality that allows space for religious postulation as metaphoric speculation cognitively inherent within the sweeping abductions that gives focus and character to subsequent reasoning; and yet he refuses to be captive to it. And he credits the German Darwinists with competence at what, in our study, we would call functional religious postulation. It should be clear, however, that the functionality thereof is due primarily to some specific (and peculiar) combination of luck and adaptation. After all, as with all truly novel events (that is, *things*), ideation is subject to the pressures of selection, both natural and otherwise. But the main point above is the danger of being held captive by/to deliberately systematic thinking; Wright offers two long quotations from Bacon, both of which speak directly to this point. For my part, I would point to the most basic (though not often remembered outside Philosophy 101) of all metaphors given us by Francis Bacon: of the four idols that confound men's thinking, it is the Idols of the Theater that are the most insidious. Concerning this, Wright adds:

> Men of science in Germany have in general never considered themselves as in a respectable neutral position with reference to opposite systems of philosophy, and Professor Schmidt in his preface accordingly consents to the cry from both sides in philosophy, "avow your colors"; and proceeds in his introduction to

> define his stand-point sharply on several subject which cultivated English liberal thinkers would consider as irrelevant to the theme of his book – e.g., against "dualism" in vital phenomena, against miracles and other metaphysical positions.

Wright thus began this review by again clarifying issues of motivation along with the consequences of unconscious (unmindful) theological exposition (especially when it masquerades as science); he ended it in similar form:

> We doubt if Darwin cared to satisfy any but those who are willing to mark the boundary by a slight difference … between what is evident or probable on experimental grounds, and what as yet battles all approaches of experimental inquiry. It is a little incongruous that one so pre-eminently cautious and painstaking, so little speculative or metaphysical in the range of his researches, should be hailed as a chief by so large a constituency of what really amounts to a philosophical school; albeit they are the brightest minds of Germany, and pre-eminently men of science. Professor Schmidt's book is in form, however, and in effect, a thorough and learned scientific treatise, though he takes grounds, as the earlier French disciples of Newton did, on matters extraneous to his scientific subject.

Within this over-reach, Wright finds/generates, exploits/explicates the meaning of his title; the so-called German Darwinism over which he worries does not suffer so much from the consequences of unwarranted speculation in and of itself, (which is problematic in its own way yet still allows for opportunities for natural progress, for spandrels to form and even succeed – even if this is merely a result of its basic, that is base-level, irrationality). Rather, this kind of 'Darwinism' suffers from an arbitrary (unmindful) closing of speculation into discrete systems unconsciously abducted and ferociously defended. This closing is ironic enough as it lies hidden within a deep and focused study of systems integration – within and without biology (there is a historically consistent trend in Germany to step its science beyond the simplistic cataloging of 'reducible' phenomena). But the irony metastasizes in how bloody well it works. This manner of speculation can be powerfully successful, but its method of success is its weakness on two points: the willfulness of its ambition lessens the opportunity for fulfillment of greater being, and an organism focusing on one specific potential object of incorporation necessarily ignores others. And some of those others just might eat it.

This is not just metaphorical. And the risk itself proves the point as it crosses issues commonly compartmentalized and increases the potential of transcendence by increasing the potential of catastrophe. In evolution, the demands of self ideation must be balanced against the demands of physical sustenance, defense against predation, reproductive success, etcetera. Furthermore, the need for successful metaphysical bordering of individuality is not limited to the human experience, rather this risk is scale thick and universal to life (this said, one cannot expect 'self ideation' to mean exactly the same thing on vastly different scales, or even on the same scale but within different species, or even within the same species, but within different individuals, etcetera).

If you will indulge a personal anecdote, I once lived some years in a house with a large porch, high on a steep wooded hill across from a park. One morning in late spring while I sat on the porch drinking coffee and taking in the sun, I saw a squirrel high in an old oak tree. She clung gracefully to the furthest slenderest ends of the highest branches, swaying in the light breeze. Due to the steepness of the hill, my porch and the tree kind of hung over one other such that the squirrel and I shared a near perfect vantage of each other. We spent some time in what I then speculated was a mutual appreciation of the beauty of the moment, the warmth of the sun and that bright smell of new life budding. She was not really watching me, (perhaps she was simply familiar to the presence of people), though it was clear that she was as aware of my presence as I was of hers. She did not appear to be doing anything except enjoying herself, by herself, for herself. She was clearly not acting in any manner to willfully extend or maintain her physiological being; so what was she doing that morning out in the trees? The same thing I was: extending and maintaining her sense of self by enjoying her life, consciously relishing in the sensation of subjective being. But all the while, there flew over-head a falcon. The rest of this story is already obvious and I won't bore you with the details; suffice to say, it ended quite badly for the squirrel. Her hero's journey cost her, her life.

Investing in conceptual self ideation is costly to an organism. In addition to running up the risks of misplaced focus (as it did to my friendly neighborhood squirrel), it uses up resources that an organism might not well afford to loose. Moreover, it 'locks' an

organism into a ‘perspective’ (or a particular rendering of a Korzybski mapping), the usefulness of which may not carry forward in a changing world, may not work well when transferred from one immediate situation to another, and is often simply dysfunctional from the get go, in one aspect or another. And this compounds the problem as often some aspect of ideation is simply correlative and ‘carried along in twain’, and so lies dormant for much of the duration of a descent only to become critically fatal at some eventual circumstance. But the biggest problem inherent to consciousness is that of subjective motivation itself – of the completely natural (and normatively healthy) desire of a self to be, to ‘mind’ its being, to locate and incorporate those elements, psychical as well as physical, which further its being – that is, maintain the being of that momentary self.

Notice the way in which James took this principle as the basis for his epistemology; from *What Pragmatism Means*, we find an exact rendering of Darwin’s Ontology. The following sentences are taken in order from, but condensed from the original:

> The process is always the same. The individual has a stock of old opinions already. The individual meets a new experience that puts some of these old opinions to a strain. Somebody contradicts them. In a reflective moment, the individual discovers that they contradict each other. The individual hears of facts with which they are incompatible. Desires arise in the individual which the old opinions fail to satisfy. The result is inward trouble, to which the individual's mind till then had been a stranger. The individual seeks to escape from this inward trouble by modifying the old opinions.
>
> The individual saves as many of the old opinions as is possible (for in this matter we are all extreme conservatives). Old opinions resist change very variously. The individual tries to change this and then that. Finally, some new opinion comes up which the individual can graft upon the ancient stock of old opinions with a minimum of disturbance to the others.
>
> The new opinion mediates between the stock and the new experience. The new opinion runs the stock and the new experience into one another most felicitously and expediently. The new opinion is then adapted as the true one. The new opinion preserves the older stock of truths with a minimum of modification, stretching them just enough to make them admit the novelty, but conceiving that in ways as familiar as the case leaves possible. An outreé explanation, violating all our preconceptions, would never pass for a true account of a novelty. The most violent revolutions in an individual's beliefs leave most of his old order standing. New truth is always a go-between, a smoother-over of transitions.

> The point I now urge you to observe particularly is the part played by the older truths … their influence is absolutely controlling. Loyalty to them is the first principle; for by far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconceptions is to ignore them altogether, or to abuse those who bear witness for them.[1]

Just as how an organism must locate its food, and not be fooled into ingesting substance which either poisons or simply fails to nourish it, an organic consciousness is also driven by it's *a priori* need to find that which nourishes what is already there; and these are experiences capable of being incorporated into, and thereby of 'feeding', that particular mind, but which alter the consciousness as little as possible so as to extend *that particular self* in time. From their initial entrance into our scale of being as a diploid cell, organisms experience (interact with) the world around them, seeking reciprocity within being (that of the world to take in, and that the world takes in what they excorporate so as not to poison the umwelt through/in which they be), even as they selfishly locate and take what they need. They 'mind' the world in order to extend themselves in time and space, in order to grow well, as well as to grow old. As the structure of their being 'settles' (or transcends) into *a particular* being (which must have happened and continue to happen, carrying forth the heritage of countless preceding generations by enacting novel origination, or there would be no being to discuss), they limit their options as to what is capable of 'feeding' them, as well as how it is they are able go about getting it.

The problem with 'German Darwinism' is not that it seeks to 'feed' itself with evidence of its 'truth' (rightness in the world); this is quite normal, quite necessary. As Wright says, 'isms' generally work quite well in this regard; German Darwinism appears to work especially well. But a man who gorges himself on this rich fare is afterwards commonly bloated, unable to move even to locate a necessary; the WC looks so very far away and soon the shit begins to pile. I guess you could say that despite the stature such men claim, this is a rather less than a highbrow way to succumb to natural selection. And despite whatever grandeur such reasoning manages to gird and gild to itself, I personally reckon it fatal just the same, and rather apoetic next to fire or ice.

[1] *James, 2003, pgs. 26-8, condensed by and online at Emory University, Georgia*

A better example of the costs of self ideation, and a more exact critique of Wright's German Darwinism than my squirrel could ever hope to offer, comes to us from the American Creationism 'debate'. Enter, one G. Charles Jackson, supposed Dr. of Science Education. Jackson argues certain knowledge that all existence was 'created' by 'god' in exactly 6 days, exactly, as of this writing, 6013 years and some months ago, (starting up, I believe, on the 23rd of October). In his 'scientific' work with the Creation Research Society, he has been known to begin his presentation in defense of Biblical Fundamentalism by quoting Richard Feynman "Science is a long history of learning how not to fool ourselves". And yes, after making a complete fool of himself for however long he is allowed his schtick, he uses this same statement to summarize. It is worthwhile to note that he ignores the next sentence of this well-known quote, which is: "The first principle is that you must not fool yourself, and you are the easiest person to fool."

There is nothing new here, just typical creationist absconding of otherwise perfectly competent truths (taking it entirely out of context, of course, and by so doing turning it into an absurdity), but it is also telling of how this particular mindset works and something to recall as we move forward. It is his reasoning around other quotations that really shows this two-bit creationist to be a true 'Darwinist' of the 'German' variety. He quotes PaleoAnthropologist Milford H. Wolpoff, as saying:

> I believe a framework is not something that can be eliminated in order to provide 'objectivity'. In my view, 'objectivity' does not exist in science. Even in the act of gathering data, decisions about what data to record and what to ignore reflect the framework of the scientist.[I]

This would seem pretty straight forward, but notice how Jackson quotes John Beatty:

> "If outcomes are chance then maybe the laws are too." "The Laws of evolution could have turned out differently." "Once they say Laws evolved we'll realize those aren't the Laws." "The Laws of Nature thought comes from a time when science and religion were closer." "We might have moved beyond the Laws of Nature."

[I] *All citations of Jackson: "Creationism vs. Evolution Debate", 2009*

I do not know why Jackson would cite these later statements in this odd manner, with multiple quotation marks but no indication of the relationship between the various sentences; – perhaps these sentences were spoken in an order utterly unconnected to Jackson's presentation, this would certainly fit with his established *modus operandi*, as well as give a reason for the disjointed method of presentation. This will remain conjecture as I have no interest in tracking down this particular weasel (deliberately obfuscated half-truth), nor is it called for by our current study. However, even if I were to do so, and did so with such acumen that the question was to any reasonable mind closed, my opinion of Jackson's motivation *must* remain speculative. I have not the capacity to survey the man's inner algebra, nor can I compare/contrast it within the mettle and measure of the umwelt in which he composes his self-ideation. But though I cannot claim myself wise as to the ways of his nature, I can, indeed I must, evaluate for myself whether I will validate his action in the world (in the gestalt we both inhabit) with my response, or if I must oppose it. In the first situation, I become effectively with him part of a greater world (being) – however by doing so, my own being is endangered if his 'facts' are unreal. In the second, greater being (and hence my own being) is necessarily compromised, but it is a compromise that may very well save my life.

I must judge, and I must judge well. If I exclude certain propositions from consideration willfully and inappropriately, I risk starving myself. But if I embrace within ('*grok*') propositions that dysfunction within the particulars that compose me, I poison myself. If I am not to be led willingly to my grave as a result of the actions (thoughts, beliefs) of others, then I must ascertain the effect of their being in the world (that is also the effect of their being in *my* world, and vise versa). To the extent that we share our world, to the extent that we are part of each other, it is not possible for me to ignore their shit. And so, to the extent that you and I interact with our good Jackson (or, act in the same 'world' as he), we are required by our own pragmatic *a priori* to evaluate his words and deeds, and in fact, the entirety of his epistemic situation (at least so far as it interacts with our own). To the extent that we and it do not, we are obligated to *not* pass judgment: the sharp edge between when and when not to judge is in some ways the greatest of the many seeming

conundrums quietly side stepped by pragmatic methodology. (After all, when it does *not* make a difference …)

If judgment is relative, then it is a question of structured relationships, which are quantifiable. We can *count* the effects of drug use/prohibition, gay marriage, heterosexual divorce, the outlawing of divorce, domestic violence, sexual education, abortion, forced unwanted births, etcetera, etcetera and etcetera. With this in mind, it seems many of our ethical problems stem more from our collective unwillingness to add up the numbers than we allow ourselves to realize. Both individually and collectively, the common response to any postulation of pragmatic ethics has been to crucify, deify, or both; this is exactly what James described as typical when the sums turn out different than presumption indicated – even when these presumptions run counter to our pragmatic a priori, even when our presumptions are killing us.

Pragmatic morality is a solution to the dysfunctions of idealism that disallow us from both taking and granting full responsibility for both collective, and collectively individual, being. There will hopefully always be strong opinions as to the possible interpretations of whatever numbers some situation reveals; but we do occasionally reach those moments of acceptance wherein we (collectively and/or individually) see that effects can be counted, *and we crunch the numbers honestly* and actually see what comes of our action (belief). We can only make ethical progress when incorrect opinions are (provisionally yet also flatly) dismissed as incorrect, that is, hypothetically closed as a dysfunctional minding. Future experience will surely force various reconsiderations, but this is no reason not to carefully evaluate the present.

The pragmatic method of evaluation is to simply accept a given hypothesis as possible, and evaluate it via its *a posteriori* consequence as we would any other. If a hypothesis can be used in furthering the overall complex of our hypothesizing (if truth 'happens' to it, if its thirdness can generate a firstness capable of surviving its own secondness), it is then (tentatively) accepted. In the above, we would say that Jackson's hypothesis could be true, even if he does grossly distort WolPoff and Beatty's views. (What he does is

called quote mining; but if you recall from many pages ago, this is exactly what Wright saw Mivart doing to Darwin). But even if we accept Jackson's presentation, and the arcing concept he presents as a valid representation of Wolpoff and Beatty's views (remember, this is only a hypothesis, the accuracy of which is, for the mere purpose of *postulating*, irrelevant), it can still only support *our* arcing concept; specifically we acknowledge the limitations of subjectivity, likewise we embrace the corollary that these 'Laws' of ours are actually transient understandings, human constructs incapable of the warranting concrete, 'objective' ontological being – and undeserving of our submission. These views support and work within Darwin's Ontology. This is exactly the point. For Jackson to think that the quotes he mines support his a-scientific religiosity, is absurd. This point alone is enough for us to reject his connected argumentation; but in contrasting the scope of his claims and their systematic lack of corroboration, we see the degree to which acceptance of his argumentation would be poison to our being. The same critique applies to basically all the mythology (both the base-level abduction as well as the public spectacle) of contemporary creationism.

You or I (along with Madden, Chambliss, Wiener and countless others) might interpret those rather innocuous statements from Wolpoff and Beatty quoted above as evidence of some understanding of the complexities of subjectivity, the difficulties inherent in all (necessarily subjective) grasping of objects (especially when done by those laying claim to unbiased consideration of *all pertaining* evidence), and a warning against a premature 'closing' of inquiry (via some metaphysical warrant whatever its claimed source – including those based upon/within some functionally rational construction). And it should long be clear that Wright would heartily agree with all this, and then launch into detailed argumentation concerning the origin of subjectivity and the kenotic demands of the objective motivation necessary for accomplishment within well functioning (true) knowing. Likewise, by explicating what we can surmise from Darwin's Science as well as his Ontology (and applying it even upon the mindset of folks who may not have knowingly adhered with/there-in), we can go further to interpret Feynman's comment as recognition of the evolutionary impact of foolish behavior and the value science can

bring to issues of survival, and likewise, what Wolpoff and Beatty said as evidence of some understanding of the subject/object complex that is the very soul of organic being.

None of this occurs to our good Jackson of course, rather, he already *knows* the source of his unique subjectivity; he *knows*, 'objectively', his place within the structure of the world, and so *his* perspective comes unfiltered. Entire clades of questions are closed to him with much of the thanks owing to that odd self-ideation of having been 'made in the image of God' – in this case, a white male ('Murikn) god who evidently has a liking for loud Hawaiian shirts. So, he takes the above quotation as evidence that the *only* difference between evolutionary science and fundamentalist religion is one of *philosophy* (as in *my* philosophy is bigger than *your* philosophy), but not philosophy as you or I might know it, that is, as an honest and *objectively motivated* study pertaining to potential success and/or failure within the various ways and means of subjective transcendence into self-aware being (of how we come to know that we are and what that means, just how is it we go about it and how we might do it better).

All living beings 'map' the world around them by 'minding' their situation. Testing the veracity (usefulness) of some specific map by empirically checking to see if what your map depicts actually exists, is basic science; testing it for readability, coherency, and consistency in signage and scale, is basic philosophy. Though both are tricky, both are necessary for any thinking being to thrive.

By contrast, to Jackson and his ilk, 'philosophy' is really just 'framing' but still somehow a task master far, far stricter than any set forth by such as George Lakoff or Thomas Kuhn (and likewise more insidious than Dawkins could will his memes to be). What Jackson calls *philosophy* seems to resemble what might be called *religion*; and as such, *his* 'philosophy' sets him free (free to vent his will *on* the world and ignore his shit *in* the world, free to take what he will and ignore both context and consequence, free to behave as if his being is not connected/dependent within/upon worldly existence and the lives of uncountable millions of other beings). The argumentation of contemporary creationism makes it very clear that in *that* world, 'science' is really just some kind of branding; to

step from a religious postulation to a scientific one is as easy as swapping logo affiliation; all it takes to adapt ideation is to change its packaging. Yet somehow, all us evil evolutionists and self-deluded scientists, every kind of 'Darwinist' along with all sorts of secular humanists, have become enslaved by/to their ideation, and yet … but yet, the creationist's 'Truth' is 'Real', his semiotic set, 'Objective' – NO INTERPRETATION REQUIRED is stamped bright and bold on nearly everything that comes out of the 'scientific' institutes he haunts. They got the facts, just the facts and all the facts, thank you very much ma'am. This way of thinking is powerfully subjectively selfish, full-fledged narcissism. This is exactly what Wright called barbarian; however, barbarism sometimes works – at least up to a point – but only as fortune shines and the gods will.

And this is exactly what Wright argues is wrong with Oskar Schmidt's 'Darwinism', that it follows exactly in vogue with the kind of postulation that would argue: "The climax of the speculation was capped when this principle was declared to be an undemonstrable but irresistible axiom – what we cannot help believing when we have once conceived it!" (This is merely an attempt to sharpen the old saw: *our reason fails us so we must believe*). The notion that self-containment of (that is, isolative rigidity within), a 'singular' belief system is evidence of its rightness, is a religious postulation that runs contrary to Darwin's Ontology, and contrary to the very idea of science, (*a posteriori*, experiential testing (falsification/verification) of hypotheses tentatively held, coupled with a humble acceptance of our own fallibility). When science is done in accordance with German Darwinism, it becomes less competent at ascertaining the validity of an idea. It functions as belief upon/through which experiences subsequent to its attainment, are themselves attained, understood or willfully grasped; but this acting, in and of itself, is not beyond the pale, rather it is how knowing is done. The problem is that, as with many a successful belief system, German Darwinism is a notion whose grasp is too tight; it does not allow for the 'objectivity' of kenosis; again – and as with Mr. Jackson, it is a failure of religion.

Such systems (whether we call them frames, paradigms, or *philosophies*) are too self-contained – and willfully so. Their practitioners are too focused on the extension and maintenance of their ideation, the 'completion' of *their* arcing self, which is the self of

that moment, or rather, that which an individual thinker *thinks* herself to be, moment by moment, by moment – most often without awareness that they *are* that very ongoing change (physical and psychical incorporation and excorporation). Their focus on intentional, volitional, action (including the origination and establishment of potentialities of action (belief), as well as unctuous leaps of faith and bad readings of the will to believe) impedes the very subjective/objective reciprocity which is what actually *is*, and is thereby that upon which we ground the structures of knowing we call our 'selves'.

Epistemologically speaking, they notice only the need they see, only what they think they need to furnish their selves, only what they intend for the self they intend they be. Such is the tenor of so-called creation science, such is the structure of Ernst Haeckle's tree of life, and likewise, such is the ontology of much of the so-called New Age mysticism (R. Steiner, Chopra, et al. back to its differentiation through/within, Swedenborgian theology, Henry James Sr.[37] and the Cosmic Evolution of our friend John Fiske). Moreover, such is the embodiment of the social epistemology of/by/within the memetic replication hypothesis postulated by the lumbering robot known as Dawkins. (To be fair, his failure is not related to science, but philosophy, seen in his dismissal of any critique of his symbology *as* symbology, a failing common to scientists of the German Darwinist variety). I cannot imagine a young-earth creationist being pleased to be lumped together with such a crowd, but this is exactly, bless his soul, where G. Charlie Jackson fits.[38]

And as for the validity of tagging creationism with the dreaded colors of (the absurdly named) moral relativism, I point you back those words which are our record of Wright's first reaction to Darwin's biology in his letter to Mrs. Lesley, that he would rather admit an infinite accord of miracles than cleave to merely a few (and thereby render reason untenable). Wright faced this dilemma, and found/generated a way to cleave to reason while allowing for continuous creation (that infinite number of miracles that is the self perpetuation of being through ever unpredictable moments of becoming). In this way, and through his study of Darwin's biology, Wright re-invigorated the Enlightenment movement by applying to issues of philosophy the language of origin and novelty with which Darwin developed his ideation. And so, it is exactly through the denial of Darwin's

science that contemporary unreason operates; for cleaving to but a few miracles is exactly what unreasonable men do.

However, it important to remember that unreason is not always as blatant as a proper Hawaiian shirt, e.g. Alvin Plantinga's absurd re-working of the argument from reason. Neatly summarized in his essay *Evolution vs. Naturalism*,[I] this is a classic 'ontological' argument: an argument for the existence of god, based not on experience, testing and the possibility of falsification, but on 'pure' reason. It is an old argument that is pragmatically identical to Wallace's human exceptionalism argument – that subjectivity (the ability of a minding organism to know itself) cannot produce reason (the vaunted heights of human metaphysical capacity) as only like can produce like, only a reasoning creator can program a reasoning creation. It is a rejection, not just of biology but also of all science, and indeed all knowing. It claims that knowing subjectivity can only appear magically and hence must have a magical source, and that these processes are not natural, but only function when instigated by some supernatural agency. This kind of reasoning has always been absurd, all the more so 150 years after the publication of *Origin*.

Obviously, Dawkins' refrain that philosophy has not learned from Darwin is sometimes correct; it would certainly appear so with Plantinga. (Though we all remember that 'philosophy' is just an abstraction and doesn't actually 'say' anything; better to say, *some philosophers* have learned nothing from Darwin.) However, even here I would add a caveat: it looks to me as though Plantinga did learn something from Darwin's Ontology; to hide his egoism in a seeming reason (an ancient fact of the inherent instability of subjectivity), he hides his absolutism in a seeming pluralism. This is very different from the 'objectivity' claimed, or at least sought, equally by ancient philosophers and medieval scholastics, as well as the more recent prophets of mechanism, from Newton to Dawkins. Yet this is a minor quibble between rival barbarisms. Force me to choose between Dawkins' absurdly Modern irrationalities and Plantinga's absurdly Ancient/Medieval ones done over in Modern drag, and I will demure. It is a false option.

[I] *Plantinga, 2008*

But the contrast between Plantinga and Dawkins is an exact contemporary comparison to the issues concerned with Wright's 'German Darwinism'. Plantinga offers us an updated version of classic subjectively motivated universalism, which is ever more obviously, now more than ever before, inadequate to critique the readability of mental mappings, and thereby unable to function as philosophy. He seems to want to do philosophy without science, a project doomed to produce colorfully absurd cognitions. By contrast, Dawkins offers us a set of signifiers that pertain in one domain, on one scale of being – and he has done the science (and put forth evidence capable of rebuttal!), but his success therein seems to have emboldened him to project that one scale as *the* scale, and its signifiers *the* essential dictionary for all scales. Herein he postulates his epistemology – all the while denying that he is engaging in philosophy. Furthermore, he seems to be accomplishing science without ever allowing for a critique of his philosophy (of his map *as a map*) – a common enough project, but one that is also (though not equally) likely to produce dangerous absurdities. This is particularly problematic when the metaphysical speculation grounding the science is presumed absolute and applied willy-nilly across the spectrum of experience, rather than focused on and limited to the situation wherein the science (upon/through/in which it is grounded) works.

This said, I must hasten to add that Dawkins' Science is clearly questionable – and hence actual science, whereas Plantinga's Philosophy appears to aim not at improving our questioning by improving the signage within the drawing out of our questions, but at ending the very process of questioning. He seems intent on offering answers that are somehow beyond any further questions we, or our continually evolving situation, may demand. He clearly postulates his signage as absolute, as if it were beyond question, a claim that can only make for some truly worthless philosophy. With this in mind, I would restate the false option above so as to generate a real option. Forced to choose between Dawkins' science and Plantinga's philosophy, the philosopher in me sides with the science. Right or wrong, I can *do something* with it, a possibility Plantinga does not offer.

The emphasis within biology on genetic factors is well supported by its scientific success, so much so that many issues therein may be (tentatively – but actually) treated as closed;

there seems to be much to learn from Dawkins' models of molecular genetics and little (read, *nothing*) to learn from denying it. (Moreover, his epic *The Greatest Show on Earth* belongs on everyone's shelf.) I do not seek to overturn Dawkins' contributions to evolutionary biology; nor am I competent to attempt it. Yet also, it is insane to simply ignore Dawkins in our study of Darwin. From the best of my admittedly limited ability to ascertain the situation, I see no 'profit' and great 'cost' to any such effort. But this does not support extending his metaphors of molecular genetics throughout all metaphysics. Rather, my criticism of Dawkins is focused on the consequences of an apparent lack of coherence in the signage of certain relevant portions of his Korzybski map – particularly as applied to his explicitly stated epistemological (and implied ontological) theory. This critique calls on us to re-interpret his science so as to place it well within a scale thick process; but also it demands that we flatly reject his metaphysics. Philosophically speaking, Dawkins has ignored Darwin. That is, he has ignored Darwin's Ontology.

Though Dawkins' considerable accomplishment (his decades of work in furthering the public understanding of science as well as the challenge he poses to Moribund Religion) is eminently respectable, his postulation of 'memes' is poison to the study of *how we know*, and easily as toxic as any of Steve Fuller's shit. Cultures are not robots, knowing is not accomplished by copying, and pedagogy is not a matter of transmission and repetition. Again and again the damage of these dysfunctional notions have been woven throughout and within human history and psychology. They are in opposition to life as understood by and within Darwin's Ontology wherein the scale thick complexes we call living beings incorporate their experience, and thereby enact it bodily. This is not blind replication of atomic bits of metaphysical candy (or, memetic 'goodness'); it is organic minding, scale thick and ontologically twined.

Dawkins' extrapolations into epistemology and sociology suffer greatly from his obvious disinterest in developing a critique of his own metaphysics, or even in acknowledging any who dare offer one. In reading his classic confrontations with Midgley, I am left to conclude that he remains unaware that such a barely tame beastie could even exist within

his cognitions. With this on hand and his scientific prowess on the other, we see Dawkins as powerfully barbarian, and a true German Darwinist.

This said, there is another aspect that cannot be fairly ignored in even our two-bit dissection of the ontology of Richard Dawkins. Rather than using a vulgar Darwinism, a thinly disguised 'relativism', in which to justify a voracious politics, Dawkins has long stated that he would choose *not* to live in a so-called Darwinian world (though this option has never been available), and that this choosing is the ground of both his career in education and his liberal politics. Furthermore, his ferocious advocacy of what we might call reality based knowing (though others might absurdly dismiss as an epistemology of *realontologik*) is both eminently respectable in its own right, and also indicative of a deep and concerned understanding of the actualities of the Malthusian scythe.

While Dawkins is clearly barbarian (as Wright defined the term), and also a 'German Darwinist' (at least in some aspects), he is also (both metaphorically and actually) a classic (honestly traditionalist) liberal British Peer in the tradition of Darwin. Such a character is broadly inclusive in his outlook, conservative in his claims, parsimonious in his principles, as tolerant as he is demanding, and proud of his keen eye for the betterment of all mankind (if only as seen by his own eyes), and all the while he remains utterly unwilling to put up with any sort of perceived fatuity (and with the clear exception of the unrecognized myopia, these are all quite respectable traits).

While the actualities of this wafer thin depiction (of the tradition of Liberal Peers) will thankfully remain in question, there is no doubt as to the contrast between Dawkins and Plantinga. The claim that the unreliability of gathered data necessitates an arbitrary postulation of theism as well as a summary demarcation of knowing into rival camps, *equally immune to serious inquiry*, is only a tonier version of Jackson's 'philosophy'. Despite having been all gussied up for school, it carries with it the same stench that clings to all who claim to know that *they* know so wisely and well, that their knowing is fact, that their semiotic set is 'objective', that their 'science' needs no interpretation, their philosophy is 'complete' and their religion singularly 'True'. It is as if they and they

alone are able to open or close any imaginable question by the simplest act of fiat. Dawkins may be dreadfully wrong in his epistemology, but he offers theories we can test. Plantinga claims no one really knows anything so nothing can be tested, then he tells us what we 'ought' to know. It goes without saying that Plantinga's pudding has no proof.

This is in remarkable contrast with Dawkins, who has the honor to acknowledge: *I don't know* even as he adds *and you don't either*. The statement that 'I cannot know for certain but I think God is very improbable, and I live my life on the assumption that he is not there' is an honest statement. This is not 'relativism', but a conclusion (a limited judgment) based on a studied inquiry and honest recognition of the limitations of an individual mind. No absurdity here. And if we follow long established tradition and interpret 'god' as metaphorical for absolute being, we can neatly read this statement as a concise summary of both the contemporary embodiment of the scientific ethics of the Enlightenment project within the ethos of Darwin's Ontology. As such, Dawkins remains quite relative (germane to our current situation). But more to the point (and from my admittedly quite limited perspective) the man appears very well engaged in his situation, enraptured by the binding into being of the umwelt that is collectively each of us individually; in his own way, Richard Dawkins is far more successful in *doing* religion than either Jackson or Plantinga could ever hope to be.

For this binding is in stark opposition to what Plantinga does, which is to claim the absolute while pretending a commitment to pluralism. These days, such men tend to strategize around very public demands for 'equality' within some mythical 'market-place of ideas', a demand grounded, not on any recognizable form of evidence for the claims they make, but merely upon evidence of their own demand. It goes without saying that this is, in and of itself, a calling card of contemporary pseudo-relativism. Both Jackson and Plantinga proudly proclaim their 'epistemic relativism', and indeed, place it at the center of their argumentation. But knowledge is indelible to morality; as such they are truly 'moral relativists' in every worst sense of that absurdly puerile phrase. And this perversion of *to relate* is exactly where egoism and absolutism hides in an era wherein well-adapted reason is founded within/upon/through Darwin's Ontology.

Darwin's Ontology postulates that complex metaphysical structures emerge through and within quality relatedness within and throughout the immediate situation (the *umwelt*, *phaneron*, or *ecosystem* (call it what you will) – extended so far as relevance pertains) of an individual (specifiable) self-conscious minding being. And so yes, life and morality are both relative. As with our being, so to our knowing; all claims of knowledge, including those which falsely pretend some metaphysical warrant, are individually and situationally related, connected, and at once inter- intra- and trans- active. Life minds its situation; psychology is relational algebra within/amongst complex structures capable of emergent behavior. Morality is relational grounding of/within ever emerging being. Relative is a good thing.

But the word has been hijacked, first by the passing breed of classic modernists such as Bertrand Russell (who famously blamed William James for the 20th Century Holocausts), and then alternatively by apathetic pseudo-nihilists who have claimed it *in apologia* for their egoism, and at other times by the mundane for whom it is a mantra of normalcy. And so it is that in far too many quarters today *it is relative* has come to signify *no interpretation required*. And suddenly we are faced with yet another challenge; How do we speak of Darwin's Ontology within a culture wherein the shorthand acknowledgement of relatedness has come to signify *so what*? Which is a statement more fully signified by: *I don't have to care, so I am not going to care*. But if Darwin's Ontology has anything to teach us (which of course it does), it is that we blithe-fully misinterpret at our peril. This inversion, this perversion of the ethos of our times takes us to our next chapter.

While Chauncey Wright died long before such came to pass, William James cast his career square within the midst of this entire conversation, and often was cast in positions opposite anything he ever argued. James is persistently accused of the same nihilism he spent his life combating, and of abandoning hope along with Truth (not to mention justice and the 'Murikan way); and yet it was James, more than any other individual thinker of his time, who gave us the principle metaphors, the common tongue, the zeitgeist of today's epistemic/mythic parlance. And despite being reviled in his life as an amoral

kook, Peirce has now become well credited with having developed a semiotic set competent to deal with the reciprocal complexities of Darwinian relativity.

As we have and will again see, much of the misreading of James and Peirce is derived from dysfunctional interpretations of the 'Darwinism' therein, confusion between this and more 'German' forms of Darwinism (not just contemporary Spencerisms), as well as an inability to grasp Darwin's Ontology. Likewise, it is from within bad readings of Darwin that many of the problems now faced by and within contemporary society both stem and hide; and herein the epistemic challenges of our time to go unanswered. This has consequences that stretch far beyond the realms of academia, consequences especially prominent amidst the many confluences of religion with politics, economics, education, cultural liberality, living traditions, and basically all of human life.

And so we continue our focus on embodied metaphysics, and hold to our claims that Darwin's Ontology depicts living being as heritable sentiency reciprocally bound, and that this recognizable but indefinable *religio*, this *umwelt* within and around us, *is* us – another scale of us, and that we truly are one with all creation. Our best method of knowing and being *who we are* is then, again, a lesson from Emerson: "Keep the habit of the observer, and, fast as you can, break off your association with your personality and identify yourself with the Universe."[I] And we read this by interpreting it as representing the objective motivation Wright saw as a vital (formatively transcendental) center of science. With this in hand and the interests of our unique experiences on the other, we turn to the many broad conceptions of James and Peirce, as it was these two close companions of Chauncey Wright who, taking to heart their friend's life work, extended, explored and established, this niche of shared being.

Throughout this exegesis on the lifework of Chauncey Wright, we have not cleaved to his time or thought but have looked back and forth, ahead and behind, for differing perspectives on the lay of land; always seeking to terraform our Korzybski mapping through successful acts of ecopoesis – through the generative reciprocity of *I* and *Not-I*.

[I] *Emerson, 1965, vol. 5, pg. 391*

As we have followed his lead without clinging to his heals, neither shall we leave him now. Better to lift a glass in toast to him, honor his moment on stage, and offer a place in both memory and imagination to this uncompromising partisan of selfless wonder, this founder of Pragmatism and student of Darwin's Ontology: Chauncey Wright. He died young but the echo of his having been still reverberates, setting the chording of who we now are. Remember him well for he is now a part of you. He dwells within us, and to him we shall return.

Coda …

In turning this chapter, we also turn to a new methodology. Whereas Chauncey Wright's fame extended only amongst his circles of friendship and he produced but few significant essays, James was to become an international academic celebrity. His story is well known, his influence extensive – however badly his ways have been and still are tweaked beyond anything he might recognize. And unlike Wright, James wrote. Alot. He wrote psychology and philosophy and pedagogy and popular commentary and letters and journals and reviews. We haven't the option, in this humble essay, to survey even a tenth of his output. Likewise, we haven't the option to compare and contrast our thesis with the well-respected authorities in the field; there are, again, far too many for us to pay such proper deference. This situation will only compound itself as we move on to Peirce, who both wrote far more than James and, at least recently, has had more written about him. And despite the massive animus he received both socially and professionally, Peirce developed his thought on paper for nearly 60 years; the work published in his life rivals anyone, and the quality of his vast quantity of unpublished manuscripts dwarfs nearly everyone including the only man in the history of ideas he considered his rival: Aristotle. Considering the scope of the terrain before us now is a good time to establish a new habit.

In opening the ethos of classical pragmatism, with its immediacy quickened as it was within Wright's synthesis of Darwin's science with Emerson's mystic agnosticism, our approach was softer, allowing the participants time and space to cozy up at their own pace, letting the rhythms synchronize 'naturally'. Now we change pace, and survey some principle arguments of two of Wright's closest friends – first James then Peirce, so as to demonstrate that these arguments are attenuated to, have emerged from, and are explorations of Darwin's Ontology. In so doing, we explore this world wherein Darwin's Ontology is at once the foundation of our knowing and of our being, this world in which we live out our chances that the former will contribute to the sustenance of the later – and whereupon we may uncover these odds, and the means by which we might better them.

Yet still, introductions are in order. It may well be that you, good reader, will already know, perhaps far better than I, of the great friendships that existed amongst the foundational circle of Pragmatism: betwixt Charles Peirce and William James, but also Chauncey Wright, Oliver Wendell Holmes jr., Nicholas Green, John Fiske, and others – practically all of whom made their mark on the history of ideas. Every one of which came of age on the eve of the Civil War, with the reading of Darwin's *Origin*. The winter of 1859/60 marked transitions; 17 year-old James switched from studying fine art and painting to biochemistry and neural anatomy. 19 year-old Peirce concluded his MA in Mathematics as well as his personal obsession with Kant, entered the Coast Guard Survey as a junior researcher, and joined James in pursuing a BA in chemistry with the decision to make his career in science. And of course, 29 year-old Wright turned his attention to *placing* Darwin's new idea *in its proper relations to philosophical inquiries in general*.

And so we take up our tale, but with momentary exceptions, we leave much, much more to the side. This is not to imply a disregard for details, but to respect both our own limitations and also the work already accomplished. Moreover, we will in no wise encapsulate the thinking of these men; again, others have done this better than I. In reference to Peirce, the singular and excellent biography is Joseph Brent's *Charles Saunders Peirce, a Life*; but a quick and solid read is offered by Nathan Houser in the introductions to *The Essential Peirce, volumes I and II*. For further analysis of Peirce's philosophy, we begin with the classic: *An Introduction to Peirce's Philosophy Interpreted as a System*, by James Feibleman (with the caveat to the good reader that Feibleman extends his partisanship for Peirce into his biography, leaving a sour note for those like myself who reject the Great Man Theory of history). The recent resurgence of interest in semiotics pushes Gerard Deledalle's *Charles S. Peirce's Philosophy of Signs* high on the list. And my personal choice of secondary literature, *Peirce's Epistemology* by William H. Davis rounds out my (consciously ironic) list of three. But also, to explore Peircian thought within the history of ideas, Umberto Eco's eminently readable (that is, well written and non-academic) *Kant and the Platypus* is in a list by itself.

To describe Charles Peirce as a complicated man is to take understatement to a new low. A fiercely independent former child prodigy who never managed to get his feet on the ground, whose young life was dominated by the maneuverings of his very political father and adult life wracked by his own rejection of the niceties of Victorian America – coupled with his own lifelong adolescent acting out against the hypocrisies imbued therein. For all his absolute brilliance, Peirce never seemed to grasp that members of the very society he found so appalling might return his scorn. And he spent his life trusting the wrong people – he regularly turned for succor and support to Simon Newcomb, the one man most responsible for destroying Peirce's career and livelihood. The young Peirce was as much a dandy as any – or tried to be in his over-controlling manner, but all he had to work with was celebrity and skill (and not stacks of cash like his friend James), but the celebrity waned with his adolescence and his skill, though immense, did not extend into social affairs. His first marriage was a disaster (though his ex was a fascinating woman in her own right) and his second wrapped in layers of deception such that almost no one has ever known much of anything about his wife, or their life. As he aged, Peirce lived for a time homeless, hiding from debtors' court. Eventually James arranged a small charity on his behalf, enabling him to live out his life in relative comfort with his Juliette at his beloved Arisibe (which, truthfully, he tried to sell in yet another failed try to get back into the thick of things; his addiction to get-rich-quick scheming *never* panned out.)

Turning to James, I must recommend first of all the original writings; not one of the authors who have attempted to tackle his thought (myself included) has anything on his chops. Unlike Peirce, the original essays of James are highly readable, and no need exists to 'translate' them into common parlance. I argue that this is a result of several factors: first, (like his novelist brother) James valued literature for literature's sake, whereas Peirce (like most philosophers) blatantly subordinated the writing of his philosophy to the 'science' of it. But also, for all his success in Academia, James valued the 'common' world far higher than Peirce. He wrote for everyone, not just experts. In this, he avoided technical jargon, convoluted wordage, and arrogated positioning. Moreover, James's pre-

eminent interest was in the relational algebra of social concerns and in the social institutionalization of justice accomplished by rational comprehension of actual factors of individual thought. In other words, he considered the central chore of philosophy to be therapeutic – and a therapist who cannot be comprehended is unlikely to find success. Finally, I would argue that James succeeded in re-writing the vernacular such that his metaphors are now our metaphors – e.g. 'streams of consciousness' may (and does) require careful handling if it is not to loose all semblance of sense, but the metaphor itself is now garden variety. In all of this, James gave us a new way of doing philosophy; within both the technical field of philosophy, as well as the general public conception of it, what James called it is now normative. (Though it must be added that its validity is mired in disputation and its expression choked with misappropriation – these problems, however, are grounded in general miscomprehensions of Darwin).

Charlene H. Seigfried powerfully argues this last claim in her *William James's Radical Reconstruction of Philosophy*.[I] She places at the center of modern thought, not Jamesian metaphors – common as they are, but the manner in which James *used* metaphor, along with his insistence that philosophy consists of an ongoing reconstruction of metaphoric imagery, selected by competence at resolving affairs of life. I see this new way of thinking about thinking grounded quite solidly in Darwin's Ontology, but prefer the term regeneration (psychological 're-birth' accomplished through novel origination within a cultural milieu or metaphysical 'population') to the Dewey-esque 'reconstruction'. However, Seigfried's definitions, and her depiction of the processes of Jamesian thought, in this work in particular, as well as her earlier *Chaos and Context: A Study in William James*, both serve as corroborative to the thesis now in your hands.

But to return to introducing the man, James was a classic dandy of a classic 'type' who reinvented himself with practiced regularity – until 'discovering' the man he choose to be. Born into a famously eccentric family, he was a wealthy hypochondriac 'arty' boy who made himself a stolidly humble student of human concerns. James patiently worked his ways to weave his nervous temperament together with and within a society that gave

[I] *Perley, 2007*

him real succor and support; by all accounts his marriage was a rousing success and his eventual career stellar – no matter his long and geeky adolescence.

Of course all life defies simple depiction, yet too the life of William James, as with those of all his friends, quite exemplifies this fact. That said, two very different books offer us remarkably competent and complimentary views of the man: Jacques Barzum's *A Stroll with William James* and Robert Richardson's *William James: In the Maelstrom of American Modernism*. And of course, his former students also wrote of him; for a somewhat dated but remarkably heartfelt read, there is R. B. Parry's classic *The Thought and Character of William James*.

While a true believer might feel tempted to rush off and find every title just listed before turning another page (and the obscenely so would add every title by every author listed – and follow through by picking up Eric Hoffer), I beg your indulgence to believe a little less (which is to act a little slower), and follow through the course of the action at hand. In many cases, this means humbly to allow the argument to be other than our own selves, to allow it to proceed unhindered by our own immediate chasing down of yet another juicy sign. Too often, the quickest among us waste their time, our peace, and countless flower-beds, wildly chasing their thoughts like dogs hot on the trail of one rabbit shadow after another, after another. But in this case, I intend only to imply that the book in your hands is turning towards conclusions and particulars in philosophy – and to bid heigh ho.

The Liquid Spandrels of William James

Do I contradict myself?
Very well then I contradict myself,
(I am large, I contain multitudes.)[1]

Our next steps take us through some principle ideas of one of philosophy's best known but often and powerfully misunderstood thinkers. William James contributed mightily to American thought. He added so many turns of phrase to the lexicon, and his contributions were so broadly and internationally applied (adroitly and not), that it is a readily defended proposition to argue that we now live in a Jamesian world, that the visions of being which inspired James are those which 'complete' contemporary thought.[39] Often and largely, it is Jamesian metaphors that turn/are the gears that drive/are the pistons that shape/are our metaphysics, and structure/are the *minding* that is both source and sensation of our selves. And without succumbing *in toto* to the ultimately flawed but occasionally useful Neo-Worfian hypothesis, these tools we call words both open possibility, and close it. They shape our selves as we shape with them our niche, which is *our* world, individually present but ontologically intertwined. As with toolage in general, our ability to *use* ideas improves with the presence of a solid handle – and successful usage tends to repeat.

Again it is Darwin, origination as usage is such that the coming into being of you and I and everyone else is a job-crew action wherein the tuning of our phraseology is not at all directed except by the immediate contingencies entailed by the work itself. The doing is its own design for *work* sets the potential of/within both us, and our shared gestalt. Moreover, while these tradesmen crews work independently 'for' some (overwhelmingly absent) lordly *I*, they do so only and always in close friendly collusion with the vast *not-I*, which then becomes for each of us a fractally-scaled *other-I*. And the work these 'crews' do is to abduct into being the notions of self which both are, and are formed by, the levering and grunting that is (ultimately) the sensation of *I*, as represented by/within an empirically contiguous generation of a metaphysical geography.

[1] *Whitman, 1881, pg. 78, Song of Myself, Stanza 51*

This attitude towards wordage, consciousness and being, with all its accompanying development, is one that most directly links William James to Charles Darwin. As an attentive reader you will no doubt recall from earlier in this thesis, that this is precisely where Wright began his work, that Darwin turned specifically to Wright to develop notions of the 'evolution' of words, and that he considered his work significant to his own. In this, Darwin *valued* the epistemic set developed by Wright. For his part, James centered his philosophy upon his psychology, and his psychology upon two interwoven sources: Wright's a-subjective epistemology and Darwin's biology. By using them as he did, James valued them; in the end, this is all of how we know, and all there is of, anyone.

When we value some ideation, we 'own it', which is to enact it within our self via reciprocal metaphysical incorporation. And reciprocity is again paramount – not as *quid pro quo*, but rather, as James wrote, *no impression without expression*.[I] But accordingly we must add: *no expression without impression*. To value something is to take it as part of our own living (our world), and allow it to change us – which is to allow it to become part of us, shape our actions and in-form our vision of reality. To value is to learn, to become, and to (re)create the whole of the world – both of our individual knowing, and of our shared *gestalt*. (I should add that it is clear from the record that Darwin so valued many, many great thinkers – and that he did so with practiced intent. Truly, the key to greatness is the practice of valuing wisely and well.) Valuation is a penultimate act in the (self) formation of subjectivity; it is 'followed' only by its simultaneous physical instantiation, both as body (neural anatomy) and as action therein and thereof. In this manner, valuation is ecopoetic action, singing into being the world of *I*, which is always a world of *us*. Moreover, it is seldom a self-aware act – even among us so-called Homo Sapiens. Rather, it is generally represented by what Darwin called unconscious selection, and normally patterned upon/through/within bonds of hunger and sex, family and friendship, self-identity, irrationally abstracted ideations, sentiments both gross and fine, and etcetera. Seldom does a man act with a knowing deliberation that is motivated less by

[I] *James, 1899, pg. 38, Talks to Teachers*

the need to maintain some transitory notion of self than by defects in knowing itself, for seldom do men value anything more than their own bloody selves.

Keeping all this in mind, we now explore the schooling James garnered from/within his lifelong friendship with Wright, and how he wrote into human culture the psychology of Darwin's Ontology. Our method will be to twine together James' many notions without regard to the history of their development – always recalling that James wrote as he lived: first as an artist and social activist, then a teacher and psychologist, and finally a philosopher. And though I focus on this last, little part of the man's life, I beg the reader to keep the larger context in mind.

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Arguably, the single essay that most overtly displays the use James found in Darwin is his 1880 lecture: *Great Men and Their Environment*.[I] Though it contains little in the way of grand propositions, it represents a complete development of Darwin's Ontology as applied to questions of the origination/emergence of the self through ecopoesis enacted, through accidental moments acted upon, *valued* well, *minded* well, and bodily instantiated within/through some particular heritage within/through a vast interweaving in which specification is (always being) settled via some order of selection. Likewise, no teleology 'destines' greatness, and no 'fate' decrees it. Rather, 'greatness' is simply a matter of surviving Darwin's Jungle (and establishing some heritage) *with style*; it is the carving of a new habituation in the face of 'the jaws that bit and the claws that catch' – and doing so in a manner that settles/opens some new terrain of thought/action/ways-of-being. Moreover, in this essay James argues that *natural selection* (indeterminate, unordered, yet chaotic and patterned within/through/by past interactions – wherein success is highly influenced by quality in *minding*) is by far the most likely producer of stable, original and brilliant forms. Any summary I give this essay is doomed to suffer in comparison to the original; we simply haven't the time or space here and now, to do it justice. And besides, James wrote better than I. The essay is online; I recommend it.

[I] *James, 1956*

But briefly, through his telling of the death of a sparrow at the hands of boy, getting blamed on the western migration of the Celtic peoples, or of the blaming of the death of a man who slipped on ice and hit his head, on his having been the 13th guest at dinner one night, James neatly dismisses the grand claims of Minds such as Spencer or Fiske. And he places responsibility for any second such slip and death (for not having thrown sand down on the ice) on the purveyors of woo whose grand abstractions waste our focus. Moreover, James cautions us well that obsession with 'sources' and 'essences' and 'ultimate causation' is likely to end in disaster. And in his telling of the moldy biscuits and the captain whose odd sense of scale cost him his ship, we see the absurdity of the attempt to ban our selves from our equations. The thickness of life itself generates situations in which, for very human reasons (for reasons of our own living), we need focus on *our* vision of things, and allow that vision its range. Paradoxically, we do this best by humbling ourselves, which is really to notice when the world humbles us.

That James could so completely adhere to Darwin's Theory and center even his wildest postulation strictly upon the study biological life, that he could portray the agency and the consequences of human abstraction so clearly in the context of the concatenation of life, and then for him to be commonly and ignorantly accused of the very same absurdities he decried, surely reveals a great dysfunction among his critics. In both this early essay, and also in his seminal *Varieties of Religious Experience* (a well titled work which surveys a broad swath of potential human experience – as it relates to the transcendence *into* being of our singular yet interwoven selves[40]), he makes not a single claim of any super- or supra-natural level of being. He claims no 'objective' knowing. He pretends neither to possess such knowledge, nor even that such knowledge can exist. He ignores all questions concerning the actuality of objects of religious experience. He refuses to postulate, or even hypothesize, on the existence of any of the millions of gods humanity has venerated (what would be the point in that, he might rightly ask). But to approach Religion from a Darwinian perspective is to treat it as one would any other potentiality embedded within a universe of struggle. E.g., from the preface to *The Will to Believe*, (the book, which contains both the essay of the same name and also *Great Men and Their Environment*) James tells us:

> The truest scientific hypothesis is that which, as we say, 'works' best; and it can be no otherwise with religious hypothesis. Religious history proves that one hypothesis after another has worked ill, has crumbled at contact with a widening knowledge of the world, and has lapsed from the minds of men. Some articles of faith, however, have maintained themselves through every vicissitude, and possess even more vitality to-day than ever before: it is for the 'science of religions' to tell us just which hypothesis these are. Meanwhile the free-est competition of the various faiths with one another, and their openest application to life by their several champions, are the most favorable conditions under which the survival of the fittest can proceed.[I]

Rather than mine the veins of mythology that course through the human experience for his own enrichment, he addresses them as phenomena in their own right, and part of the heritage that is our selves and the world, as well as both our heritage and our potential therein. It is clear both in his life and work, and from his own words, that James learned much from Wright – not the least of which was to practice kenosis and allow the world to fill him, rather than spend his self in a futile attempt to fill the world.

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James first named one of his earliest doctrines *The Duty to Believe*, but reworked the entire concept after an apparently somewhat traumatic (and certainly dramatic) encounter with Wright, who (having previously informed Peirce of his argument and intent) chased him down on the street one day to excoriate him for relying upon a conceptualization of *duty* that necessitates an absurd deification of necessity (ala the dominion of simple efficient causation), alongside the pretense of a singular (scale thin) 'level' or 'source' competent to oblige our consent. Notably, Wright did not have a problem with the flat rejection that James gave to the hypothesis: 'It is wrong, always, everywhere, and for anyone to believe anything on insufficient evidence.' For this is precisely what Wright valued in his young friend's essay: it built upon recognition of selection and the brutal reality that life normatively and *formatively* compels us to believe (which is to act) with uncertain footing. In this, James was acting (hypothesizing) in accord with Darwin's Ontology. But the lesson Wright gave his young friend that day was a deeper understanding and more precise extrapolation, thereof.

[I] *James, 1956, pg. xii*

Life is entangled, which renders duty meaningless without reciprocity. Events unfold within complexes of mutuality wherein *duty*, like *species*, originates; and so, *duty*, like *truth*, is unwarrantable, and valid only so far as it pertains to the weaving together of life. It is something like Aldo Leopold's Land Ethic: belief (action) that tends to increase the potential of concatenation is ethical, that which tends to decrease it is not. Our 'duty' then, is to the weaving – which can only be *our* weaving and pertain to/within *our actual life*; it is not according to some *plan*. Duty does not pertain to any object however grand its claim, and however many claim to perceive it. Wright's fury was focused on the manner in which he saw James cleaving to a notion of Duty as if it stood apart from some imagined Object of duty, rather than the relation of the two along with the interpretive act entailed within the act as the origination and experience of what due we owe. Wright saw carelessness in the young philosopher's handling of live coals. And though it was indeed with love that Wright warned him of the dangers of fire, it was clearly with all the drama of the perception of love scorned.

It should be noted that James took the lesson well. I say nothing controversial here: the heritage that links Darwin, Wright and James has been well established in the scholastic literature. My little contention is to claim that this heritage as a *religious habituation*, a *religio*, as it were, and a successful one, which bound Darwin's Ontology within the heritage of our shared culture, and one well defined in the Will to Believe hypothesis.

(If you will kindly recall, Darwin *believed* in his natural selection hypothesis long before the evidence was in – but more, his belief motivated him not to chew contentedly on the cud of his knowing but to gather together a multitude of facts that touched upon the objects of his belief and pertained to their ontological status (whether or not they actually exist), and then twine together the various strands of his experience such that his believing and his acting were stoutly bound within a hermeneutic circle, a cycle of metaphysical breathing wherein the subject of his self and the actual objects on which he hypothesized *re-in-formed* each other. Thus he kept his belief in the face of insufficient evidence, by *working with it* so as to hold it accountable to actual situations. By this he

succeeded in avoiding absurdity – with the obvious exception of the rather blatant sexism riven within his life and work, but this failure would be a topic of another thesis.)

In later years, James was to comment that he considered his doctrine better described as a 'right' to believe, as it is grounded within the reality that living, and therefore minding, beings 'rightly' seek continued living (in the face of that perpetually immanent failure of incorporation, which is the potential of utter discorporation that we better call *death*). Consciously subjective or (at least nominally) self-aware beings do so *willfully*, with pre-meditation of perceived need, which *necessitates* 'belief' both as a call to and a focus of the action that is itself the struggle of life. To James, this struggle results in and from the minding that is life itself, and hence both belief and struggle are necessitated by/of/within the processes of living. This is again a consequence of the use of Reid's postulation (that belief is mere propensity to action) within a 'Darwinian' world wherein a failure to act in accord with your actual situation may well result in the world continuing without you.

The mature concept weaves will and right with a *kind* of duty stripped of subjective motivation, egoistic claims of warranted status, and absurd claims of a singular source. As an attentive reader, you will keep in mind that duty is absurd unless devoted to sustainability in (and of) the process of life, which both *includes*, and *is* (individually and culturally) our very selves. It is to the weaving together of particulars, and not to any shallow (scale-thin) particular to which we owe our fealty and *not* to the peculiarities of any formulation rendered therein. After all, the Will to Believe does allow for the Right to be Stupid (jump off the building if you want), but stupidity has consequences (so don't expect me to leap off trying to save you) – even for philosophers. James' fellow traveler, F.C.S. Schiller, described it well, and with a pointed detachment:

> 'Will to Believe' was a collective term of reference for a number of human habits in matters of belief that included wishes and cravings, beside the strict will to believe; also the selective direction of attention, and the willingness to believe and to act upon risks in default of absolute certain knowledge. James had inferred from these universal psychological phenomena a certain limited "right to believe" at one's own risk, but had provided an objective check upon the whole procedure by subjecting it to the pragmatic test; in the end (however long delayed) the empirical consequences of a belief were needed to ratify it and

> decided upon its value. The doctrine was thus far from being mere subjectivism or a warrant for uncritical credulity; its real significance lay in its recognition of how very much more than logical reasoning goes to the making of all human beliefs. It showed up completely and forever the traditional cant about 'disinterested' knowledge and 'pure' thought, and thereby deprived many philosophers of their stock-in-trade and inflicted a deep would upon their vanity.[1]

This check is not actually given us by James, but by Malthus, via Darwin's theory of origination by natural selection. Quite simply, we don't get to believe what we want, however gratifying it may be to some aspect of the multitude of selves we only know as *I*. The upshot of James' Will to Believe doctrine is this: believing you can fly will not save you while you plummet to certain death, but believing that you can make a critical leap may help you make it – hence choice in belief is critical to life. This seems far too innocuous to deserve the controversy it has engendered; yet it generates some remarkable consequences. His extrapolation is classically Aristotelian in the sense that 'the elephant, when present, gets noticed' and it is classically Lockean in contending that an actual (lived) respect for others is a necessary foundation of our own self-determination. However it transcends both of these notions in its insistence that all our categories of knowing and our knowing itself, as well as our very sensation of knowing and the emergence of a knowing self, are all subject to the natural processes of selection, heredity and emergence, that drive origination and settle the parameters not only of our own being and of being itself, but also of our believing and knowing, our passions and ideals, our logic, our profundities, our absurdities, etcetera.

Believing is larger than knowing: it encompasses a wider terrain. The boundary between the two is tricky to define, as both are at once approaches to action, the potential of acting (represented by behavior), and the agency of willed intent. But *belief*, both as it is commonly but pointlessly defined (the conviction of some perceived truth, justified or not) and as Pragmatism defines it (the propensity to action on the part of some nominally conscious – living and therefore minding, being) is more raw. In a very real (and yet utterly metaphorical) way, *knowing* is believing that has passed through the Malthusian jungle, while *believing* is potential knowing that somehow manages to cling to its fringes.

[1] *Schiller, F.C.S., 1927*

In this, knowledge (whether *true* or *false*) is the transformation of belief enacted; it is belief thrust by force of circumstances into that jungle, (which is also the *thereness* of James' Pure Experience and Peirce's category of secondness) and emerging successfully (by organic incorporation whether either studied or intuited, or only by some accidental happenstance) to take on a new aspect, a hereditable form, which is the so-called 'objective' knowledge of a so-called knowing subject. Simply put, knowing is believing re-forged on the anvil of experience, pounded into more a useful shape by actuality itself.

It is worth taking a moment to look briefly at the 'objective knowing' between the so-called Evolutionary Epistemology of Karl Popper, as it contrasts so greatly with James. Popper hypothesized the actual existence of an abstracted 'realm', a 'world' we create by projecting therein our ideas, a kind of noosphere wherein ideas become/are self-contained objects. He argues that in this reality (largely represented by peer-reviewed journals and 'serious' conversations), both wrong and wrong-headed ideas can be bloodlessly slain. However, when we allow our notions to 'remain' subjective (or presume that they necessarily *are* subjective), then life and death struggles overtake even our best ideas and battle rules the day. In other words, Popper thought that ideational conflicts could be resolved in pure abstraction – as if no lives depended on them. (In light of the man's life, this is blatant self-deception, utopian escapism, pure intellectual egoism, and an astoundingly epic fail.) For all his brilliance, Popper neither understood nor worked with Darwin's Ontology, which postulates a singular natural world wherein academic excellence is *not* a sinecure from the struggle for life. By contrast, James granted no pretense of 'ontological' status or metaphysical self-containment to either knowing or being: ideas do not 'transcend' nature, but generate deeper reciprocity *within* nature (more activity across more scales). Everything is bloody – ideas most of all.

Yet still, we do know things, and sometimes brilliantly. What form this knowing takes, however, remains forever open and unsettled – yet drastically limited to (which also means *opened within*) the intersection of 'objective' reality (our larger selves) and the vitality of our own believing (our sense of *I*), which is (ultimately) simply a question of whether a hypothesis is to us 'live' or 'dead'. The full algebra of James' analysis is clear

in the original essay, (readily available online) and we need not elaborate here. But before moving on, it will profit us to look back at the rest of our earlier quotation from Schiller. Wounded pride may indeed explain the vituperation visited upon James by generations of professional philosophers, typified in this next instance by Bertrand Russell, who absurdly placed blame for the 20th century European Holocaust on the "relativism" of James[41], and to whom the following is sadly attributed:

> William James used to preach "the will to believe". For my part, I should wish to preach "the will to doubt". What is wanted is not the will to believe, but the wish to find out, which is the exact opposite.[1]

For all his wit and skill, Russell never understood Darwin; at least he was no fellow traveler. Again, it is clear from the record that for Darwin the 'will to believe' *was itself* the will to doubt. The point is that his was not an egoistic believing in or acting out of some fanciful notion that had passed his way, or on which some aspect of his self got stuck; rather it was the focus of his finding out. While there is no record of what Darwin may have thought of James' formulations (largely developed off Darwin's radar or well after his death), it is a readily defendable proposition that the Will to Believe would have caused him few (if any) of the conniptions that beset Russell. Furthermore, rejection of notions of 'pure' form, dismissal of Platonic 'fitness' and 'mathematical' certitude, and contempt for claims of 'ideal' status are all built into Darwin's Biology – and interwoven within his Ontology. It ought not surprise anyone that the mathematically idealistic and psychologically antiseptic Lord Russell would fail to grasp the manner in which James incorporated Darwin's work into his own – and this despite the fact that Russell drew heavily on James in developing his own philosophy, and, at his better moments, uses Darwin's Ontology himself.[42]

The issue of knowing is always key to any philosophy. Clearly, the bright abstractions of Russell are remarkable in their contrast to the murky a-subjective, process incorporative, pseudo-nominalism of Pragmatism (imbued as it is with a practiced focus on the digestive, and hence necessarily murky qualities of *life*). And in this, we have already

[1] *Sagan, 1986, pg. 51*

seen the manner in which Pragmatism adapted the specific notion of truth with which science (starting with Darwin) now operates. Famously, James developed this theory of truth out of the methodology Peirce had proposed for clarifying ambiguities (though as an attentive reader you will understand that Peirce did not act alone, that Wright, Green, Holmes, James and others all contributed to this emergence).

For James, "Truth" is *always an adjective* – it is merely descriptive and always tentative, unwarrantable, ever changing. A day may be sunny or overcast or somewhere in between, but always the weather *happens* within the day – which is to say that it happens *to* the day, the day accrues it's knowable form vis a vis what actions remain potential in/of the 'settling' of the actual (pure) experience. "Truth happens to an idea", just as weather happens to a day. For 'truth' results from speciation: it is an event of differentiation that originates within and out of a process of selection and heredity bounded within the inter- intra- and trans-actions that jointly comprise Darwin's Jungle. There is no metaphysical side-reel or supernatural equivalence of is-ness; truth is real, but that makes it relative and subject to the same vicissitudes the rest of us suffer. And so, truths pass into oblivion just as readily as any of the uncountable millions of species that either now are, or (like the tigers in India) may very likely soon be, extinct. Moreover, the false equation of truth and being that makes 'truth' the unchanging 'essence' of events, and that lies at the heart of the seemingly deathless traditional neo- and pseudo- Platonic metaphor of the mirror, is quite actually a zombie truth.

All this is clear in James' *The Meaning of Truth*. And whichever approach to this issue we prefer, through *The Function of Cognition*, *Abstractionism and 'Relativismus', The Existence of Julius Caesar*, etcetera, James offers an essay to accommodate us. In our limited forum, I would point to *The Tigers in India*, wherein James postulates a range of potentials of knowing, a continuum characterized by two extremes: knowing by 'pointing' and knowing by 'embracing'.

In contrast to the entire heritage of Plato – including many (most) modernist as well as countless so-called post-modern thinkers, knowing as 'pointing' entails no special inner

mystery and requires no innate (magical) source or seat of knowing, but only *the context of being*, which, in this instance, serves as a kind of "outer chain of physical or mental intermediaries connecting thought and thing". Here, knowledge is potential consequence of the wholeness of mutual incorporation within some particular aspect (the metaphorical knowledge of trees), carrying the capacity of such 'pointing' (towards forest of life). This way of knowing is in and is the development of self-consciousness, but it only appears in evolution subsequent to the cognition of mental intermediaries *as* intermediaries, which is to say, by calling a sign a sign. Yet *signs* are merely the action of signaling which is the instantiation of a relationship, the awareness of which marks the emergence of knowing. That this is not apparent in evolution until very, very recently (and even then very, very rarely) does not imply that this way of knowing is of a 'higher' order, only that it is a lately (and barely) differentiated phenomenon. It would be a simple manner to digress from here into the semiotic character of Darwin's Ontology, but James did not work in this vein, and so this is really just a tease – until we get to Peirce. However all this does point to the neutral monism of Pure Experience and the reciprocal character of Radical Empiricism, and so I beg the readers indulgence, and continue apace.

The second method of knowing is immediate, which makes it *instinctive* [43] and as visceral as staring down the barrel of a gun. As James wrote: "There is no 'presence in absence' here, and no 'pointing' but rather an all-around embracing" of the thing signified by its signification. Here, that paper on which James would write and the conception thereof within his minding, are empirically and pragmatically one item; 'thought-stuff' and 'thing-stuff' are "indistinguishable". "The paper seen and the seeing of it are only two names of one indivisible fact, which, properly named, is the datum, the phenomenon, or the experience." This is precisely what James describes as the minding of an organic being within it's environment, and what is well described as reciprocal incorporation of and within the physical/metaphysical integration, which is life itself.

James wove these twinned ideations of living and knowing, as incorporative/instantiated and as incorporated/instinctive, throughout his struggle for living knowledge. E.g. from later in *The Meaning of Truth*, we read:

> The object, for me, is just as much one part of reality as the idea is another part. The truth of the idea is one relation of it to the reality, just as its date and its place are other relations. All three relations *consist* of intervening parts of the universe which can in every particular case be assigned and catalogued, and which differ in every instance of truth, just as they differ with every date and place.[I 44]

Within the Western tradition, knowing has seldom been thought of as the mutual incorporation of 'subject' and 'object'. In fact, the very possibility is deemed absurd within the Occident's over-arching eschatological ontology. Moreover, the twinning egoisms of idealism and rationalism deny outright the very possibility of such knowing, labeling it as 'mere' instinct (or sinfully carnal), and dismissing it as unworthy of consideration – even while deifying its agency. This is particularly common within the shuttered minds of those who deny science in general, and specifically deny the science of evolution. And yet we also see such absurdities woven within brilliantly scientific minds. E.g. the Neo- (or Pseudo-) Darwinian epistemology of Dawkins, which works through/within a classically modern ontology, clearly and distinctly claims that the concatenation of life is naught but pure mechanism – the 'programming' inflicted by genes upon us "lumbering robots". Tik-tok, the clock beats, the gears turn and the 'we' both come into being, and come to know about it by (in this conception) *replicating* some *otherness*, some 'object' of potential knowledge, some 'thing' (a mental *cog*). Moreover, this is a thing that must *copy* well as *it replicates itself* within us (at risk of 'our' failing to cognize well). By granting ontological status to his hypothesized 'memes' (which is to think them 'real'), Dawkins makes them absurd.

The machined idealism of classical modernism avails Dawkins no better than it did Russell or Popper. All such positioning, all attempts to claim a warranted status for their bits of knowledge – however packaged, is a result of mankind's peculiar ability to fetishize its mental capacities, which is to refuse kenosis and to value above all others some shallow aspect of our own self. In Dawkins, this is seen in his postulation of 'memes' as the 'true' scale actual psychical agency (as if 'we' have nothing to do with it) just as he absurdly postulates genes as the 'true' scale of organic life. In Russell, the

[I] *James, 1997, pg. 234*

'true' scale is mathematical, and in Popper it is the 'third' world wherein nothing bleeds. By contrast, in Darwin's Ontology, no such 'higher' scale exists.

All of this (with the 'religious' rejection of science offering the most extreme example) represents a remarkably consistent range of failure to value the organism as organism. This requires humility; we need to see our selves humbly, as our own ecosystem – a tangled bank of 'others' all interwoven as us, but also as a fragment of a much greater 'system' or scale of organism. What we are is both greater and lesser than all of this; what we are *not* is a singular 'essence'. Though again, with Dawkins this is nuanced; he somehow claims these very postulations while denying their consequences. Though the voyage he offers differs from that of Popper or Russell (and stands in stark contrast with the willful self deception of 'religion'), all three share both a common point of departure and an ultimate destination – these being classical Modern Ontology, and getting rendered absurd by the light of Darwin's Ontology.

This fact of this epic fail is by no means limited to these three men, but extends far beyond Modernism itself, and is shared (in one form or another) by most of mankind. And this brings us to the central issue of *The Meaning of Truth* and also the focus of the Pragmatic Methodology. It also points us towards the center of James' life work, the social activism of his therapeutic world-view and his epic *The Principles of Psychology*, the flow of the stream of consciousness and the fear of bears. However, before we get there, it will profit us to spend some time on three principle ideations at the center of his philosophy: Radical Empiricism, Pure Experience, and the Pluralistic Universe.

***

James wove his ideations together with provocative intent – and for all his literary skill, it is no small feat to tease them apart again. There is no easy approach to his notions; they contain each other in all their daunting wholeness – which is itself an expression of Darwin's Ontology. For example, looking back at the *Meaning of Truth*, we read: "TRUE IDEAS ARE THOSE THAT WE CAN ASSIMILATE … FALSE IDEAS ARE THOSE

WE CANNOT"[I] – in their original screaming allcaps (unfortunately lost in later editions). This definition, James leaves no doubt, pertains only within/to a relative world, that is, a world where things are related, bound together, one in their ontology. It is a world of particulars, of *this* exact moment experienced by *that* exact being – wherein *relating* is itself the only thing that is. At the crest of it all, *to be* is nothing more than *to relate*. And here we see the Pragmatic definition of truth at work within Darwin's Ontology, informing a Radical Empiricism, which James obligingly draws into our view:

> The generalized conclusion is that therefore the parts of experience hold together from next to next by relations that are themselves parts of experience. The directly apprehended universe needs, in short, no extraneous trans-empirical connective support, but possesses in its own right a concatenated or continuous structure.
>
> The great obstacle to radical empiricism in the contemporary mind is the rooted rationalist belief that experience as immediately given is all disjunction and no conjunction, and that to make one world out of this separateness, a higher unifying agency must be there. In the prevalent idealism this agency is represented as the absolute all-witness which 'relates' things together by throwing 'categories' over them like a net. The most peculiar and unique, perhaps, of all these categories is supposed to be the truth- relation, which connects parts of reality in pairs, making of one of them a knower, and of the other a thing known, yet which is itself contentless experientially, neither describable, explicable, nor reduceable to lower terms, and denotable only by uttering the name 'truth.'[I]

Sadly, some of what James wrote does not seem to be as true as it may once have been. While supernaturalism still lies buried within the materialist hypothesis (the ghost in the machine), causing the same problems now as in his day, the religious landscape has altered dramatically since James was writing. And the change has not been good. Today, the irrationally abducted ('religious' as it is commonly defined) belief that experience is *set* (done and decided), in accord with some non-thing (some agency that is not an event in time and space) has returned to the fore of history. Here again, we touch upon a phenomenon, the resolution of which is both *momentous* and *forced*, and of which zombie solutions abound. While many, including James, once argued that Religion offers a genuine option (one that is *forced*, *living* and *momentous*), the tide of history has turned since his day and 'religious' has given up most of its inherent sense of 'metaphorical' and

[I] *James, 1997, pg. ix*
[I] *James, 1997, pg. xvii*

'interpretative' (not to mention aesthetic and fun). Moreover, the bad old days of theocratic rule had subsided in James' time and place; but religion is now again deriving enormous profit in terms of cash and power, at the expense of psychological agency and coherence. This has resulted in a 'renaissance' of 'dead-clades walking' – metaphysically realized as/through religious fundamentalism, which can be described as the refusal to recognize *momentous* options as *actual* options, and a 'principled' rejection of interpretation. This is a common expression of the *religio* that is us, but to settle into this niche is to refuse the ongoing generation our own selves, which is the action of interpretation bounded within what possibilities our world actually offers. And we do well to remember that *our* world is *the* habituation that has bound *us* together *as* us, by binding us together with not-us into the wholeness of all-of-us. In their rejection of interpretation, the fundamentalist claims that their 'essence' and hence their 'knowing' is unique, unconnected by/to/within the world, and supernaturally warranted – by this they destroy themselves, they unbind themselves from that which is their actual being.

The prevalence of religious extremism (in the widest sense of the phrase) has risen steadily since the 19th century – at the expense of the actual existence of countless lives, and the psychological coherence of all mankind; for it is at the expense of the *religio* itself (in its true sense as our binding into being). And the scientific response could not have been more disheartening; the retreat into dry abstraction as 'fact', clinically detached from all but its relation to 'truth', is only more useless egoism. But we are now getting behind ourselves, and so we turn straight away from belief to experience, which is a bond of knowing far stronger than any shallow abstraction, however 'truthy'.

Radical Empiricism is the most 'Darwinian' of all empiricisms – it is also the most thoroughly empirical. The difference between classical empiricism (in its many forms) and empiricism at the hands of a Pragmatist, begins as one of direction. The traditional approach argues that things happen *out there*, they happen *to me*, and I know about them *in here*. However, classical empiricism has never been able to describe what it means by *there*, *here*, and *me*. Many fanciful attempts have been made, all of which eventually boil down to mythological, if not downright egotistical, posturing (in this, even Hume, the

man, offered nothing but stoic resolve and some god-awful Whiggisms). That traditional empiricism depends on the supernatural is especially evident throughout pre-Darwinian science. Case in point, Lamarkian evolution presumes a constant flow of formational influence from the vast *out there*, to which the living thing responds. In this response, the some mysterious 'vital fluid', which no one has ever seen or can ever measure and which represents the actual evolutionary agency, is unleashed to work its 'magic'. When this kind of supernaturalism no longer suffices us as pertinent (perhaps as a result of the study of Hume, the detached philosopher), one is want to reject the empirical and flee towards the comforting embrace of rarified ideals. (In the Modern sense, this generally takes the form of Idealistic Materialism – in the contemporary sense it is more likely to take the form of Ignorance and Sectarian Aggression). However this is precisely what we must *not* do, Darwin argued by example, if we hope to maintain our ability to learn from/within the world and thereby survive, which is to continue as part of it.

Our quest, then, is to place our selves – with our full share of actual agency, along side and intertwined with countless other selves, *within* experience, *as part of* the incessant (inter- intra- and trans-) action that is existence, represented by the complex of agency and heritage, and patterned by/within past actions. And so, following Darwin, the radical empiricist includes his own 'vision' (his beliefs) as part of his experience, which is then as much a matter of looking (of focusing awareness, of choice in interpretation), as it is of the impact of foreign bodies upon our physical self. The one essay that best exemplifies radical empiricism is actually not included in the posthumous collection *Essays in Radical Empiricism*. It isn't even by James (though he did celebrate it), but authored by his successor as public face of Pragmatism, John Dewey.

The Reflex Arc Concept in Psychology plainly argues that experience is incorporative, and that empirical knowing is a matter of mutuality and reciprocity, of multiple layers of meaning interwoven within identifiably specific events that are of importance to living, feeling beings. Describing the world envisioned by radical empiricism – or rather, the *experience* of the world that is our own reality therein, Dewey tells us:

> What is the reality so designated? What shall we term that which is not sensation-followed-by-idea-followed-by-movement, but which is primary; which is, as it were, the psychical organism of which sensation, idea and movement are the chief organs? Stated on the physiological side, this reality may most conveniently be termed coördination.[I]

Coordination is the upshot (the wholeness that emerges) from 'things' working together. In this it is everything; it is the moment of our knowing and the thing known, the reach of the arm, the looking, the seeing, control of body muscles and tissues and the motivation of curiosity. Even a 'stimulus' is a coordination of the stability of a situation and the introduction of a novel element therein (which is evident in that we do not respond to a loud noise in a louder pub as we would to the same noise in a quiet room). Coordination is the quale of being, the gestalt that is both our selves and the basic ontological element – depending on our immediate point of view (which is, of course, itself a coordination). And all this interactive wholeness can only be entered from the inside; and so we begin with the physicality our action as tempered by our *interest*, and the organism of us.

> In other words, the real beginning is with the act of seeing; it is looking, and not a sensation of light. The sensory quale gives the value of the act, just as the movement furnishes its mechanism and control, but both sensation and movement lie inside, not outside the act.

We are yet one more of these *coordinations*, and all our grand ideals, all the vaunted heights of our science and reason and passion, are likewise coordinations of *this* and *that*. And with this, no further warrant is required for even our most speculative claims – except at risk of death, of course (and so we better *mind things well* if we don't want burn ourselves needlessly). So we learn by reaching *into* situations, not by reacting to them, and *not* by recoiling from them. Referencing James' writing in *Principles*, Dewey reminds us of the infamous child-candle incident[II] in which physical stimuli (candle light and pain) become meaningful through cycling within the whole event that is a union of the so-called object with the so-called subject.

> More technically stated, the so-called response is not merely to the stimulus; it is into it. The burn is the original seeing, the original optical-ocular experience

[I] *Unless or until otherwise noted, all citations are Dewey, 1896*
[II] *James, 1890, vol. 1, pg. 25*

> enlarged and transformed in its value. It is no longer mere seeing; it is seeing-of-a-light-that-means-pain-when-contact-occurs.

This can only takes place in a world where 'thought stuff' and 'thing stuff' *can* coordinate – and more, a world wherein the coordination naturally becomes its own 'thing'. This is Darwin's world. And within this 'thing' of a world, we can only come to know 'things' after we recognize our own 'thingness', and *value it accordingly* – neither too much nor too little. This happens when the coordination of our thoughts of our 'self' and the 'thing' of our 'self' takes on its own value, when we (all our various selves) make some 'thing' known to 'us' by making it part of our own 'thing'.

The origination of value, which is the act of valuing some actual potential, but also the transcendence into being of some actual 'thing', is a concatenation (a stitching together) of (as Whitehead would say) actual events. Like all living beings, we *are* when we recognize some deficiency within the coordination that is us (which is nothing more than our own knowing bound within that otherness which is our own body) and seek to rectify it. In this, our psychology functions as any successful work of science or art, which must take on its own completion, patterned by its deficiencies and not by other interests. Dewey channeled James and came up with Wright, only to find himself extrapolating on Darwin. His vision is quite reminiscent of Wright's *objective motivation*, and it leads us always towards that reciprocal incorporation that take place between/within brute contingencies, and our knowing of them. To coordinate the contra-actions between/within our situation and our knowing is to generate nothing out of nothing, it is the birth of that fabulous non-existence that is you, me and every other human soul, which is conditioned on nothing except that we do it well, attend and incorporate our circumstances properly, and survive to do it again.

> The sensation or conscious stimulus is not a thing or existence by itself; it is that phase of a coördination requiring attention because, by reason of the conflict within the coördination, it is uncertain how to complete it. It is to doubt as to the next act, whether to reach or no, which gives the motive to examining the act. The end to follow is, in this sense, the stimulus. It furnishes the motivation to attend to what has just taken place; to define it more carefully.

This is the heart of Radical Empiricism, bound within James' Psychology; a stimulus is a thick coordination, it is an interaction noticed, which is its own kind of incorporation. These things are generally called *facts*; and in their multitudes they return us always to the immediacy of sensation – that dangerous zest of time and space through which we pound out our little lives. As James wrote of his Principles his brother Henry, "I have to forge every sentence in the teeth of irreducible and stubborn facts."[I] But these facts include us; and we are as dangerous and stubborn as anything – and more dangerous by far than most. And so our own interest rushes us back to that most urgent demand, carved in Delphi so long ago, *know thyself*.

The most basic questions of this sublime resolve all revolve around notions of consciousness. And the most basic of all of these is the title of James' most provocative essay on the subject, *Does Consciousness Exist?* His answer is a clearly qualified *no* – it does as a function, but not as 'stuff' – it is not an object. This dovetails quite neatly with our entire thesis that the interaction is what actually is. For no *thing*, no event in time and space *can* exist apart from the particulars of its 'event-ing', which is its own coming into being. In Peircean terms, this is Trinitarian; oneness is the signaling event of firstness (the establishment of potential), passing through the Darwinian Jungle of secondness (survival in the welter of action on action), and establishing a thirdness (a heritage which takes on its own semiotic character and thereby becomes a firstness, (a process re*it*erated so long as life exists). In Jamesian terms, this is Unitarian; all this is one; and the experience of us-ness is a fragment of the ontologically intertwined is-ness that is all function, all action, all play of one and other which can only be represented retro-*act*-ively, and only within/through/by specific circumstances. Being is knowable only in the past tense just as it all *is* only as it is shaped by and shapes the specifics of its *having been*.

The consequence of Darwin's Ontology include the Pluralistic Universe of Pure Experience as Radical Empiricism; which is the uncountable variety of potential limited only by that singular 'immortal', the *past*, present as a singular stream of interactions which is itself a fragment of a thickly infinite cascade of consequences therein and

[I] *Whitehead, 1967, pg. 3, Science and the Modern Word*

thereof, and known within/through/ by/as taking part within it. As the good reader will no doubt recall, Peirce and James had different vistas of intent; James focused on the merely human, called it 'Pure' (as it is its own *thingness*) and approached it almost exclusively on that level. (All the while, of course, he never forgot the thingness of other scales of being; he merely saw enough problems in our dealings with our scale of usness to occupy his attention). On the other hand, Peirce always seemed to find the vastness of *not-I* to be of more pressing concern; and he focused equally on scales that ranged greater and lesser, working both with that of which we are part, and that which is part of us. For now, having noted this confluence of thought, we can save further discussion of Peirce's cenopythagorean perspective for its own time and place and keep to the question at hand: *Does Consciousness Exist?*

Alfred North Whitehead lionized the essay in his seminal *Science and the Modern World* as the contemporary equivalent of *Discourse on Method* by Descartes. His argument is not that the essay singularly revolutionizes philosophy, or even offers a new system or paradigm, only that it sharply redraws what questions we are able to ask, and hence what answers we are able to develop in all our various philosophies and sciences. My claim that we now live in a Jamesian world is strongly supported by Whitehead[45], who furthers the claim by pointing to those places where philosophy and science work most closely together such as cognitive studies and neural physiology. Speaking of the contrast between Descartes and James, and the problems of Modernism, Whitehead tells us:

> In agreement with the organic theory of nature … I shall for my own purposes construe James as denying exactly what Descartes asserts in his *Discourse* and his *Meditations*. Descartes discriminates two species of entities, matter and soul … for Descartes, minds and bodies exist in such a way as to stand in a need of nothing beyond themselves individually (God only excepted, as being the foundation of all things); that both minds and bodies endure, because without endurance they would cease to exist; that spatial extension is the essential attributes of bodies; and that cogitation is the essential attribute of minds …
>
> [Descartes'] fundamental principles are so set out as to presuppose independently existing substances with simple location in the community of temporal durations, and in the case of bodies, with simple location in the community of spatial

> extensions. Those principles lead straight to the theory of a materialistic nature, and philosophy took charge of the cogitating minds.[I]

In this, we see why Whitehead places Descartes and James "in close juxtaposition", as "neither philosopher finished an epoch by a final solution of a problem. Their great merit is of the opposite sort. They each of them open an epoch by their clear formulation of terms . . ." Whitehead came down clearly on the side of a Jamesian world, and claimed organic psychology as basic to all worthwhile philosophy; building upon the use James made of/found within Darwin, Whitehead argued an incorporative metaphysics in which:

> The private psychological field is merely the event considered from its own standpoint. The unity of this field is the unity of the event. But it is the event a one entity, and not of the event as a sum of parts. The relations of these parts, to each other and to the whole, are their aspects, each in the other…
>
> A body for an eternal observer is the aggregate of the aspects for him of the body as a whole, and also of the body as a sum of parts … The fundamental principle is that whatever merges into actuality, implants its aspects in every individual event …
>
> These aspects are aspects of other events as mutually modifying, each the others. In the pattern of aspects they stand in their pattern of mutual relatedness.
>
> The aboriginal data in terms of which the pattern weaves itself are the aspects of shapes, of sense-objects, and of other eternal objects whose self-identity is not dependent on the flux of things. Wherever such objects have ingression into the general flux, they interpret events, each to the other. They are here in the perceiver; but as perceived by him, they convey for him something of the total flux which is beyond himself … They are modifications of the subject, but only in their character of conveying aspects of other subjects in the community of the universe. Thus no individual subject can have independent reality, since it is a prehension of limited aspects of subjects other than itself …
>
> Cognition is the emergence, into some measure of individualized reality, of the general substratum of activity, poising before itself possibility, actuality, and purpose.[II]

This is vital to the source of our understanding in that our own subjectivity can only exist by the incorporation of the actions of other subjectivities; moreover, it actually *is* these incorporations. Allowing James some space to speak for himself on the subject, we see

[I] *Whitehead, 1967, pgs. 144-5*
[II] *Whitehead, 1967, pgs. 150-3*

him using Radical Empiricism as the only way of knowing that this Pluralistic Universe, as well as the ‘strictures’ of Experience generates therein, as generative of Wright’s a-subjectivity, which is the very center of his infamous essay:

> My thesis is that if we start with the supposition that there is only one primal stuff or material in the world, a stuff of which everything is composed, and if we call that stuff 'pure experience,' then knowing can easily be explained as a particular sort of relation towards one another into which portions of pure experience may enter. The relation itself is a part of pure experience; one of its 'terms' becomes the subject or bearer of the knowledge, the knower, the other becomes the object known.
>
> As 'subjective' we say that the experience represents; as 'objective' it is represented. What represents and what is represented is here numerically the same; but we must remember that no dualism of being represented and representing resides in the experience per se. In its pure state, or when isolated, there is no selfsplitting of it into consciousness and what the consciousness is 'of.' Its subjectivity and objectivity are functional attributes solely, realized only when the experience is 'taken,' i. e., talked-of, twice, considered along with its two differing contexts respectively, by a new retrospective experience, of which that whole past complication now forms the fresh content.
>
> The instant field of the present is at all times what I call the 'pure' experience. It is only virtually or potentially either object or subject as yet. For the time being, it is plain, unqualified actuality, or existence, a simple that. In this naif immediacy it is of course valid; it is there, we act upon it; and the doubling of it in retrospection into a state of mind and a reality intended thereby, is just one of the acts. The 'state of mind,' first treated explicitly as such in retrospection, will stand corrected or confirmed, and the retrospective experience in its turn will get a similar treatment; but the immediate experience in its passing is always ' truth,' practical truth, something to act on, at its own movement. If the world were then and there to go out like a candle, it would remain truth absolute and objective, for it would be 'the last word,' would have no critic, and no one would ever oppose the thought in it to the reality intended.
>
> I think I may now claim to have made my thesis clear. Consciousness connotes a kind of external relation, and does not denote a special stuff or way of being. *The peculiarity of our experiences, that they not only are, but are known, which their 'conscious' quality is invoked to explain, is better explained by their relations these relations themselves being experiences -- to one another.*
>
> The 'I think' which Kant said must be able to accompany all my objects, is the 'I breathe' which actually does accompany them. There are other internal facts besides breathing (intracephalic muscular adjustments, etc., of which I have said a word in my larger Psychology), and these increase the assets of 'consciousness,' so far as the latter is subject to immediate perception; but breath, which was ever the original of 'spirit,' breath moving outwards, between the glottis and the nostrils, is, I am persuaded, the essence out of which philosophers have

> constructed the entity known to them as consciousness. *That entity is fictitious, while thoughts in the concrete are fully real. But thoughts in the concrete are made of the same stuff as things are.*[I]

And so our conscious being, like all being, flows Into this Universe, and Why not knowing / Nor Whence, like Water willy-nilly flowing – and like every body that ever lived, it *is* only so long as it *breathes*, but what about the substance of that 'breath'? We may be forced to part with our most foolish notions of our 'self', but is their any hope for maintaining the so-called objects of our thinking? What about Ideas, what kind of being can we claim for that most precious water of life? If consciousness has no ontological status (actual being), can we claim it for the many notions of/by/through which it exists?

> A permanently existing 'Idea' which makes its appearance before the footlights of consciousness at periodical intervals is as mythological an entity as the Jack of Spades.[II]

Ideas too are concatenation; we don't stitch *with things*, but the stitching brings into being both the thread and the cloth. Taken as a one (the only we can) this is the 'neutral' monism of Pure Experience – and a consequence of Darwin's Ontology. Pure Experience is the action of incorporation/decorporation that is itself the fact and the action of living. What we know of the processes we commonly call *us*, however many of us fail to find comfort with the fact that these *things* (these events in time and space we call our *selves*) are always 'accidental' variations, spandrels. The being that thinks that it is *I*, is a liquid spandrel, the flow of the stream that is formed by and reforms Darwin's tangled bank, and the cascading incorporation which exists only so long as it 'settles' the heritage of past within the flow of the present. But none of this is in the abstract; the moment we catch ourselves in the flurry of all this, we pause and remind ourselves that:

> If we were readers only of the cosmic novel, things would be different: we should then share the author's point of view and recognize villains to be as essential as heroes in the plot. But we are not the readers but the very personages of the world drama.[III]

[I] *James, 2003, pg. 11*
[II] *James, 1961, pg. 24*
[III] *James, 1996, pgs. 48-9*

This surely puts the Malthusian quality of Pure Experience into a sharper perspective: when the plot thickens, characters have a tendency to die off, and those that don't are forged anew, reborn in the circumstances of their survival. But this is *not* an abstraction. James spent his youth in pampered hypochondria and his adolescence contemplating suicide; but his considerations of Darwin – of that thoughts are actions and actions have consequences led him to conclude that he had the capacity to renew his living. This was his salvation, his vocation, and the foundation of his psychology.

***

What James took from Darwin was first and foremost a sense of freedom, a joy at the recognition that the very fact that the world shapes us, grants to us an ability to shape the world – thereby conferring on us a limited but functional agency, which is free will. This and other such notions were no longer mere sophistry and illusion, but could be subjected to the cycles of science. And so, taking his life in his hands, this awkwardly flamboyant and depressive young student of art and escape turned resolutely toward the study of biochemistry and neural physiology – and thence to psychology and philosophy.

For James, Darwin demands that we view 'the mental' as a product of variation and selection – it is the 'survival the fittest' of possible lines of action. From here he builds his entire psychology. And again, we are faced with a similar dilemma; extrapolating from *Principles*, we see that Consciousness has 5 components, or factors. Taken together, they fairly represent the psychological consequences of Darwin's Ontology.[I]

First, a thought is individual, each consciousness is self contained and insulated from intrusion by other consciousnesses. Second, within each individual consciousness, states are constantly changing and no experience can be repeated. Third, thought is a sensibly continuous 'stream of consciousness' and within the stream, the flow varies enormously, hence all attentive states are conscious, but not all consciousness is attentive. Fourth, consciousness appears to deal with objects independent of itself – that is, it knows it is

[I] *James, 1890, vol. 1, pgs. 224-263*

thinking about some object. The consciousness of the object comes first, followed by recognition of the object as thought. In this, reflection is built upon personal habit. And fifth, consciousness is always selecting from the welter of sensation it encounters, which to ignore, which to focus upon. This is accomplished by (or rather, this is the effect of) valuation – which, when successful appears as variation, habituation, and genuine emergence. And of course, this function of so judging the relevance of the sensation did not appear *in toto*, but co-developed alongside the increasing complexity of life – through the processes of variation, habituation, heredity and natural selection.

In the same manner in which only individuals reproduce but only populations evolve, only the individual knows (within specific events and exactly one moment at a time) yet culture shapes all knowing (in the widest definition of the term, referencing integrated systems of human knowledge patterns – including inherited genes, expert care of humans, gardens and bacteria, as well as aesthetic profundity, etc.). Or rather, we know only through/within/by culture, through the greater and lesser habituations that are the generation of personal habits writ large or small. Moreover, these factors (or integral components) function together to 'create' (to *be*) consciousness – the knowing function, only as the events in/of which we take part stream by (the mapping of our own consciousness together with the terrain mapped). And self-consciousness is the flowing notice (the metaphysical incorporation) of habit – which is the settling into 'place' of some repeatable action of living, the opening and closing of possibility. Contingent to what comes, accidental in happenstance. It is a liquid spandrel.

The 'stream of consciousness' is perhaps the best known and least understood metaphor James gave us to consider. As it is commonly understood, it is absurd. The manner in which, for example, the Beat poets used the term is rooted in the very supernaturalism James hoped to counter. When Kerouac et al. spoke of their 'stream of consciousness' writings as one-directional, as issuing forth from a magical *I* and flowing 'down' to the benighted 'squares', it was as barbarians claiming special status for their bloody selves. By contrast, James saw that streams exists only as they are formed by the factors of their being – climate, geography, weather, etcetera – *and only as they re-form* these same

factors! More, a stream exists only through/by/within the play of the interactions of the exact factors of these larger interactions. And it is only through all this, that it becomes its own factor, its own 'thing'. A stream is made by/within its remaking of land-plus-weather-plus-climate-plus-biology-plus-geology-plus-etcetera, just as 'we' are made by/within our own remaking of every such factor, past and present, of which we have taken part – known and knowable consequentially, and represented by/ within acts of hypothesizing. In this, the Stream of Consciousness claims more than mere 'fluidity' of/within our thoughts, and far more than the continuous flow that I call *I* – it argues a flat rejection of the egoism that claims a supernatural spring or source of the self. The evidence for such argument both follows that of Darwin's Science, and works through/within Darwin's Ontology

When/as we notice that we are fragments of a whole, we notice ourselves and the fact of our own individual being. The wholeness of this process did not drop from the heavens unannounced, but evolved along with the complexity in the same manner in which drunken Australians stumble through the sheep pasture of life.[I] Except this 'progress' is a circumambulating movement into deeper concatenation of greater scales, and cannot be fairly represented by singular individual beings, moving of their own accord and wholly of themselves 'into' complexity. As we have already seen, nature holds no such thing; however it does contain (and is) a concatenation of being which seems far greater than the organism that contains my little *I*. Indeed:

> The body is the innermost part of the *material* self in each of us; and certain parts of the body seem more intimately ours than the rest. The clothes come next. The old joke that the human person is composed of three parts, body, soul, and clothes, is more than a joke.[II]

The empirical 'me' consists of all that is 'mine' – all of what we know as 'me'; this includes our mind, our mores, our face, our presentation/aspect, family, and etcetera – genome as well as gaia, inner fish and outer astronaut. 'Me' is an ecosystem, a heritage of emergence ontologically bound across infinite scales, all-of-which and the-whole-of-

[I] *Myers, 2009*
[II] *James, 1890, vol. 1, pg. 292*

which, and even all-of-that-, all succumb to Darwin's Science. Of course 'our' scale of things is not the ultimate or even the primary scale of things, and our 'self' extends as far 'inside' as it does 'outside' – always so far as relevance pertains.

The wholeness of this processing likewise responds scale by scale, according to the some situationally specific demand. Psychology, as it is generally conceived, too often remains bound within a zombie culture of vulgar Neo-Platonism – this conception lies behind the incoherent interpretations of the stream of consciousness, as expressed as foolish notions of a 'self' uniquely existent and supernaturally composed. The ego-satisfaction that comes with this has created various absurdities; including but not limited to bad poetry, barbaric notions of angelic perches from which the 'best' of us survey creation, and pathetic claims of status, ordination and 'pre-salvation' that claim to distinguishing some small social group (or chosen people) from the bloody hell of existence.

Perhaps the most subtle and difficult to extinguish such consequence is the notion that we somehow make our decisions 'ourselves' – that 'we' are/have agency that is detached from the many scales of our own being. It is the foolish notion that free will is 'free'. It is as if I 'control' my decisions, *as if I even have an 'I' to even make such an attempt*! If stout evidence existed that such a detached 'decider' held such exclusive agency, or even just a lion's share of it, this would then contradict the whole of James' Psychology, and not incidentally falsify Darwin's Ontology. But we find sometimes our 'outer' selves making decisions, as when a uniform dictates a man's behavior. And we find sometimes our heritage 'chooses' for us, as when our genetic structure 'decides' that we get 10 fingers and 10 toes. But genetic expression is only one of many ways in which our 'inner' self, our long despised body, makes decisions for us; for our heritage is also brought to life instinctively, through 'choosing' what to incorporate within 'us'. Likewise, we sometimes 'choose' our 'heritage' (actually, we quite commonly do) by selecting which few of our countless ancestors we claim as 'ours' and upon whom we pattern our living. Importantly, all of these 'choices' are decided not on one scale of *I*, but across many. Our fear of bears makes this clear.

> Common sense says, we lose our fortune, are sorry and weep; we meet a bear, are frightened and run; we are insulted by a rival, are angry and strike. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be. Without the bodily states following on the perception, the latter would be purely cognitive in form, pale, colourless, destitute of emotional warmth. We might then see the bear, and judge it best to run, receive the insult and deem it right to strike, but we could not actually feel afraid or angry.[I]

This is the James-Lange theory of emotional response; its validity lies in the manner in which it interprets emotion as an emergent coordination of *this* and *that*, represented by living action and the survival function. While the theory is often discounted by much of theoretical psychology, this is primarily due to a false expectation that emotional function is limited to mechanism.[46] But it is absurd to read James as if he were Hobbes, as if the emotion comes *after* a visceral *reaction*, caused by it like one billiard ball hitting another. Our reading is that the fear experienced when confronted by a bear in the wild is a *whole body response from within the situation*. It is its own *gestalt*. The whole of the organism, reaching into the depths of our DNA and out to the furthest reaches of possibility (which includes the possibility of getting mauled), incorporates that moment by generating a particular 'field' or 'flow' of consciousness which we then, after the fact, call fear.

In the same manner in which James re-constructed 'vital' to describe a quantifiable expansion of living potential, he moved emotions from Metaphysics, to metaphysics. To a ridiculous degree, much of passes for Philosophy consists of insupportable emotional claims of an entirely 'mental' (read, supernatural) affair, but James saw such emotions as part of us, and subjected them along with *us* to the natural world. Our fears are justified if they are 'real', if they are part of a whole process, which binds within one moment the fathomless certainty of the past together-as-one with dreams of having a future. Organic form is the binding of that moment within life; it is/has evolved naturally to run or fight or freeze-and-change-color or stop-and-think-about-it, etcetera – as 'instinct demands', as each circle 'closes'. Just as a hypothesis is 'true' if and only if it is generative of further

[I] *James, 1890 vol. 2, pgs. 449-50*

(more) knowing, just as instinct is 'real' if it tends toward success in some moment and points to a furthering therein, so too, fear is 'true' if it reaches into what-is, and 'answers' some vital need. Life is these moments of incorporation that *tend* towards continued living. By submitting emotion to the natural world while recognizing it as its own 'thing' and granting 'it' its own agency, we argue: when fear doesn't work, it does not survive. Surely there is here some lesson to be derived with consequence to our lives.

We could easily continue to mine James' Psychology for clues into the consequences of Darwin's Ontology, but this would be the subject of its own book. And so, leaving aside a lingering fear of short-changing the story, we move on to the thing we all have been waiting for, the star-billed principle at the center of Darwinian Methodology, which is the critical heritage of that little philosophical club James co-founded in his youth, the product of the Metaphysical Club of Cambridge Mass: Pragmatism.

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And so, finally, we cannot turn our attention away from James without at last exploring his best-known contribution to philosophy, Pragmatism. And as Pragmatism is (almost) consistent in dismissing the Great Man theory of History, so too shall we. Almost. James tells us that the pragmatic doctrine was 'Peirce's principle', but we have no reason to accept this proprietary claim, particularly in light of the fact that when James made that claim (20 plus years after the fact), his old friend was already living on his charity. Also, we recall that any number of essays from the period were (almost) as telling of the pragmatic method as the one James tells us started it all: Peirce's 1878 *How to Make our Ideas Clear* (brilliant though it is). And in private letters between the two, Peirce wonders if it wasn't some other member of the club – perhaps Green, or even James, who first formulated the concept and began to use the term in its new way. (That last may have been a bit politic, Peirce certainly had no difficulties defending the specifics his conception where they differed from James – going so far as to renounce the term, switching to the ungainly Pragmaticism, to distinguish his conception from all others.)

Rather, as good Darwinists, when we look to the emergence of some new form, we look for the interactions that both *herald* and *are* its coming into being. We look for a point of differentiation within the continuum of what is, rather than some magical or supernatural event, be it god or genie. We point to entire ecosystems, and to the interplay therein. And when we have done with all that, we then look for a hero, as humans tend to do. After all, it is individual acts of accomplishment (survival and reproduction) that allows populations to evolve and novelty to originate, while the hobgoblin of foolish consistency is only a bugbear of our own imaginings. We like heroes; moreover, we need heroes like Peirce, who risked – and lost – everything in his world in order to discover his true place within it. And we need heroes like James, who won great fame but never claimed it, who valued his friendships with commitment, and who always looked for the good in people, and usually found some share of it.

There are at least three reasons for saving Pragmatism for last. First, it makes a great segue into Peirce. Second, it is so interwoven through out this entire thesis it almost goes without saying. And third, it represents its own complete argument for the validity of Darwin's Ontology. To this last point, in Darwin's Ontology the interaction is what actually is. No object *is* in and of itself; nothing has a metaphysical warrant – not even *stuff*. When we want to know what stuff is, we look to the consequences of its interactions, what comes out of them – the 'up-shot' as Peirce liked to call it.

There is a fourth (and likely a fifth and sixth . . .) reason to leave Pragmatism for last, which is that as James conceived it, it represents a timid approach to the great question of Darwin's Ontology. Throughout the book, *Pragmatism*, religion is presented as an object, (which makes it secondary to the pragmatic and merely one of many ways of making one's way in the world) conceived of in traditionalist terms. In this, James treats religion as if it were its 'own' thing, which we can know – and actually a rather unique thing with unique properties. And it is a fair criticism of James that he was sometimes sentimental to religious attachments – despite his adamant empiricism – and that this weakens all of his notions. However this is not consistent within his thought, e.g. in *A Pluralistic Universe*, *Varieties*, throughout his *Psychology* and much of his work, he clearly identifies the

religious in Darwinian terms, as *religio*, the binding together of heritage and potential that is our relation to the universe, as well as our very own selves. Here, he posits no 'object' to religion, as he posits none for 'object' itself. But now we get behind ourselves; leaving this issue aside, we return to *Pragmatism*, and read from James:

> To attain perfect clearness in our thoughts of an object, then, we need only consider what conceivable effects of a practical kind the object may involve – what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, whether immediate or remote, is then for us the whole of our conception of the object, so far as that conception has positive significance at all.[1]

And there it is, perhaps the most significant upshot of Darwin's Ontology. Because ideas, like species, originate *a posteriori*, after/through the twinning fact of generations upon generations of natural coordinations, and because these 'populations' evolve as liquid spandrels, opportunities taken advantage of in the cascading of individually accomplished events of minding, and because minding is stream, a flowing constellation of causation formed by and reforming its surrounds; because of all this, there are consequences.

There is in nature no essence, nothing classically *a priori*, neither can we discern any first principles, nor is there any golden yardstick by which we can mark our take, and there is no *other* world in-which/to-which any such things pertain. No ideal can stand apart. Nor do we even have a firm basis for our very own notions of our selves; even consciousness is tossed under the bus. There is nothing but consequences with consequences, nothing but the upshot. Our conception of these consequences is the whole of our conceiving; and whole of our being is but bright constellations of the consequences within and to which we are bound. All of everything is nothing but what comes – it is what survives the culling of what might-have-been to twine itself further within what-is. This is pure Darwin; for all its endless wonder, life is a consequence of life, a merely possible consequence of living.

[1] *James, 2003, pg. 21*

Most of what James offered for our consideration is bound within that definition of life from so many pages ago. The living thing, the thing that continues, that incorporates and decorporates, physically and psychically, – as it is want to do – the thing that 'wants' to go on living, *this thing exists*, physically and psychically, objectively and subjectively, only by resulting in its own being. Perhaps I contradict myself; there is nothing to it but to turn the page.

Charles Peirce and the Pillars of Chance

Pasteboard pies and paper flowers
are being banished from the stage
by the growth of that power of accurate observation
which is commonly called cynicism
by those who have not got it…[1]

It must be said that Charles Peirce did not live a pragmatic life. To the contrary, his inability to apply pragmatic principles within his personal life screams forth from his biography; it is apparent throughout his correspondence, as well as the commentary of those who knew him. Perhaps, as pure and unwarrantable speculation, we could argue that his focused zeal on questions of Pragmatism resulted from (or was generated within) this incapacity. But whatever else this means, it is also very clear that Charles Peirce lived true to himself. And in this way, it is fair to describe his life as a Greek tragedy – but not Oedipus Rex (his relation with his father was close and profound, although there were plenty of Cassandras spelling out his doom, had he only listened…), but something by Aristophanes – Clouds, perhaps. Certainly Peirce's life was bounded by early promise, angry creditors, deep cynicism of society and social norms, profoundly negative reactions to normative hypocrisies, and an honest struggle for a living truth thwarted at every turn – often by our Hero himself.

Clearly, Peirce was a difficult man. William James offered perhaps the best advice on how to deal with his peculiarities, the nettles recipe: grasp firmly and pull.[47] And this is precisely what James did when, in the late 1890's, he tugged out of his friends old writings a principle of great consequence: Pragmatism. More, this is what Peirce did with his life – hence the difficulties. Few of the many thinkers that Peirce met in his life would willingly put up with this manic genius shredding their concepts of their selves – always grabbing (often rudely) their most cherished notions and *pulling*. The difficult greatness of Peirce is largely due to fact that for this man, philosophy was *never* academic.

[1] *Shaw, 1894*

Growing up as he did at Harvard, the boy genius son of the founding professor of Mathematics and Astronomy, Peirce developed a strange relationship with the 'community of inquirers' that centered the scientific world of his time – he was indulged greatly at his father's behest, and seemed to expect it as a matter of course. As a young man, he spent the possibilities he was offered, along with his father's social/political inheritance, without regard to the cost. More, He could be quite a dandy, and enjoyed living on more than he ever earned. But none of this would have cost him so much if only he had been willing to live by the domestic norms of a man of his time, place, and class. Many a man had 'kept company' with the lower classes, but openly living with Juliette, (of whom we know so little but with whom he would spend his life), while separated but not divorced from his first wife, was a significant blow to his social/professional regard. The fact that Peirce's first wife was herself well-regarded and from a prominent Harvard family, and his second was (probably) a French speaking Gypsy with an unknown past, surely weighed heavily in his quiet but complete blacklisting from the academic and scientific life – and nearly every kind of educated employment.

But it was more than a merely pretended Puritanism that cost him so much; Peirce simply made too many enemies, and he often confused them with his friends. The most significant of these was Simon Newcomb, one of his father's former students who took over much of Benjamin Peirce's 'space' upon his retirement and passing (the directorship of Harvard Observatory and professorship of Mathematics). Not incidentally, Newcomb ran an active campaign to destroy any hope Charles Peirce ever had of having a career, tenure in any post – or eventually any position at all. This effort began long before Peirce's eventual professional destruction, and could only be described as successful. And yet Peirce never seemed to understand that Newcomb actually opposed him, and would write him as if he could rely on him for a positive recommendation. By contrast, James sent letter after letter for his old friend for any conceivable post; yet Peirce appeared not to value his commendation and often behaved as if all James offered was at best a bore, but more often a chore. In my humble opinion, this is typical of the personal myopia that cost Peirce most of all.

And yet the accomplishment of Peirce's foreshortened career ought not be understated – his contributions at Harvard Observatory helped determine the shape of the Milky Way; his use of wavelengths of light at a certain frequency to define the length of a meter was to become a scientific standard. And however he (mis)spent his European sojourns, wearing "beautiful clothes, etc." while "busy swinging pendulums at the observatory" (and however he thought "himself indifferently treated by the Paris scientists", [I] he was for a time considered one of the world's leading researchers on geodesy and gravimetry. And his years as an adjunct instructor in logic at Johns Hopkins University could have proceeded towards a professorship of Philosophy. But all this was stripped from him. Late in life, when James invited him to Harvard to give a series of lectures on Pragmatism, the event had to be held off campus and Peirce was denied even a walk across the Yard that had been his childhood home. And his last years were often spent without heat in the winter; he survived on charity arranged in part by James, and also his brother and his neighbors, including the founder of American Forestry, Gifford Pinchot.

Through all this, Peirce worked. He developed a logical framework applicable across a startlingly wide array of disciplines, and particularly useful in the development of Social Network Theory, Systems Analysis, and Artificial Intelligence. More, his Semiotics has shown itself useful as an approach to biology across a dizzying array of scales, from the genome to Gaia 'herself', and his philosophy of science and method of categories stand competent in an era of Chaos, Complexity, and Emergence. All this has brought about renewed interest in Peirce, such that the man seems never to have been more successful than he is right now, nearly a century after his death. This interest would, in my opinion, be greatly improved by viewing the 'Principles of Peirce' as extrapolations on Darwin's Science. And hither we ho. Yet as we go, we recall that the natural limitations of our little study forces us into highly minimalist sketches of all that we survey; and so as we turn to Peirce's ideations, it should again be clear that we do a disservice to the man if we leave the impression that we *have* him. On the contrary this is but a fragment, as are we all within Darwin's Ontology.

[I] *Parry, 1935, vol. 1, pg. 362*

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We must begin with Peirce's writings on evolution, as these can easily be read as though Peirce rejects Darwin, which if true would contradict a significant element of this thesis. It must be said that Peirce tended to underestimate everyone's work but his own, and this clearly included Darwin; but even if he did knowingly work within Darwin's Ontology, this would in no wise pre-empt Peirce from tearing into any weakness he perceived therein. So the larger questions are: did Peirce accept Darwin's Science? Did he work within Darwin's Ontology? (These two questions are often given conflicting answers by individual thinkers.) More, did he see Darwin's Science as an expression of that larger view on/of/in the world as represented within our thesis, which we define/name Darwin's Ontology? Finally, did Peirce believe he had located some force or source of/for our evolutionary heritage greater than natural selection – and is this supernatural? I argue: yes, yes, no (but he should have), yes, and a brilliant but clearly qualified not really.

Peirce considered himself Christian – he wrote on his faith repeatedly and we have no reason to doubt him. However, he never seemed to have much time for actual church, and revitalized his belief in God by combining it with belief in evolution. For Peirce, the function of evolution is far greater than the mechanisms of natural selection, it is love – the love he found in his idealized but never realized, church. And god represents *not* the fixed unchanging insensitive Old Testament God of pre-ordained ideals, determined paths, and personal vendettas – functioning both as the Platonic Form of Pure Goodness as well as the Aristotelian Unmoved Mover. To the contrary, Peirce's is rather a hippie Jesus/Francis kind of god where*in* love represents the necessary presence of mutuality and reciprocal becoming, the coming into being by/through/within togetherness (synechism). Love is the function, the fuel and the fueling of the mechanisms, the action of/within, and actual instantiation within/of, evolution. Peirce's Love is in no wise trifle or trite. In the human self, love represents the act (and action) of kenosis by/through which subjective need is replaced by objective motivation – which replaces ignorance and ego with knowledge and growth. In the process of evolution, love represents the

growth of formational (genetic) knowledge and the increasing complexity (the scale thick relatedness) of life, the 'knowing' that all living beings share.

We will come to his articles of faith by and by, but the point now is that Peirce set Darwin's Ontology square in the center of everything, but he called it Evolutionary Love and claimed it as his own (with some highly critical reference to Henry James Sr. – see footnote 39, as well as the broader streams of Christian Mysticism). He did not credit Darwin with the insight to see that the natural selection hypothesis can only function in a world of consequence and connection – this world where living things exist as parts of a whole, rather than as the whole of themselves. More, he did not see that Darwin portended the end of the absurdly bifurcated Modernism of Descartes and all its ghostly machineries. Indeed, Peirce claimed that honor for himself. He fancied his own conception of the actual agency of creative love (agapism) to be an understanding vastly superior (more useful) to the coupling of pure chance (tychism) with heredity – expressed in/as mechanism through/as necessary causation. Peirce conceived of Darwin's world as forever-trapped, not only in *struggle* but in absolute war of individual against individual – in an atomic world where the only peace is power. His error lies how he did not see that to proceed in the face of inherent difficulties is not necessarily violent (an error that has become commonplace in the last century and a half. In confusing Darwin and Hobbes, Peirce alternated between claiming Darwin's mechanisms but denying Darwin's world, and claiming Darwin's world but denying it has anything to do with Darwin.[48]

So far as the Natural Selection Hypothesis is concerned, Peirce used it as the vital center of nearly all his arguments – he clearly accepted (worked within) both Darwin's Science and Ontology, however he failed to credit Darwin with either. It is correlative to/within this thesis that Darwin's Ontology is stronger (of more use) than the ontology (theory of being) of any rendition of Neo-Darwinism yet proposed, be it Dawkins or Mayr, Watson, Wilson or Gould, and etcetera. This includes Peirce's grossly strict reading of Darwin. It is to Peirce's discredit that he presumed Darwin to have limited his hypothesis to the certitude of Neo-Darwinism's Newtonian mechanisms rather than the more general conception of being as inter- intra- trans- action (which we call Darwin's Ontology). It is

greatly to his credit that Peirce focused on rectifying this perceived failure, and in so doing contributed mightily to the reconstructing both logic and love in Darwin's world wherein nothing is certain, especially not our selves. Peirce's failure, but also his successful response therein, both serve to support the hypothesis that Pragmatism originated as a study of and extrapolation within Darwin's Ontology.

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As Peirce conceived it, Pragmatism is a precision. He was so profoundly disappointed in the manner in which the concept was adapted/adapted itself within popular culture, that he invented a new word, Pragmaticism, to distinguish his take on the concept. It is commonly held that Peirce proposed this new word in reaction to James' appropriation of the old. But this presumption is questionable – at best it is only a fraction of the tale. It is dismissed in part by Peirce's own words – his *philosophical* problem with James was primarily that he thought him a wuss. For Peirce, it was an insult to philosophy that anyone as tender hearted, cheerfully sentimental and openly emotional as James would be honored *a philosopher* (while he was denied). For him philosophy must always be hard, sharp and quick with the cut. His position was not that James reasoned unsoundly or argued in bad faith, but that he was soft, 'unmanly' and lacked aggressive precision – and thus tended to fail with the thrust. And quite so, Peirce could hardly refute James without refuting himself. Their respective ideations are bound so tightly together that to tease them clean apart takes its own book; it goes without saying that the common thread is Darwin's Ontology.

Following the Pragmatic conception of the 'evolution' of ideas, we clarify Pragmatism not by seeking its 'source' (which, following upon James, is traditionally cited as Peirce's essay *How to Make our Ideas Clear*), but rather its differentiation; we look to the emergence of Pragmatism as a cohort or *population* of notions, from the one which preceded it, clarified *after the fact* but barely distinguishable beforehand. And of course we also plant markers at significant moments within/of its 'evolution' – which is partly what James was doing when he cited Peirce as 'the' founder of the doctrine. (Another part of what James was doing was extending his own social and academic prestige to

assist his old friend in his time of need.) However, as we are speaking metaphorically (ideas are not organisms, however both depend on interpretation to exist), it does not help us to demand (and hurts us to pretend) an absolute precision. Instead we look for a functional integration that works to assist us in clarifying some portion of our Korzybski map – relative to the origination of mankind, and the capacities that have resulted thereof. Pragmatism originated within/through a community with this exact focus.

Moreover, every member of the Metaphysical Club of Cambridge (even Fiske!) appears to have accepted (as method as well as theory) that ongoing clarification is a persistent necessity as interpretation is a fundamental act of living; and so, while the objectivist fallacy is distinct from the fundamentalist, both result from a refusal to concede to interpretation: sans singer, sans song – but not sans end, unless we fail in our sentience.

Evidence that Pragmatism (as Peirce understood it) consists of extrapolation upon/within Darwin's Ontology is woven throughout his 1905 essay *What Pragmatism Is*. As with everything the man wrote (particularly his later work), this is an essay that must be read with care – it is dense and confusing and expresses much resentment couched inside brittle manners, but it is both short and online (find it, read it). Here, he states that the proof of his principle is a 'closed' question, "for it would essentially involve the establishment of the truth of synechism"[I] – which is the manner in which interaction is what actually is, and *all-that-is* is nothing more than the interactions of *is-ness*.[49] This is to say, Peirce argues that to refute Pragmatism is to pretend away the interconnectedness of living things with each other and their non-living environment – and that this extends to both situation and heritage. Darwin devoted his life to exploring the hypothesis that living forms result from the encounter of historic (ancestral) and situational interactions – and that this encounter is an ongoing process. We extrapolate on this by claiming that life is *and* is formed by/of/within living interconnectedness, the mutual incorporations that are scale thick living processes: Peirce assumes Darwin's work as a matter of course – though as per our earlier discussion, he did not always offer credit where credit is due.

[I] *Unless otherwise noted, following citations are: Peirce, CP 5.411-437*

From his first encounter with *Origin* through to his most mature work, Peirce came to regard any attempt to refute this assertion to be as pathetically misguided as pretending that Newton was wrong about Gravity while leaping off a tall building. Peirce connects synechism to the reality that "in truth, there is but one state of mind from which you can 'set out,' namely, the very state of mind in which you actually find yourself at the time you do 'set out' …" In juxtaposing this statement with the one above, Peirce builds upon the most basic elements of Darwin's Ontology – living things are both individual and intertwined; they exist only in/of/through exact situations which are themselves a twinning of the heredity of past situations with the needs of the present (– as limited by/within the constellations of causes that form/forge all *physis*, living and not). More, individuals reproduce which allows heredity to establish and populations to evolve, which allows origination to proceed and novelty to exist; likewise, we think (subjectively exist) individually but only through/within some specific, specifiable and consequential context in/of/through which we emerge, and which can be represented as an instantiation of a metaphysical context, which is the 'you' that you discover 'setting out' in the world.

Peirce is consistent in arguing, "pragmatism is not a *Weltanschauung* but is a method of reflexion having for its purpose to render ideas clear."[I] In this, of course, he argues with James, for whom philosophy is all about the world-view (the metaphoric arc) such that method and technique are necessarily subsumed by therein. By contrast, such technique of philosophy was beneath Peirce's consideration; he found it unconstructive of clarity and precision. However, it should be clear that both men believed that the construction of any such world-view is a foray into always-suspect abstraction and as likely to obfuscate your notions as to clarify them. Not that this ever stopped either of them from doing it (not that *any* living – hence minding – thing *can* stop such abstracting), but it did serve as motivation to ground themselves in empiricism – not as a presumed (and impossible) 'objectivity' but in the 'objective motivation' so critical to Wright. Yet too, in a contrary compliment to his own nominalism, Peirce makes it clear that: "Not only may generals be real, but they may also be physically efficient, not in every metaphysical sense, but in the common-sense acception in which human purposes are physically efficient." And so

[I] *Peirce, CP 5.13 n. 1, Personal Interleaved Copy of the 'Century Dictionary'*

while we suspect all abstractions, we don't pretend they don't exist (have consequence). After all, "Generality is, indeed, an indispensable ingredient of reality; for mere individual existence or actuality without any regularity whatever is a nullity."[50]

And indeed, Pragmatism represents but one of the countless generalities (alongside such notions as truth, justice, the 'American way') through/of which Peirce wove himself into being; and whether we think of it as a 'take' on the world or a technique for living therein, it remains profoundly relevant just as James called it when he reminded the world of this ferocious thinker. The citation James used in defining Pragmatism came from Peirce's *How to Make our Ideas Clear*: "Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object." The argument from here follows exactly as it did in our closing section on James. And indeed, for both James and Peirce, Pragmatism follows, and never does it lead. It is in accord with evolution as postulated by Darwin, in issues of *life*, everything that is, is *a posteriori*; there is no 'track' to follow, no 'form' to mirror, and no 'place' at which it all comes to a rest – except as living beings carve out some momentary respite through individual acts of minding of/in the world. The confluence of thought Peirce shared with James is apparent in the statement: "What the true definition of Pragmatism may be, I find it very hard to say; but in my nature it is a sort of instinctive attraction for living facts."[I]

How to Make our Ideas Clear remains a foundational essay in the differentiation of Pragmatism, even if it is not the 'mystical' 'foundational' point of the 'essence' thereof. And however complex the interweaving that produced the concept that Wright used long before, however its re-conception in/through the boxing lessons he gave to Peirce, James and all the Metaphysical Club, still we 'enter' Darwin's Ontology somewhere, if we are to approach it at all. This essay, along with at least 2 others from his younger days, *The Fixation of Belief* and *On a New List of Categories*, are concise, readable, and brilliant writings on the logic of Darwin's Ontology. Any of these would have served James in

[I] *Peirce, CP 5.64*

establishing his old friend's claim to Pragmatism. Much of our earlier extrapolations on *religio*, the function and vitality of belief, and the absurdity of fossilized abstractions can be found therein. More, these essays lay the groundwork for a new logic, a relational algebra that has already proven itself useful in navigating the dark jungles that exist within our world, our minds, and our minding of both.

Of course, we are not parsing the distinctions between Pragmatism and Peirce's ungainly named Pragmaticism. There are differences between James and Peirce, and between the young Peirce and the old, but these are not the point of our study and we leave them for others to explore. Rather, in seeking to define Darwin's Ontology, we mark the homology it shares with Pragmatism, and move on. We set aside the famed 'Principle of Peirce', and turn to the man's Logic and on to his Semiotics. But as we go, we remind ourselves that for Peirce, Pragmatism is above all else ferocious dismissal of the twiddling minutia of incoherently presumed difference via relentless attention to living consequence. As always, the Malthusian Scythe hangs like the sword of Damocles, threatening all who would fain rule their own thoughts. It is easy to waste one's life struggling over nothing.

> The essence of belief is the establishment of a habit; and different beliefs are distinguished by the different modes of action to which they give rise. If beliefs do not differ in this respect, if they appease the same doubt by producing the same rule of action, then no mere differences in the manner of consciousness of them can make them different beliefs, any more than playing a tune in different keys is playing different tunes. Imaginary distinctions are often drawn between beliefs which differ only in their mode of expression; -- the wrangling which ensues is real enough, however.[I]

We must, of course, take care not to confuse ourselves by thinking that whatever we call 'reality' (by way of whatever theory) actually exists as its own thing and not merely as that of which we are some part and is some part of us (lest we succumb to the succor of fundamentalism and devote our lives to the destruction of our greater selves). We seek instead to remember that while "we may define the real as that whose characters are independent of what anybody may think them to be … it would be a great mistake to suppose that it makes the idea of reality perfectly clear." This is because it is gross error

[I] *All citations on this page are: Peirce, CP 5.388-410, How to Make our Ideas Clear*

to think that any 'thing' – any event in time and space, is 'actually' independent. Applying the 'rules' of Pragmatism, we see that "reality, like every other quality, consists in the peculiar sensible effects which things partaking of it produce. The only effect which real things have is to cause belief, for all the sensations which they excite emerge into consciousness in the form of beliefs." We believe, and hence act upon, a constructed notional world that is its entanglement within some complex situation. To pretend our understanding of what-is *is* what-is, is to 'create' a reality wherein mutually informative interaction is seriously degraded and situational comprehension becomes a miraculous affair – restricted to what few heroes would brave priest and pirate in desperate quest to re-claim the world, and *fit* their lives therein.

And all this takes us to the question of abduction, which is the question of belief and of how we steal our way into this ruthless circle of object and knowledge. But once there (as we are every day of our waking life – however commonly we botch it), how are we to distinguish a true hermeneutic circle from a hamster's wheel? If Darwin's Ontology informs a coherent vision of the world, we could then expect conflict between clarity and truth as a matter of course. And if it works to model our experience, then we need a logic that actually works *here*, within this back-addled convolution that is both us and our world, and *not* merely 'there', in that wish fueled dreamscape too often passes as 'reality', that world of perfect clarity and precision, which is generally presumed, little understood, and absurd. What we need is a logic of Pragmatism, which is otherwise called: abduction.[I]

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Students of practically any field know of the logics of induction and deduction – these familiar concepts have no special connection to Darwin's Ontology (though they take on a new aspect therein); but abduction clearly does. Despite our daily use of it within our regular weaving together of these three logical functions into/within one immediate sensation – which is thought itself, abduction remains a mysterious affair. This is absurd on the face of it, for abduction is nothing more than the postulation of a hypothesis,

[I] *Peirce, CP 5.195-205, Pragmatism, the Logic of Abduction*

tentatively held, for the purposes of examining its viability in future situations. Peirce coined the term to describe (get a handle on) the specific mechanism of Wright's long developed postulation that the act of hypothesizing is at once the source and the immediate sensation of the subjective sense, which is the sensation each of us has of our individual existence.

Abduction is the fundamental act of minding, it is acting on *it's like this* – which is foundational for *what if it's like that* – a more complex form of hypothesis. Abduction is as common as dirt. It seems so simple, yet isn't: like all *minding*, it is both the common denominator of all life as well as the basis of science and 'science' alike, in which man rightfully takes pride and foolishly get lost. It is also the basis of animal faith as well as the gilding of instruments of torture. Abduction is inherently irrational (unconstructed): whatever can be grasped is always a thing, a wholeness, an apple, idea, or willing partner – you can't pick a half an apple without it having been cut apart on the vine but then you get that whole half. The same is true of ideas and bedmates – *and we are the ones doing the cutting*, most often without awareness of our complicity in the shallowness we too often find in both.

To Abduct is to grasp in our minds (to grab by our minding and make a part of us) a specifiable and (most often unconsciously) specified concept – some *thing* we (mostly unconsciously think we) need to further the coming into being of who and what we already think we are. It is a ruthless thing, and beautiful. It can make sow's ears into silk purses and vice versa – depending on how we cut it. And while to abduct is to guess and guessing is failure prone, it is only in abduction that both logic and love become possible.

Be that as it may be, there is logic to/within abduction, though it can only make sense in the world depicted by Darwin's Ontology. As Peirce wrote:

> The maxim of Pragmatism, if it is sound, or whatever ought to replace it, if it is not sound, is nothing else than the logic of abduction.
>
> A mass of facts is before us. We go through them. We examine them. We find them a confused snarl, an impenetrable jungle. We are unable to hold them in our

> minds. We endeavor to set them down upon paper; but they seem so multiplex intricate that we can neither satisfy ourselves that what we have set down represents the facts, nor can we get any clear idea of what it is that we have set down. But suddenly, while we are poring over our digest of the facts and are endeavoring to set them into order, it occurs to us that if we were to assume something to be true that we do not know to be true, these facts would arrange themselves luminously. That is abduction. […]
>
> The anticipation that such might be the truth, not amounting to positive assertion yet by no means sinking to a recognition of a bare possibility, was the Abductive conclusion.[I]

The definition of abduction pressed hard on Peirce's quest for a more perfect logic; defining a logic of Abduction was one of his first tasks (in his earliest writings he called it *hypothetic inference*) and one on which he spent his life. It was a task he inherited from his first philosophical colleague, Wright, and shared with his longest, James. These three men all focused on the act of postulating a working hypothesis as the basis of science, logic, and of all minding (human and animal alike) as well as the most basic sensation of subjectivity. And all three saw that the actual experience of living and (at least nominally) sapient beings is seldom rationally constructed and never particularly logical, but an interaction of inherited characteristics with and within some exact situation. As with being itself, logic is necessarily *a posteriori*; it is best served by attention to the sequence of interrelation of the thinker's situation and the consequence of action therein. In defining abduction, Peirce argues that it "consists in examining a mass of facts and in allowing these facts to suggest a theory. In this way we gain new ideas; but there is no force in the reasoning."[II] There is reasoning in abduction, but the reasoning hasn't the *force* to stand on its own, and forge its own path. To the extent that we lack successful integration of all three basic forms of thought, (that is, if abduction is divorced from induction and deduction), our abductions take on characteristics of the fallacy of certitude. (This very often takes the dangerous form of religious fundamentalism, but can be discerned within other, more subtle, forms, such as the so-called relativism that is part and parcel of contemporary fundamentalism, but extends far beyond it.)

[I] *Peirce, PPM 282-283, Harvard Lectures on Pragmatism, a deleted passage*
[II] *Peirce, CP 8.20, A Letter to Calderoni*

It seems to be a common error among students of Peirce to make much of how he defined abduction ass a 'type' of critical thinking that is not a *symbolic logic* (philosophers tend to fetishize 'types' of thinking). The mistake is understandable considering the effort Peirce put into developing exact criteria for layer upon layer of human signage – but the understanding is incorrect in that Peirce identified *all* thinking with/as symbolic logic. We think *in* symbols and *through* the relating of symbols within some specific context; thought is no more and no less than an algebra of is-ness. (And is-ness itself is an algebra of signage, but we will come to this in time.) In all this, *critical* thinking calls for high standards of symbolic clarity, while 'uncritical' thinking results from/in confusion in/of incompetent signage. This is a necessary consequence of the 'fact' that facts are like species, a holding together of some heritage within/as some highly contingent form, a mutable mutuality that is a rolling event in time and space and far, far more likely than not to fail and fall from being – and in fact, 'destined' to fail within eternity. As Peirce made plain in his earliest essays, the character of both our thoughts and the world in which we do our thinking, results in certain incapacities of reason such that clarity and distinction ('perfection' in thinking) is simply not possible. We are in no way meatbots, constructions that are 'unconnected from every living thing'; as individuals and species, we can be no more certain, or distinct, than any of the 'facts' that both form and are both our world and our selves.

But the Pragmatic response to this situation is not to toss one's hands up in the air at some self-defining point on the continuum that ranges from nihilism to narcissism and back again – not to merely accept emotionally self serving stories in place of careful minding of the world we share, but to set about dealing with what we actually encounter in whatever situation we find ourselves. And so, longing for a world of crisp lines and clear logic but dwelling in the world of Darwin (not only blood and claws, but convoluted snarls of inter-relating that can only be accessed upon risk of life – as blood and claws come included), Peirce set about developing a *purer* logic. The result is a new heritage of thought: the *abductive inference* – which is how we make rational use of our irrational grasping of everything, from whole apples to half-assed bedmates. (Here, as always, the key to success is found in properly sizing up a situation, and responding well within it.)

Abduction is not rational at all, but neither is rationality accomplished by ignoring the part it plays in human thought. Peirce refers to abduction as *non-necessary reasoning*, and its function as *generalizing*. By grasping the wholeness of the process of thought, and winnowing the interactions so as to deliberately form a syllogism, Peirce gave us Darwin's method of science, in a classical logical form:

> The surprising fact, C, is observed;
> But if A were true, C would be a matter of course,
> Hence, there is reason to suspect that A is true.[I]

Elsewhere he clarifies:

> This is not accepted as shown to be true, nor even probable in the technical sense, - i.e., not probable in such a sense that underwriters could safely make it the basis of business, however multitudinous the cases might be; - but it is shown to be likely, in the sense of being some sort of approach to the truth, in an indefinite sense.[II]

For example, at an impressionable moment in his young life (onboard the Beagle), Darwin met with what in his society would be considered a surprising fact – that O'run-del'lico, (known in England as Jemmy Button) was an intelligent, complicated man. And yet, if all the so-called races of man are but one species of animal, then it would be a matter of course to meet such folk of every existent variety. Darwin made an appropriate abductive inference and came to a conclusion competent to generate a deeper interweaving of the actual situation. Not long after he decried the Tasmanian Genocide as an irreparable loss to humanity, and a moral stain on the character of his beloved England. Building on these realizations, he became profoundly opposed to racial slavery, and to any notion of 'racial' superiority – and eventually to any and all notions of 'higher' or 'lower' ranking within evolution. All of this is part and parcel to Darwin's Ontology, and stands as an essential correlation within his Science. (Those who claim

[I] *Peirce, CP 5.189, Harvard Lectures on Pragmatism*
[II] *Peirce, EP 2:287, A Syllabus of Certain Topics of Logic*

that ‘Darwinism’ stands for racism are at best uninformed, they are otherwise ignorant or lying – or both.)

And so we see that this syllogism works, as both an extrapolation of Darwin’s Ontology as well as a depiction of the man’s biography. And while this mature formulation comes to us from Peirce’s so-called Harvard lectures late in his life, it bears a marked similarity to his earlier work. From another foundational essay, *Deduction, Induction, and Hypothesis*, we read:

> The surprising phenomenon, X, is observed.
> Among hypotheses A, B, and C, A is capable of explaining X.
> Hence, there is a reason to pursue A.[I]

And again, is this not what Darwin did, as both method and motivation, with his science? It is by use of abductive inference that Darwin managed never to claim any warrant for his speculations beyond that which ongoing experience could support, while still making the assertions necessary to continued success in minding the world. Not once did he stop testing the hypotheses he provisionally accepted as points of demarcation, entrée into the circle of knowledge. And of course, is this not familiar? We make such leaps of faith every day of our lives. Moreover, short of some serious malfunction, we do not do blindly. Rather, knowledge ‘comes’ to us patterned on the twinning together of the context of the moment and heritage of past situations. The logic of abduction is the logic of Darwin’s Ontology.

This attitude towards hypothesis, common to Darwin and Wright, James and Peirce, is what differentiates Darwin’s science from both the Newtonian certitude that had patterned biology into/upon a teleology of mechanism and necessary causation, as well as the religious certitude that turns initial postulations (abductions) into god-given truths.

And it is here that we see how absurd it is to treat the Natural Selection Hypothesis as a religion: religions treat abduction as revelation, Darwinian science treats revelation as

[I] *CP 2.619*

abduction – as hypothesis, as notions to be tested and dismissed if found wanting. Belief is both religious and scientific (as if these signifiers stood for *actual objective opposing things*). However for the scientific, the term signifies incentive-to-go-looking-for-evidence, while the religious among us use 'belief' to represent evidence-of-truth-in-hand, which is the pretense of the possession of supernaturally certified knowledge (of getting 'the true' strait from the horse's mouth, as it were). Moreover, this depiction is held (abducted as 'fact) no matter how blatantly its supernatural absolutism is 'hidden' within self-serving pseudo-relativism. Both of these distinct uses of the term 'belief' (the scientific and religious) fit the Pragmatic conception of the term as a tendency to action, but pragmatically speaking, not all belief is equal. In that, and to the extent that, Science twines abduction together with deduction and induction into a whole logic, it serves us better than Religion, whose adherents tend to treat their abductions as unique and distinct acts of divine creation, which bear an absolute representation of 'the true'.

As I read what I write it sounds harsh, be that as it may be: it draws an accusation of philosophy than anything else, for religion (expressions of the function; *religio*) does not stand or fall on its own. It is the philosopher's job is to critically study our minding *as minding*, to check the map against itself, and yes, that's why we spend so much hot air and black ink redefining concepts that 'everyone already knows'. The previous discussion of the Pragmatic notion that to believe X, is to act as though X is adequate as a depiction of our actual situation, is a prime example of the manner in which philosophy can offer means by which to end the so-called war between science and religion. And philosophy bears the responsibility to do this promptly, well, and culture wide. It was bad philosophy (dysfunctional sorting of the signage in/of which we make and test our abductions) that started the 'war' in the first place. But in defense of that ontologically non-existent entity that we call philosophy, in no way does *it* bear sole culpability. For philosophy is not possible without both religion (*religio*, actions of *binding* that incorporate 'object' within some 'subject' so as to generate mental maps) and science (actions of checking our mental maps against the actual world). We isolate philosophy (we abduct its 'presence') for/by/to-improve its particular function in the minding (the metaphysical incorporation) that is definitive of life; but we acknowledge that it cannot

function (it does not exist) separate from the other (equally necessary and simultaneous) functions within/of the minding of life.

More than that, we necessarily do all three at once; everyone is philosophical, scientific and religious. Life is tangled like that, which is why we need to identify abduction and use it rationally. The alternative is to remain twined in animal mysteries for the life span of our species (which would be a tragic ending to the the Enlightenment). By way of adaptation, we, as a species, have abstracted certain functions from/within our cultural cohorts, such as farming, soldiering, and selling. And it appears this strategy/technique of survival has offered us great adaptive benefit – though it has also brought corresponding difficulties. And so we have folks doing 'philosophy' (et al.) as if it were some isolated unique event (thing) that 'stands on its own' and has its own essence or 'being' separate from science and soldiering and etcetera. It behooves us to remember that in this world that we share, in Darwin's world, no such thing is actually possible – except by taking part within some larger world wherein philosophers 'have' others to grow their food, fight their wars, and test their notions against actual situations. This is a world of Darwin's Ontology. Here, those who pretend to do science, philosophy or religion, sans science philosophy or religion (in any combination thereof), quite simply fail in at least some aspect of their minding.

It may seem we have stepped away from abduction – but no conversation of Peirce ever could. It seems that nearly every essay he wrote pivots on the question of its definition. E.g. he introduces abduction as a consequence of Wright's objective motivation:

> Accepting the conclusion that an explanation is needed when facts contrary to what we should expect emerge, it follows that the explanation must be such a proposition as would lead to the prediction of the observed facts, either as necessary consequences or at least as very probable under the circumstances. A hypothesis then, has to be adopted, which is likely in itself, and renders the facts likely. This step of adopting a hypothesis as being suggested by the facts, is what I call abduction.[I]

[I] *Peirce, CP 7.202*

This is from *On the Logic of Drawing History from Ancient Documents*, which serves as a kind of primer on abduction as much as it defends its premise. Likewise, from *A Syllabus of Certain Topics of Logic*, we read:

> An Abduction is a method of forming a general prediction without any positive assurance that it will succeed either in the special case or usually, its justification being that it is the only possible hope of regulating our future conduct rationally, and that Induction from past experience gives us strong encouragement to hope that it will be successful in the future.[I]

In both of these passages, abduction fits both the mold of the Natural Selection Hypothesis, as well as Darwin's Ontology. Peirce's *A Neglected Argument for the Reality of God* presents this excellent description of how abductive reasoning works, though here he defines it more tightly, as retroduction. He rests his defense of god on the necessity of successful minding therein – without abandoning the core principles of science.

> The whole series of mental performances between the notice of the wonderful phenomenon and the acceptance of the hypothesis, during which the usually docile understanding seems to hold the bit between its teeth and to have us at its mercy – the search for pertinent circumstances and the laying hold of them, sometimes without our cognisance, the scrutiny of them, the dark labouring, the bursting out of the startling conjecture, the remarking of its smooth fitting to the anomaly, as it is turned back and forth like a key in a lock, and the final estimation of its Plausibility, I reckon as composing the First Stage of Inquiry. Its characteristic formula of reasoning I term Retroduction, i.e. reasoning from consequent to antecedent. In one respect the designation seems inappropriate; for in most instances where conjecture mounts the high peaks of Plausibility – and is really most worthy of confidence – the inquirer is unable definitely to formulate just what the explained wonder is; or can only do so in the light of the hypothesis. In short, it is a form of Argument rather than of Argumentation.
>
> Retroduction does not afford security. The hypothesis must be tested.
>
> This testing, to be logically valid, must honestly start, not as Retroduction starts, with scrutiny of the phenomena, but with examination of the hypothesis, and a muster of all sorts of conditional experiential consequences which would follow from its truth.[II]

[I] *Peirce, EP 2:299*
[II] *All citations until otherwise noted: Peirce, CP 6.481-482*

Always abduction functions with induction and deduction, within the subjective self not one can exist without the indelible effect of the other two. Indeed, for Peirce, everything that's *real* works in threes – existence itself is a trinity, and *is-ness* functionally divides into three basic categories, which intertwine ontologically to share, and to generate a singular *being*. And shortly we will turn to *firstness*, *secondness* and *thirdness* as represented by Peirce's Semiotic Ontology, and the phaneron (the world of signage, the semiosphere) that binds interaction (which is, as a matter of course, all that actually is) into rich complexities of being. But even as we approach the end of our study, still we get ahead of ourselves. Our purpose remains to relate Peircian thought to Darwin's Ontology; as ontology remains the study of being and the signifier *god* represents ultimate or perfected being (whether or not the object we imagine actually exists), it behooves us to explore the manner in which Peirce reconstructed god, and accomplished the task the unfortunate Fiske had claimed for himself, the postulation of a religious sensibility competent to stand in the only world we know. As always, we look to the twinning into being, the reciprocal incorporation that is life; now we look at how this finds representation in/through/by god and love within in the only world that *is*, this world of chance and death.

***

It is more than passing strange that of four men our study has surveyed, James is most often identified with religious thought, while the written record would indicate that Peirce took the reality of God far more seriously than he – with Wright lying between the two. Only Darwin equaled James in his agnostic dismissal (psychical discorporation) of the comforts of religious practice – though of these two, Darwin invested practically nothing of himself in practice or study of religion (beyond finishing his BA in theology – a study chosen for him by his father), while James invested greatly in the study of its practice (and its consequences within human psychology), but did not practice it himself.

Indeed, of these four men only Peirce put pen to paper in defense of religious tradition. By contrast, James went to great pains to study the psychological effect of religion as a therapeutic regeneration our cultural notions of belief so as to bring our believing closer

in line with empirical reality. But Peirce invested of himself in regenerating the religious heritage – though with him this took a decided novel, though undeveloped approach.[51] It is not by chance that the Peircian heritage includes a radical re-imagining of god as *a posteriori*, as existing because the universe exists, rather than the other way around. This theory, formally proposed in distinct forms by Whitehead and Hartshorne, is the rejection of god the creator in favor of the proposition of an emergent god, and is alternatively called Process Theology, or Panentheism. This follows Pierce's assertion that the hypothesis of god as intimately woven with/within, through/of it's self-formed 'object' is "vague yet as true so far as it is definite, and as continually tending to define itself more and more, and without limit." It is likewise apparent in his argument that it is "less false" to speak of a god that has purpose – and grows in its being, than a god with neither growth nor purpose – and no agency or identity worthy of any consideration.

The question of whether or not Science and Religion can co-exist is a false question – it has no answer. As we have been arguing all along, these functions play their part (alongside philosophy) within the generation of the subjective self. But also, the lack of specificity of the question renders it both unanswerable and absurd. However, questions of whether or not some *specific* science (some set of scientific thought, whatever its validity/usefulness) and some *specific* religion (some sect or order, or otherwise institutionalized claim of absolute supernaturally obtained knowledge) can coexist are quite valid. Moreover, such questions are *necessary* judgments – and ones we regularly face. It is to Whitehead and Hartshorne's credit that they recognized what Peirce had done, formed abductive conclusions applicable as religious practice within Darwin's Ontology. While Fiske used Darwin as an appliqué to fancy up the familiar classical Neo-Platonic eschatology, Peirce saw that for the Natural Selection Hypothesis to actually work, ontology demands that we dump eschatology all together, and replace it with process and chance, love and emergence, and a world wherein consequence matters. Peirce wove his new understanding within the traditional structure of Triune Christianity, but the Emergent God that he strove to establish as a necessary corollary of evolutionary science represents an absolute departure from traditional Christian Ontology, which necessarily presumes a supernatural agent, existing in perfection prior to all that is.

This said, I find Hartshorne's argument that the presence of sentience in at least one animal (us) 'proves' the existence of a sentient God, to be as absurd as Wallace claiming the same – and equally antithetical to the sense of Darwin's Ontology. The difference between the two arguments is, however, quite telling. Wallace failed Darwin in claiming that animal (our) sentience necessarily requires a sentient 'creator' – thereby resting his theory on a Platonic assertion of *a priori* causation. Hartshorne failed Darwin in claiming that this sentience necessarily *creates* a sentient 'god' *a posteriori* to 'creation' – thereby resting his theory on an assertion of necessary causation beyond (or without regard to) the limitations of physical efficiency. Neither of these assertions is supportable within Darwin's Ontology, both are grounded in the Modernist Ontology that Darwin refutes.

Moreover, Whitehead argued that all existence, all matter down to the sub-atomic scale, is somehow 'aware', and thus existence itself necessarily generates 'god' as that level of oneness that is itself the processing of energy into/within matter as stable and heritable form. In some ways, this may look like a stronger application of Darwin's Ontology than Hartshorne's more limited concept, but I beg the good reader to remember that limitation is a stout pillar of being. It goes without saying that appearances can be deceiving, and that 'doing' metaphysics is something like chasing a greased pig on a slippery slope, blindfolded, in a hungry crowd tooled up with axes. Yet, I also ask you to recall the pure bliss of rampant speculation that seemed to fuel Chauncey Wright's friendship with Fiske – and in this spirit, read on …

Whitehead's 'God' is a Buddha-field of pure sensitivity of which all existence partakes and in which the whole of being is formed – but which *is moved* by the formation of being rather than being that which moves it, and engages in neither will nor choice, but 'upgrades' that which *works* (establishes a successful integration in/as/through heredity) and 'downgrades' that which doesn't. *As unwarrantable speculation*, this depiction of emergence within sub-atomic processing is a brilliant expression of our scale thick world of inter- intra- and trans- action wherein *being* is a kind of reciprocal transcendence (both through and after the fact of its transcendence) of a veritable infinity of constellations of

causes. As philosophy, this speculation may even prove useful in clarifying some aspects of our Korzybski maps. But as science, it appears to be a useless hypothesis. This may, in time, prove to be a mistaken judgment; but for now, no one is doing (or seemingly can do) science based on Whitehead's God – the hypothesis is not helping us check our maps against the territory. Moreover, as religion (an institutionalization of an abstraction of the heritage of some occasion of *religio*), the hypothesis appears to contradict the greater understanding that both Whitehead and Hartshorne worked so honorably to establish (and with which even St. Augustine agreed): any religion that fails science is false in its binding and will fall in the end.

While Darwin's Ontology does allow for the *possibility* of an *emergence* of a self-aware 'wholeness' of which we are part and which (like us) is all process and emergence, in no way does it *necessitate* such a conclusion. (To be clear, I argue that Darwin's Ontology allows for ongoing perfectibility, but never perfection – I stumble along till I die, and get 'better' only as I pay my dues. This is the way of nature. If there's a god, she's in the same boat: of course, such claims are always rank speculation.) Again, the postulation of Whitehead's God may prove quite useful *as speculation*; but also Darwin's Ontology warns us against making rash judgments – and relying for our lives on their veracity. It rejects egoism thinly disguised as worship, while rewarding our interest in the very real, but likely a-conscious, 'other self' that binds all living things, not only by heritage but also by reciprocal transcendence (by how living being comes into being bound together, or not at all) both physical (in terms of a mutually supportive ecosystem) and metaphysical (in terms of the emergence of our sense of subjectivity within, out of, and through *sentient*, *sapient* and *creative* minding of experience therein).

We have every reason and much evidence to support the assertion of the actual existence of these larger wholenesses of self, but any claim we make that they have the coherent agency of a recognizably active psychology is unwarranted by any means at our disposal. And yet, speculation *as* speculation – lived out with full awareness of the consequences thereof *from within a thickly believed naturalism*, remains as vital as ever. And again it is

not a simple issue of cause and effect. This vitality is not merely 'because of' the existence of a morality implicit within Darwin's Ontology, however important this morality may prove to be of great value both to us as individuals as well as all the species of the world. The vitality of Darwin's Ontology lies *in that it works* – and is thereby able to partake in some future heredity.

Peirce offers a sound argument to revisit the question of god with regularity, and to treat its *asking* as unending, in-formative and necessary – while participating within but also holding as contingent any and all *answers* we may find (explore/claim/build-upon). It is to Peirce's credit that he believed that all such answers are mere abductions (which are guesses that self-correct through cascades of selection). It is to his discredit that he could not distinguish *religio* from religion and maintained that the later is definitive of the function of the former.[52] For our purposes, we set this issue aside and turn to Peirce's use of Darwin's Ontology; and in doing so we look forward to Peirce's Semiotics.

Peirce's Neglected Argument begins with another trinity – a method familiar to all his thought, and typically ties his argument to the reality of signage:

> Of the three Universes of Experience familiar to us all, the first comprises all mere Ideas, those airy nothings to which the mind of poet, pure mathematician, or another might give local habitation and a name within that mind. Their very airy-nothingness, the fact that their Being consists in mere capability of getting thought, not in anybody's Actually thinking them, saves their Reality. The second Universe is that of the Brute Actuality of things and facts. I am confident that their Being consists in reactions against Brute forces, notwithstanding objections redoubtable until they are closely and fairly examined. The third Universe comprises everything whose being consists in active power to establish connections between different objects, especially between objects in different Universes. Such is everything which is essentially a Sign – not the mere body of the Sign, which is not essentially such, but, so to speak, the Sign's Soul, which has its Being in its power of serving as intermediary between its Object and a Mind. Such, too, is a living consciousness, and such the life, the power of growth, of a plant. Such is a living constitution – a daily newspaper, a great fortune, a social 'movement.'

This is the whole of the universe that Peirce searched for the reality of his God – and whatever we individually may think of his answers, he had the decency to postulate them

as no more (and no less) 'real' than any of 'airy-nothingness' that bound our selves. In clarifying his distinctions as tightly as he was able, Peirce wove god, love and evolution deep within his every logic. Perhaps, as pure speculation, we can argue that the dissonance of his minding of life was such that he was driven to bind *everything* as tightly as he could. Certainly he seemed unable to write a single essay without incorporating vast elements of his thinking together with whatever topic he had at hand – and this includes his prickly defensiveness.

In the following excerpt, what is important for our argument that Peirce's philosophy is grounded in Darwin's Ontology includes Peirce's focus on the agency of habit (which includes natural predisposition) as having function as/within reciprocal formation as active interpretation within experience. Also, that this function defines (limits) what is possible within human reason (thereby leaving us with Pragmaticism as our least wrong approach). And finally, we see Pierce introducing semiotics, which is the most prominent feature of his work, and grounding it within the natural world. In his view, success in the struggle of varying potentials to actually be is found in conduct, which is a kind of habits of action in a world of consequence. Taken as a whole, Peirce argues not so much for the reality of God, as for the reality of nature, un-capitalized, which is "something which is constituted by an event indefinitely future"[I] For Peirce, nature is the inter- intra- and trans- action of past actions *extended* by the hope (trusting expectation) of having a future – it is indefinite to be sure, but real because without it, existence collapses. (By this time, it almost goes without saying that with all this, knowing is necessarily limited to what happens previous to the act of knowing about it – and so, again, all we can know of what we are, is the consequences of our having been.)

Of course, Peirce also takes a shot at the one man who never failed to value him highly – both professionally and personally. Again, from the Neglected Argument, we read:

> "Since I have employed the word Pragmaticism, and shall have occasion to use it once more, it may perhaps be well to explain it. About forty years ago, my studies of Berkeley, Kant, and others led me, after convincing myself that all

[I] *Peirce, CP5.331, Grounds of Validity of the Laws of Logic*

> thinking is performed in Signs, and that meditation takes the form of a dialogue, so that it is proper to speak of the "meaning" of a concept, to conclude that to acquire full mastery of that meaning it is requisite, in the first place, to learn to recognize the concept under every disguise, through extensive familiarity with instances of it. But this, after all, does not imply any true understanding of it; so that it is further requisite that we should make an abstract logical analysis of it into its ultimate elements, or as complete an analysis as we can compass. But, even so, we may still be without any living comprehension of it; and the only way to complete our knowledge of its nature is to discover and recognize just what general habits of conduct a belief in the truth of the concept (of any conceivable subject, and under any conceivable circumstances) would reasonably develop; that is to say, what habits would ultimately result from a sufficient consideration of such truth. It is necessary to understand the word "conduct," here, in the broadest sense. If, for example, the predication of a given concept were to lead to our admitting that a given form of reasoning concerning the subject of which it was affirmed was valid, when it would not otherwise be valid, the recognition of that effect in our reasoning would decidedly be a habit of conduct.
>
> In 1871, in a Metaphysical Club in Cambridge, Massachusetts, I used to preach this principle as a sort of logical gospel, representing the unformulated method followed by Berkeley, and in conversation about it I called it "Pragmatism." In December [November] 1877 and January 1878 I set forth the doctrine in the Popular Science Monthly; and the two parts of my essay were printed in French in the Revue Philosophique, volumes vi and vii. Of course, the doctrine attracted no particular attention, for, as I had remarked in my opening sentence, very few people care for logic. But in 1897 Professor James remodelled the matter, and transmogrified it into a doctrine of philosophy, some parts of which I highly approved, while other and more prominent parts I regarded, and still regard, as opposed to sound logic. About the time Professor Papini discovered, to the delight of the Pragmatist school, that this doctrine was incapable of definition, which would certainly seem to distinguish it from every other doctrine in whatever branch of science, I was coming to the conclusion that my poor little maxim should be called by another name; and accordingly, in April, 1905 I renamed it Pragmaticism.

In the end, we find that Peirce fundamentally misunderstood James, that he valued his ideations without crediting him for having conceived them – exactly as he did to Darwin. Thus he cast James in a role similar to that which Rorty found for him, a prophet of the easy sleazy ‘relativism’ that James actually opposed. Of course, Peirce and Rorty came at this from completely opposite points of view; Peirce demanded more precision from James than James could find within the human mind, while Rorty seems to revel in (and exploit) the Jamesian focus on the metaphoric arc of subjectivity *as if each arc were a Leibnizian monad*, such that nothing *therein* connects *herein*, which makes ironic detachment the only position worth taking. (And so we see Rorty committing the same

fallacy as so many others, the attempted shoehorning of Darwin (and Pragmatism) within the Modernist Ontology.) Needless to say, none of these notions have anything to do with James, and to the extent that Peirce thought they did, he was as wrong about it as Rorty. (And to be clear, the notion that James would favor ironic detachment over passionate involvement is flat-earth absurd.) Moreover, Rorty's so-called Neo-Pragmatism (which sacrifices thickness for the seeming distinctions of irony, and grounds itself in a presumed detachment that in no way represents Darwin's Ontology) more resembles the Pragmatism that Peirce wrongly saw in James (which sacrifices definition with nothing of consequence gained) than did the Pragmatism of James – which James clearly admitted, sacrifices some measures of both clarity and distinction in favor of thickness within that narrow frame of living experience which is our own.

Though Peirce never agreed with James in his sentiment for the merely human (however much he personally benefited from it), this resulted from choices of judgment and valuation where Peirce prioritized "Every concept that is vague is liable to be self-contradictory in those respects in which it is vague" over "No concept, not even those of mathematics, is absolutely precise" while forgetting the consequences of his own argument that "some of the most important for everyday use are extremely vague."[l] What Peirce and James shared was Darwin's Ontology; what they did not was the focus of their application therein. But again, this is the subject for some other book.

It would leave a wrong impression to end this study in discussion of the object of God – even as represented by Peirce's Love. Nothing in this Ontology points to any notion of the perfection that is implicit within the concept. Perhaps Peirce's greatest (philosophical) failing is that he insisted on the actual existence of 'objective' ideals as well as the reality of god. Or perhaps the tension he appears to have experienced between his (subjective *a priori*) need for such perfections and the (shared objective) world that does not recognize them (which is *this* world wherein we find no evidence for their existence) was a source of his genius. Either way, it is genius that he demanded that existence subjects *everything* to the bloody press of nature – god and ideals included. This is represented/established by

[l] *Peirce, CP 6.494-6, The Concept of God*

rendering *all* 'actualities' *as inherently limited to their potential within future interactions* (especially as cast by the shadows of the angels of selection and extinction), and thereby limited (contingent) through/within *a posteriori* emergence within/through the Darwin's crazy quilted Jungle – wherein (even at their very best, even when *useful*) such assertions are categorically resigned to pure speculation. Oh but we see Signs, of course, woven throughout existence! Just look and see! – We hear it over and again, and not only from thinkers as sophisticated as Peirce. But what is it we actually see? What exactly is a sign? Exactly.

***

Peirce devised nearly as many names for *sign* as all of history has offered for *god*. This is gross exaggeration, of course, but the focused zeal behind both endeavors lends itself to the analogy. Moreover, in both instances the unique *names* represent unique definitions grounded in unique functions (which are aspects) of a universally vast generalization. But for Peirce, Signage – not God, is the origination, habituation and instantiation of all the *endless forms most beautiful and most wonderful* that have ever graced this earth.

This may sound like Peirce intends some impressive re-definition of the concept of sign, but none is needed. He rather makes the point, "I use 'sign' in the widest sense of the definition. It is a wonderful case of an almost popular use of a very broad word in almost the exact sense of the scientific definition."[I] (We note the snarky use of *almost* and ignore it as both unworthy of Peirce's better moments and also incorrect – it is not an *almost* popular usage that almost is correct; the common use of the term *is* largely useful…) In other words, a sign is what we think of it – and more. Any *thing* (event in time and space) that is used by any *minding* thing to point out some other thing is a sign. And this makes signs the building blocks of life.

For this to make sense, and for us to draw out the parallels between this and Darwin's Ontology, we need to understand Peirce's ontological categories, the three basic things that interact to compose all of what actually is. And there are (at least) three things to

[I] *Hardwick and Cook, SS 193*

know about these categories … first, what distinguishes the categories (each from the other) is the *function it plays within the whole*. Second, no single category (aspect or process) *can* exist (with any coherence to the term) apart from the whole. And third, the whole of the process is natural – signs come into being as/by/through *populations*, which makes them akin to species in at least two ways; there is no 'ultimate' end to or of their evolutionary process (no Aristotelian Final Cause or Platonic Form), and they come into being individually and collectively, subjectively and objectively, as fragments of a whole. This last point has some major corollaries: *there is no designer*, is only the first – though this may be qualified by the following corollary, *except the limited contributions of each and every living thing*. The second is *there is no 'correct' interpretation* of a sign; some interpretations are more useful (clear, distinct, *and apropos*) and some less, many are 'wrong' (useless, incompetent at/for reciprocal incorporation) but none are 'fact' (necessarily correct). (I.e. words have no 'correct' definition, only the consensus of usage, which is the habituation of that signifier within a particular linguistic (social) community.) The third is that *every act of interpretation 'calls forth' new acts of interpretation*; this last point is of great importance to our thesis, but it will have to wait upon further development before we can say why. We are just a few pages shy of finishing this thesis, and still we get ahead of ourselves. It remains to be answered, just what are these three basic 'things' of which all existence partakes? And to the point of this thesis we must ask, are these ontological categories an expression of Darwin's Ontology? The short answer is, yes.

Peirce named his 'modes of being' *firstness*, *secondness*, and *thirdness*. Each is an event within the functioning that draws the others into relationship. Combined, they represent the manner in which what-was and what-might-be become what-is, which is the habituation of event into form. In reference to animal forms, this is the precise topic of *Origin*. And like the definition that Darwin gave us for species, these categories are not boxes into which 'stuff' can be catalogued (indexed, referenced, known); they are descriptions of relationships that represents how interaction becomes what is. Peirce gave us hundreds upon hundreds of examples of what he meant – all describing specific instances on, across, and uniting, multiple scales of being – from the 'merely' physical to

the minding that is life, and from the naked quest of need to the grandest heights of knowing. It boils down to this: firstness represents initiation, secondness represents action upon and through that which firstness makes possible, and thirdness represents the emergence of a habit of being, which then takes on the agency of initiation and becomes its own firstness. These three modes of being together represent a more complete concept of sign.

> The triadic relation is genuine, that is its three members are bound together by it […] The Third […] thus must be capable of determining a Third of its own; but besides that, it must have a second triadic relation in which the Representamen, or rather the relation thereof to its Object, shall be its own (the Third's) Object, and must be capable of determining a Third to this relation. All this must equally be true of the Third's Thirds and so on endlessly; and this, and more, is involved in the familiar idea of a Sign.[I]

Firstness is the instigation of a relationship; it is the *intrigue* of sign, the furtive glance that may well become the presence of grandchildren, the suspicion of sugar that gets the flagellum humming, some indication that just might lead to the feast of life. Firstness is the aboriginal event of the ubiquitous cascade of relating, spontaneously expressed; it is possibility with no strings attached. It is "such as it is, positively and without reference to anything else."[II] Of course, as such, it is meaningless, formless, unknowable; "For as long as things do not act upon one another there is no sense or meaning in saying that they have any being, unless it be that they are such in themselves that they may perhaps come into relation with others."[III] But the relating itself comes second.

Secondness is the action of event on event; it is Darwin's Jungle of *dating* where that potential, born in (as) firstness, is tested, challenged, put to risk. Secondness is acting on the intrigue, with the very real possibility of getting shot down; it is not just the glance, it is approaching and asking – and if that doesn't happen, you'll never get that date or those grandkids. It is the flagellum hard at work, the crush of the cascade in real time. Secondness is hard, it is the brutality of force; it attaches string upon string upon string – binding possibility into potentiality. "That of first is so tender that you cannot touch it

[I] *Peirce, EP 2:272-3, A Syllabus of Certain Topics of Logic*
[II] *Peirce, CP 8.328, A Letter to Lady Welby*
[III] *Peirce, CP 1.25, Lessons from the History of Philosophy*

without spoiling it; but that of second is eminently hard and tangible."[I] The primary metaphor here is existence as struggle, *the thrill of victory and the agony of defeat* – as it were. Secondness is the "brute actions of one subject or substance on another, regardless of any law or of any third subject".[II] It involves effort and resistance and opposition, and in this it represents a true duality of experience, which is the union (the reciprocal incorporation) of self and non-self that represents the minding that is life.

> The type of an idea of Secondness is the experience of effort … The experience of *effort* cannot exist without the experience of resistance. Effort only is effort by virtue of its being opposed; and no third element enters… Imagine yourself to be seated alone at night in the basket of a balloon, far above earth, calmly enjoying the absolute calm and stillness. Suddenly the piercing shriek of a steam-whistle breaks upon you, and continues for a good while. The impression of stillness was an idea of Firstness, a quality of feeling. The piercing whistle does not allow you to think or do anything but suffer. So that too is absolutely simple. Another Firstness. But the breaking of the silence by the noise was an experience. The person in his inertness identifies himself with the precedent state of feeling, and the new feeling which comes in spite of him is the non-ego. He has a two-sided consciousness of an ego and a non-ego. That consciousness of the action of a new feeling in destroying the old feeling is what I call an experience.[III]

And so we see that in all this, secondness functions only by taking on the ability to initiate ever-new rounds of signing (how else can you hold that heart but by perennially initiating love). To accomplish this, the action 'completes itself' by generating of itself a heritable structure, a habit, a heart, a 'law' of science, a regularity, an aesthetic, a culture, you, me, god, etcetera. Secondness cannot stand, either as itself or even as a consequence of firstness, but a thirdness can – by/through/within success at the always ify secondness (but then it becomes a firstness) In this, secondness is acted on by firstness, but does not initiate anything (again, that's a firstness); thus events of secondness are events in time and space that in and of themselves, lack agency (are 'dead'). Peirce compares it to the mechanisms of billiards and Newton's *matter*, and speaks of it action/reaction. But these are not the only two categories, there is also an isness that unites the living and the dead:

[I] *Peirce, CP 1.358, A Guess at a Riddle*
[II] *Peirce, CP 5.469, Pragmatism*
[III] *Peirce, CP 8.330, A Letter to Lady Welby*

> We have seen that it is the immediate consciousness that is preeminently first, the external dead thing that is preeminently second. In like manner, it is evidently the representation mediating between these two that is preeminently third. Other examples, however, should not be neglected. The first is agent, the second patient, the third is the action by which the former influences the latter.[I]

Every signs that we can know is a representation of thirdness, and all the so-called laws of science are habits that develop by/as/through surviving within the strict anarchy of secondness, which is the welter of experience whereupon the signs are read into being, or not. In secondness, selection reigns and differentiation occurs – forms evolve, take shape, develop their own unique semiotic receptivity and 'read' and 'write' a new generation of events (things) into being. This happens an infinite number of times for every event that has ever happened. Meanwhile, immediately upon the instantiation of any thirdness, comes a firstness, as that thirdness emerges with its own, novel, semiotic receptivity – its has a new capacity to form relationships – which is a new whole, and an unknowably simple "quality of feeling"[II] that cannot be experienced apart from its vast heritage of descent *as it interacts* with the immediate situation, the secondness, that is the tempering of any potentially relating firstness, that is a thirdness … and so on. All of these are signs. And this is why *every act of interpretation 'calls forth' new acts of interpretation*.

This could go on. It is endlessly relative, endlessly relating. But remember this is a good thing; it is a real thing, an event in time and space (a *thing*) that actually is. Like James' pluralistic universe, Peirce's semiotics is superior to the simple mechanisms of modern dualism in that it recognizes that the scale thick quality of being grants a limited but real agency to the capacities of a minding life – which is an agency that is witnessed countless times in the experience of life.

This must be, for living being does not lack agency, and matter takes form (thirdness), ideas gain representation (thirdness), and desire becomes a proposal becomes a marriage becomes children becomes standing for a grandchild's wedding, etcetera (all thirdnesses). What is initiated as possible (firstness) necessarily engages in the ranging of its potential

[I] *Peirce, CP 1.361, A Guess at a Riddle*
[II] *Peirce, CP 5.66, Pragmatism*

(secondness) wherein it either fails and passes from possibility, or establishes itself as its own wholeness (thirdness). This makes this 'thing' capable of initiation, whereupon it engages in firstness. Repeat into infinity. "The immediate present, could we seize it, would have no character but its Firstness."[I] The seizing, us of it and it of us, is all secondness, and the 'completion' of such seizing, the bird in the hand, is thirdness. But then the feel of the feathers is a firstness (until it is *identified as a feeling* – at which point it has taken on thirdness), which is an initiation of a new round of signing that may end in dinner, or in the morally obligated chore of cleaning spilt oil – depending on the heritage of past moments interacting with current needs *plus* success or failure (secondness) at reading the signs offered within that exact situation (here taken as the firstness of bird-in-hand). (All this begs us to wonder, who would be stupid enough to mistake a poisoned animal for dinner? – I won't insult you by pretending the question is merely rhetorical.)

A sign that points successfully becomes a reality. This reality then becomes itself a sign, a harbinger of a new reality. In this layering of sign upon sign and reality upon reality, I don't just read signs; I am a sign, read into being by all that is *not-I*. Again, it is the *tangling* that makes the tangle. And again, living experience is not mono-directional, and the language of cause and effect is often not useful for the movements of parts within a whole, *living* thing. To be clear, for Peirce, the entire universe is a living thing.

In Peirce's view, no response is ever *to* any phenomenon, but always within it – even rocks dance. The success of *our* responses (our interpretations, our minding of our situation, our *life*) depends on the quality of our action herein, which is our ability at reading, singing, dancing, moving, loving, (insert metaphor here) – *incorporating* us within the world, and the world within us. And to be sure, in no way does any of this ease our responsibility for our choices in the world; rather it vastly increases it by recognizing that our choices *are in the world*. They are consequential. Again, if Darwin is right and the speciation of our being is 'built' upon uncountable generations (iterations) of interactions of heritage and situation, then we have a very real responsibility. Our life is our world; it is in our hands as we are in its. We *cannot* just kick back and wait for some

[I] *Peirce, CP 1.343, Lowell Lectures*

imagined mothership to pull a calgon and take us away, for Jesus to kiss our boo-boos and make it all better, or King Arthur or Dionysus or Brahma or any such character to wake from his slumber and set all anew. In all this we see how interpretations have a way of taking on a life of their own, how very often they run amuck. This is what I meant in the opening pages of this study when I referred to *signs* as barely domesticated beasties – it is so very often our own stories that mount the saddle and ride mankind.

A sign marks the moment (and manner) whereupon possibility becomes actuality. In this, signage has three discrete functions, which become obvious when we study the action therein. But what is important here is that the pointing of one thing to another is the generation of a relationship. This makes the action of signing, the act of Creation. Every (living) thing is co-creator. We 'make' our selves and our world even as ('because', or *through* the action wherein) our world makes us. More, the *use* of the pointing to draw metaphors (hypotheses) is the action of the generation of the subjective self – it is the initiation and conclusion (the making) of a self. And so there is yet more; in initiating and concluding *our* being, we necessarily put the world at risk (or at least parts thereof, we are but fragments after all). This is the contrary compliment to the Hero's Journey, for the world also binds us into being, and puts us at risk so that it can be. All this takes place within/out-of all that is *naturally*, and therefore *actually*, potential as limited by/within/to what chances to emerge out-of/from-within the only immortality that can exist, our shared but dead past. Thus the signs we see throughout the world universe are pillars of chance, stout and irrefutable happenstance; the cornerstone of all that-is, *is* what-is as what-comes of what-has-been – and not what-we-will.

While James would limit this to living being, and place humans in the pen with all other animals, Peirce would expand this far beyond the range of humanity, farther than life, and apply his cenopythagorean hypothesis to all existence. (And he thought James was haphazard with his metaphors!) For the purpose of our thesis, this dispute makes no difference; either way, the pragmatic/semiotic approach to life and existence is distinctly representative of Darwin's Ontology.

"Every symbol is a living thing, in a very strict sense that is no mere figure of speech. The body of the symbol changes slowly, but its meaning inevitably grows, incorporates new elements and throws off old ones."[I] Moreover, this growth happens not only in our minds, but also in the so-called objective world – growth within signage is growth within being, and vice versa. The argument here follows as we have already seen, by how success in pointing can only build on itself. Peirce took Wright's postulation that the generation of a hypothesis is the definitive quality of living being, and applies it as a general quality of existence. Not only does "The conception of being arises upon the formation of a proposition",[II] for Peirce, being conceives itself in its proposing. We have already seen this woven throughout Peirce's Love, Logic, and God, and in all these, we find it woven within his Ontology. Countless manuscripts would lend support for this claim, but two exemplify it: his early *A New List of Categories*, and his much later manuscript *A Guess at a Riddle*.[53] To quantify the shared quality of being we find implicit within both Peirce's Semiotics and Darwin's Science, we turn to one last and most telling aspect of Peirce's philosophy, which is the 'community of inquirers' he considered absolutely vital for any proper comprehension, and which is best grasped as a fine application of Darwin's Ontology.

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This entire thesis could be defended by in depth comparisons of Peirce's hypothetical 'community of inquirers' and Darwin's postulation of the origination of biological species as a consequence of how individual reproduction drives population evolution – and hence produce 'fitness' on multiple, entangled scales of being, which very much includes the individual fragments of the whole of the population (all of which exerts their own selective agency)… Basically, Peirce argued that the potential failure of any one thinker can be mitigated by the success of others – hence science (which, in keeping with Wright, Peirce identified as the only competent method of *fixing* belief[54]), is best served by a social epistemology. But this would only follow the members of this population cohort are grounded upon Wright's way of objective motivation, and that failure is not

[I] *Peirce, EP 2.222 Elements of Logic*
[II] *Peirce, CP 1.551, A New List of Categories*

protected by an institutionalized (or otherwise socially hereditable) subjectivism. This is to say; Peirce's idealized 'community of inquirers' is any group that *as a group* institutes within its practices methods (habits) of not blocking the paths of inquiry, techniques of interaction capable of limiting the exuberance of subjectivity and encouraging objective motivation. (I would comment that this would seem to be the intent behind peer review.)

At this point it may be plain that the Peirce never met with his idealized scientific community any more than he did his idealized church. Of course, the Pragmatist in Peirce would not expect to 'find' such perfections – even as he (like James) maintained his 'right to believe' (act) on the *hope* that such is possible (however improbable). More, it is a Pragmatic argument that such a habit is absolutely vital to any given society's chances at continued success (existence).

In Darwin's Ontology, none of this contradicts. A human society succeeds so far as such communities flourish therein, and withers without them. More, they originate in heroic quests that both result in and generate qualities not dissimilar to adaptive excellence, and fail in proportion to their loss of plasticity. No society since time began has managed to perfect such a community, but some have done better than others – relative to the circumstances of their flourishing of course. This is all a matter of course: no species is 'perfect'; no species is 'higher' or 'lower' than any other, but all have evolved as an imperfect fit to some imperfect situation within this dangerous, imperfect world – and the vast, vast majority have gone extinct. How can anyone expect anything different for us? But even with an issue as straight forward as this, the complexity inherent to a Darwinian Epistemology tends to confuse those who reject Darwin's Ontology, whether or not they cleave to his Science. The typical response of such thinkers is entirely subjective:

> When an ostrich buries its head in the sand as danger approaches, it very likely takes the happiest course. It hides the danger, and then calmly says there is no danger; and, if it feels perfectly sure there is none, why should it raise its head to see? A man may go through life, systematically keeping out of view all that might cause a change in his opinions, and if he only succeeds -- basing his method, as he does, on two fundamental psychological laws -- I do not see what can be said against his doing so. It would be an egotistical impertinence to object that his procedure is irrational, for that only amounts to saying that his method of

> settling belief is not ours. He does not propose to himself to be rational, and, indeed, will often talk with scorn of man's weak and illusive reason. So let him think as he pleases.
>
> But this method of fixing belief, which may be called the method of tenacity, will be unable to hold its ground in practice. The social impulse is against it. The man who adopts it will find that other men think differently from him, and it will be apt to occur to him, in some saner moment, that their opinions are quite as good as his own, and this will shake his confidence in his belief. This conception, that another man's thought or sentiment may be equivalent to one's own, is a distinctly new step, and a highly important one. It arises from an impulse too strong in man to be suppressed, without danger of destroying the human species. Unless we make ourselves hermits, we shall necessarily influence each other's opinions; so that the problem becomes how to fix belief, not in the individual merely, but in the community.[1]

What does Peirce intend with his reference to the social impulse? How can he argue that this distressingly familiar method of fixing belief, the method of tenacity, is opposed by a social impulse? Rather, isn't the social impulse akin to group selection, the pressure of the egoisms of the greater population (as mediated through institutions of social power) rejecting notions that it subjectively finds problematic? – This would certainly be the case in the so-called war of science and religion, the rejection of Giordano Bruno, Galileo Galilei, Copernicus, and etcetera by the Roman Catholic Hierarchy, as well as rejection of Darwin's Biology by both the American Southern Baptists and the Soviet Union.

Our approach to these questions begins in the same essay, where Peirce informs us that it makes no more sense to fetishize the community as its own unique thing. Nothing is gained by allowing a state (or culturally instituted factor of social power) – especially a religious state (which makes very real secular power an absolute power by pretending a supernatural – hence unquestionable – source of that power), to claim the unique status as *the* essential scale of being. This follows from the argument that nothing is gained by allowing the individual (itself a social construct) the same claim. Indeed, the narcissism is distressingly similar; and though worshiping the state may create problems on a grander scale, few tragedies equal a confused mix of the two. And yet, a belief must be fixed (made hereditable, become thirdness, *fit* its situation) within both the individual, and her community, if it is to stand at all (how else may it take on a knowable form and gain the

[1] *Peirce, CP 5.377-9, The Fixation of Belief*

status of belief but by surviving within this uncertain world). And this must happen in *this* world, where all being (*living* being, Darwin may very well contend) is a limited, contingent, connected, fragment of the whole of (living) being.

We end our confusion by recognizing, as did Peirce, that:

> It seems to me that we are driven to this, that logicality inexorably requires that our interests shall *not* be limited. They must not stop at our own fate, but must embrace the whole community. This community, again, must not be limited, but must extend to all races of beings with whom we can come into immediate or mediate intellectual relation. It must reach, however vaguely, beyond this geological epoch, beyond all bounds. He who would not sacrifice his own soul to save the whole world, is, as it seems to me, illogical in all his inferences, collectively. Logic is rooted in the social principle.
> …
> Now, it is not necessary for logicality that a man should himself be capable of the heroism of self-sacrifice. It is sufficient that he should recognize the possibility of it, should perceive that only that man's inferences who has it are really logical, and should consequently regard his own as being only so far valid as they would be accepted by the hero. So far as he thus refers his inferences to that standard, he becomes identified with such a mind.
>
> This makes logicality attainable enough…
>
> But all this requires a conceived identification of one's interests with those of an unlimited community… Yet, when we consider that logic depends on a mere struggle to escape doubt, which, as it terminates in action, must begin in emotion, and that, furthermore, the only cause of our planting ourselves on reason is that the other methods of escaping doubt fail on account of the social impulse, why should we wonder to find social sentiment presupposed in reasoning?[1]

Indeed, why would we doubt such society? How can we? And who among us would even think of doing so? – Except those who fancy themselves uniquely and separately created by act of divine fiat, with a special (intuitive or supernatural) knowledge of their 'place' in the world (that they 'own'). But 'society' is larger than our little self-identifications. It extends to an unlimited community. *Whether or not we accept it as such, our society is the entirety of our heritage of interactions* – immediately present within (relative to) some specific situation through and of which we exist, extended so far as relevance pertains.

[1] *Peirce, W 1.284-5, The Doctrine of Chances*

The key word here is *relevance*. Whether or not Paris is the capital of France is not important to the study of radium, but the fact of radiation poisoning is important to the study of practical applications of nuclear power. We may forever argue over the particulars of relevance, but this much is clear: a father and son, attempting to 'discover' how to tie shoelaces, is a community of inquirers but *only so far as all participants engage the process openly* (sans unbridled subjectivity, sans claims of supernatural authority, and basically sans all sorts of personal bs). If the father insists that there is only one true way that actually doesn't work (however it may have with bronze-age footwear), forces the child to tie ungainly knots ('cause that's how Jesus did it), and berates (or even beats) the child for discovering (and using) some more practicable method, then that 'community' cannot successfully inquire. But frankly, the fact of fatherhood is not relevant to the method of tying one's shoes, and to the extent that we allow our notions of parental authority (or those of *one*, *true*, or *way*), to disrupt or destroy the process of inquiry, we destroy that exact community on which our society most thoroughly depends.

The community of inquirers is any group that *makes the habit of minding well*. And we are somewhat capable in this regard: we form communities, and we can also reform them – but on history, we can do nothing. In the case above, the consequences of the father's behavior always lands on this continuum: the son either finds some other community wherein he can find validation (social support) for his method of shoe tying, or he limps through life knotted up quite badly, or some combination thereof. And this continuum represents the range of probability that he will die young due to some random catastrophic shoe-tying failure – which could have been averted but for the lingering damage of that original failed minding. It is no different for our knottier issues. Thus the community of inquirers that Peirce valued so highly is larger than any university can contain, and more vital to society.

This *commens*[55] that centers of every attempt at knowing is not limited to ivory towers and intellectual superstardom (however this may – and often actually does – represent the greatest (most inclusive, complete, and whole) expression of human knowing). Likewise,

we grant no authority to the ivory towers *as* ivory towers, knowing that these cultural icons are as capable of the corruption of unbridled subjectivity as every one of us. Instead we engage the whole of the world – the whole of the society of interactions that are the constellations of causes that are both our world and our selves.

The social impulse that guards against our irrationalities is itself a corollary of selection: we are only as we are part of a whole, and so it matters not how strongly we 'believe' (act upon) some absurdity, we are not alone in our actions – and so the truth will out in the end. This is why the social impulse drives out absurdity *in practice*. I.e., if we deny Newton and leap from a tall building, or Darwin and act as if we are the individually and consciously crafted result of some supernatural act of creation, then we'll likely die. Outside our fantasies (subjective propensity and want) absurdities just don't work; their incongruous character renders them dumb – incapable of generating signage. As with the impulse of any individual subjectivity, the impulse of the whole of a society – which in every case involves so-called natural law, the qualities of physicality – is to 'complete' itself. And this means it must reject the absurd in favor of the functional. And thus the social impulse gives rise to the social principle in which logic is rooted, as well as the hero capable of risking herself, that others might think and the world be.

It is uncertain how deeply Peirce identified himself with such a hero – though clearly he was a man to risk all on the aggression of logic, truth, and love. His expression of this infinite community in which we are all but utterly significant fragments, where layer upon layer of mutual incorporations are born of and birth all the glorious forms of life, was the truth he found/generated within/through his reading of Darwin's Ontology. And in this, Peirce forged/joined a community of inquirers such as this world has never seen. The jury is still out on whether this Darwinian epoch of ours, that Peirce, James, Wright and countless others have settled into being, will prove more socially competent than the many others with which it is entangled and of which it has emerged. But other questions close fast, and it has become quite safe to argue that in this world of ours, both science and philosophy function better in Darwin's mold, and Darwin's Ontology has joined the world in reshaping the one long argument, the great tangled bank, that we call life.

Summary …

As with all thinking (living and minding) individuals, Charles Darwin 'was' his ontology. Indeed, we all are – it is the enactment of heritage (including that of our previous selves) that is our both our being, and our experience of it. However unlike the most of us, Darwin's Ontology was truly great – at least in the sense used by James. Darwin wove together a way of minding that opened a new niche of human understanding, one which offers us a way of living in the world that does more than merely not destroy it – more than just saving it. Darwin's Ontology informs our living within the world as a whole fragment thereof and therein; when and as we incorporate it well within our individual minding, it offers ways and means by which one might meliorate natures brutalities, mend its weaving and not just survive the world, but live within it successfully and well.

Chauncey Wright read into/within Darwin's epic *Origin of the Species*, this new way of being in the world as a *religio*, a renewed binding with and within the world. Two of his closest friends, Charles Peirce and William James, further extrapolated upon/within Darwin's Ontology bringing it into the fields of human logic and psychology. Pragmatism does not exclusively represent Darwin's Ontology (as actually pragmatic thinkers would all agree), for truly "the point of any pen can be an epitome of reality."[I] However as a whole, it does represent a full expression of Darwin's Ontology in its *demand* for an ongoing revitalization of minding, a regular paying-of-attention, to the thickness of life; and in this it demands that we give up our childish fascination with permanence, essence, 'first' principles, 'final' causation, and the whole general apparatus of traditional religion and philosophy.

Darwin's Ontology demands that we get over ourselves, and accept the impossibility of getting one over on the universe. A perhaps unexpected consequence of this is that it rejects a mere rejection of religion, and instead expects reconstruction, revitalization thereof and not merely reaction to it. More, *it rejects reaction* – and replaces it with reciprocal incorporation, integration, and the *limited* free will inherent to the minding of

[I] *James, 1978, pg. 115*

life. Of course, this also has demands. At risk of our own living and that of life as we know it, we must not do so foolishly; we must also discorporate, allow dinosaur notions to fall from our thoughts. Darwin's Ontology warns us: when we become 'too big' for our selves, we are bound to fail in our circumstances and fall from history's grace.

And so we allow philosophy and science *and religion* to proceed *and to pass* unhindered by past needs. We mind well our notions and our world, and at risk of life and limb we do our best to do it right. The upshot of the demand for a Darwinian *Religio*, this deep rebinding of *not-I* with and within the world and *I*, is a return to the question of survival. It is a Pragmatic demand, one of choice and consequence: Love the world, give it your concern, and pay attention to it as we would our selves. Move within it with care, leave the seeds and don't shit where you eat. Make your takings in such a way to have left more when you have gone. Take your leavings in such a way to add rather than poison the community/coordination to which you belong and from which you emerge. And for crying out loud, stop pretending you're somehow already saved or otherwise real special, and get about with the learning that for the sake of the children, you really do need.

These are the demands that Darwin felt so keenly, that Wright explored so urgently, and that James and Peirce exploited in opening this new niche of being. Darwin's Ontology represents the differentiation of a new species of thought, which is the regeneration of our habitat, a new home for that (still) recently differentiated hominid that is this remarkable nearly hairless ape, Homo Sapiens. Our very existence depends upon our ecopoetic quality, which is the skill of our singing/reading, acting/interpreting, widening/defining this mapping of/that-is-at-once our world and us.

For I am about to do something new. See, I have already begun! Do you not see it?[I]

[I] *Is 43:19, New Living Translation*

… and a Conclusion

The arc of history tends not towards justice but extinction – justice is our only tool with which to stave it off. Justice is an individual (read: social) instantiation of respect for equanimity, a secular kenosis, which stems both from and results in a furthering of the intertwining of layer upon layer of life – all of which is minding its own business but also is the business of each other. It is in this that justice is sustainable and falling short of it, suicide. Time is long and events unpredictable, but by weaving ourselves deeply with other life and all its surrounds, we greatly increase our own chances in and of living. (Provided we do this wisely of course – no need to roll around in poison ivy after we learn of what will likely follow, still less a 'vital' 'need' to consume skullcaps blithely.) So-called non-sentient animals do this with no apparent self-awareness; but sapience is more than the adolescent tagging of public spaces, more than the egoism of pretending to own the world. We call ourselves Sapient, but we survive only if we prove it true.

Psychologically, we are the ruckus of our own weaving together of possible 'answers' to immediate situations, which is the continuing emergence of the experience of *I*, out of the indigenous minding of life. This very accomplishment demands that we check our exuberances against an internal coherence of external factors (after all, how many rashes must we suffer, and how many must needlessly suffer and die, before we learn to both look and see). Everything I have ever read that came of Darwin's hand convinces me that this was a man who saw profoundly that all life touches on itself with such great intimacy that monoculture is always genocide, and genocide, suicide. Seen from a Darwinian perspective, fair practice in living and respect for other life tends toward more living, and lack thereof tends to destroy some aspect of our greater self, which includes our own sense of self as well as the world in and of which we pertain – and without which we (our own notion of *I* as well as the whole of our species and countless others of both) cannot survive. When we rend those (individuals or species) within and through which our being is and has been interwoven, we destroy ourselves. Survival is justice, and justice survival – that is all /Ye know on earth, and all ye need to know.

*

Notes

[1] "An ontology defines (specifies) the concepts, relationships, and other distinctions that are relevant for modeling a domain. The specification takes the form of the definitions of representational vocabulary (classes, relations, and so forth), which provide meanings for the vocabulary and formal constraints on its coherent use." (*Gruber 1995*)

[2]From E. W. Gurney, Chauncey Wright's childhood acquaintance in North Hampton and Harvard schoolmate (who would later become Librarian at Harvard Medical School, before becoming Professor of both Latin and Philosophy as well as Professor and Dean of History), occasional member of the famed Metaphysical club and Wright's lifelong friend, we have these wonderful illustrations (*Wright 2000 vol. 2 pgs. 361-383*):

> The tenacity, by the way, of Chauncey's hold upon all the results of his past thinking was marvelous, and showed, if I may say so, how organically connected was his whole structure of thought. 'You remember,' he would say, 'the definition I evolved of this, - or the law I formulated of that – in such and such a talk with you,' – and the conversation, it might be, had occurred five or ten years before.
> …
> *Cave hominem unius libri*, says the proverb; which had probably a more frequent application once, when books were rarer. At any rate, Chauncey was the only striking illustration that has come in my way of the immense amount of nutriment that an original and meditative mind may draw from a single author.
> …
> It must have been in 1859 or 1860 that Chauncey first felt the influence which was to be more powerful than any other in giving direction and color to his intellectual life. This was the publication of Darwin's Origin of the Species. We read it and re-read it aloud together, and talked over it and the reviews that appeared of it interminably. The ground had been prepared for the seed by Chauncey's interest in theoretic geology, and the argument for the sufficiency of cause now in operation to explain past changes in the condition of the earth; by the discussions which had gone on for years in Cambridge between Agassiz and Gray concerning the true nature of the terms 'genus' and 'species'; and by the fruitfulness, already shown, of the historical method in dealing with social phenomena …
>
> Up to this time, however, the abstract theory of evolution had not found favor in Chauncey's mind. In illustration of this, I recall, years previously, a talk with him about the 'Vestiges of Creation,' into which, I think, he had barely dipped, and how lightly he regarded the thesis itself, as well as the arguments. I remember, too, how decided were his leanings for Cuvier as against Geoffroy St. Hilaire, and how destitute of attraction for him had

> been the nebular hypothesis. To his mind, no theory of evolution would have commended itself on *a priori* grounds; but the cumulative argument, based on observation and experiment, of the 'Origin of Species,' in harmony as it was with his own habits of thought, carried with it complete conviction. A real explanation, so far as it went, had been furnished as to the manner in which the organic world had come to take its present form; and, more and more, as time went on, it became the predominant intellectual interest of his life to study the problems, physical and metaphysical, which the acceptance of this explanation presented.
>
> Not only was the direct influence of Darwin on Chauncey's scientific view thus great, but hardly less curious and important was the reflex influence upon his purely speculative opinions of the questions in which he was now most interested and the methods employed in their solution. There was no sudden change; for Chauncey's opinions had been too well considered, and were too organically connected to admit of any serious modification, except that which comes from a changed attitude of the mind as a whole.
> …
> … up to the time of his interest in Darwin, it was Chauncey's synthetic powers that were most called into play in his philosophy. From that time, the analytic element became the more potent, and bit by bit the old foundations crumbled away. Occam's razor … was used by Chauncey with more and more ruthless consistency, until nothing was left standing in the mind that was not rooted in experience. Experience of phenomena gave both the content and the form of knowledge; the ground and the sanction of moral judgments; the limits of the universe in its intelligible, credible relations with man.

[3] This miniscule biography would not be complete without reference to Wright's affinity to small children: he was a lifelong devotee of slight of hand magic, and late in his life he mastered the art of juggling – skills which he would display to the hordes of small children that tended to gather around him; and also to the long and involved letters he would write to his younger friends, including his infamous thousand word essay on why taffy becomes white when pulled. And on a different note, Wright was a dispassionate, but committed but practical abolitionist, as evidenced by the fact that he boarded for over a decade with a family of former slaves and contributed to purchasing freedom for others. This is likewise seen in his associations; Ann Lyman, who was the family friend who had sponsored his education and was involved in many such actions, carried the mortgage on his landlady's home, enabling this freedwoman to thrive.

[4] E.g. In the introductory essay to *The Evolutionary Philosophy of Chauncey Wright*, (*Wright, 2000, vol. 1*) Thayer cites a letter wherein Wright, in response to an inquiry from younger female admirer concerning the qualities he might find appealing in a wife, states that had he chosen to marry, his wife's singular characteristic would be that she would want to be married to another and hence, very unhappy. In the same essay, we learn that

in the late 1860's, Wright spent the better part of a year unable, or barely able, to walk - an experience stemming from a minor injury that festered in his inability to stir himself from his bed. His depressions are apparent throughout his private letters, letters written about him, and other contemporary references, as well as subsequent biographies – i.e. Madden, Chambliss, etcetera.

[5] This is not to say that Wright did not appreciate posies, actual and literate. We learn more about this fascinating man as we proceed, however there is now a temptation too great to ignore, so let us loosen the immediate focus long enough for an added footnote. Wright drew much from Emerson – so much that no summery of his life, however short, should fail to draw a direct parallel from *Self-Reliance* (*Emerson, 1920 pg. 37*):

> The other terror that scares us from self-trust is our consistency; a reverence for our past act or word, because the eyes of others have no other data for computing our orbit than our past acts, and we are loath to disappoint them.
>
> But why should you keep your head over your shoulder? Why drag about this corpse of your memory, lest you contradict somewhat you have stated in this or that public place? Suppose you should contradict yourself; what then? It seems to be a rule of wisdom never to rely on your memory alone, scarcely even in acts of pure memory, but to bring the past for judgment into the thousand-eyed present, and live ever in a new day. In your metaphysics you have denied personality to the Deity: yet when the devout motions of the soul come, yield to them heart and life, though they should clothe God with shape and color. Leave your theory, as Joseph his coat in the hand of the harlot, and flee.
>
> A foolish consistency is the hobgoblin of little minds, adored by little statesmen and philosophers and divines. With consistency a great soul has simply nothing to do. He may as well concern himself with his shadow on the wall. Speak what you think now in hard words, and tomorrow speak what tomorrow thinks in hard words again, though it contradict every thing you said to-day. "Ah, so you shall be sure to be misunderstood." Is it so bad, then, to be misunderstood? Pythagoras was misunderstood, and Socrates, and Jesus, and Luther, and Copernicus, and Galileo, and Newton, and every pure and wise spirit that ever took flesh. To be great is to be misunderstood.

Chauncey Wright called himself a positivist, and considered positivism to be nothing more than another theory, to be fled when necessary. Likewise, he was a philosophical materialist who considered the presumption of materialism absurd. We will have more on Emerson soon – for now let's just savor the feel of *Self-Reliance*, inveighing its opposition to the presumed consistencies of subjective motivations.

[6] There is an ethical corollary that gives agency to the Pragmatic focus on consequences, and is derived from the Pragmatic redefinition of vitality: that having 'somewhere to go with it' is the essential factor of any proposition. Nothing is more un-pragmatic than an *arbitrary* closing off of possibility. This, James argued, is the basis of Pragmatic ethics. As such, applying this very pragmatic sense to this exact situation, we can call Rorty's attitude immoral. To be fair, Rorty seems to have considered questions of Wright's philosophy a 'closed' issue, which is to say that he thought nothing could be garnered from further study of Wright's work. So perhaps Rorty is not immoral, but simply wrong.

[7] In his 'expert' testimony for Kitzmiller v. Dover, as well as numerous interviews, Fuller has been quoted as defending the right to be wrong. I can agree without reservation that everyone has the *right* to be wrong; however, I must absolutely insist that being wrong has consequences, which are often irredeemable and can readily become fatal. Moreover, these consequences regularly affect far more of the world than a single, individual dolt. Fuller's position is more than merely absurd; it is know-nothingism, epistemic suicide, which (as we ought to have long since learned – from Darwin, if not our own living) can readily lead to physical destruction. Furthermore, Darwin's Ontology teaches us that living being is nothing if not *a posteriori*, that is, dependent on con-sequence-s which form complexes, which shape and are shaped by the interdependence of life and out of which new life emerges; hence, this right to be wrong which Fuller so crudely vows, amounts to more than a right to be stupid; it is a right to die. It is a right to kill, epistemically if not physically; it is the narcissism of a sociopath disguised, concern troll style, as respect for pluralistic individuation. I too respect that there are multiple paths and infinitely individuated ways of being, I too respect that I am not, thanks be to ?@#*&^), responsible to determine all the ways of the world, or even which way to go for anyone but myself; but. wrong. is. still. wrong. Berlin is not the capital of France. And 2 plus 2 does not make 5, however many people think it does, and however often someone's demon drops that extra pebble into their personal counting bowl. To argue otherwise is to divorce the minding of one's self from Reason and Philosophy, from Science and Pragmatism – and from one's own self. In today's climate this is more than mere suicide; it has become generative of global genocide.

[8] Admitting my own prejudices, I cannot bring myself to describe the man's work as scholarship wherein I would expect to find more even handed research, and far less blatant sensationalism; (following Wright's approach to the differentiation of science from other forms of rationalism, I would argue that the necessary objective motivation is rather missing from his work). Louis Menand may be a skilled writer, but he approaches his storytelling with the breathlessness of the paraparazi chasing down a lead on some starlet's fashion malfunction. This said, Menand really does tell a good story, it is rather sad that this ability isn't linked to a more demandingly inquisitive nature. Menand has also produced a compilation of Pragmatic Writings, heavily focused on James, which consists of little more than the standard tropes, ignores all of the subtleties of Pragmatism and contribute little to the subject. Worse, he basically turns Pragmatism into the very straw dog its detractors have been beating for well over a century.

In a remarkable convergence, Steve Fuller gives major props to the Menand School of DeepThoughtas/equalsLiteJournalism in a letter to the editor (*Fuller 2007*), wherein he uses the statement that "both philosophers and scientists would do well to learn from journalists" *as a proof*. Yes, of course. How can anyone argue any side of such proposition? This is what instructors strive to beat out of sophomore philosophy students: argument by absurd truism. The fact that philosophers and scientists would do well to learn from journalists has nothing to do with what it is that they can therein learn, nor the fact that journalists would also do well to learn from philosophers and scientists. The very different sets of methods, objectives, practices and signifiers *etc.* have practical consequences in their epistemological scope, but so what? That knowing is as interwoven as being does not imply that all choices are the same, but that decisions actually matter. No attempt to construct a causal connection between sensationalism and excellence in science can pass as good philosophy.

[9] Likewise, to Menand William James is the dorky kid down the block, cast by Disney, who grows into his own by discovering that a) the coach deserves respect, b) the looser deserves to loose, and c) how to be a man in a complicated world. Storytelling is built around catharsis, which is to say that some character usually 'gets it' or completes his transcendence (epistemically and socially) *into* being, so as to complete the hero's journey – overcome the local bully or outshine the local swell, and become the man he never really believed he could be (and yes, it is most commonly only *men* whose transcendence is thus depicted, a prejudice that continues in the writings of the world). In the case of Menand's *The Metaphysical Club*, this person is James – but by depicting his story in such a shallow way, Menand abuses him as badly and perhaps even worse, than the others. Menand claims to be a Jamesian Philosopher. He isn't; he's a storyteller and a damn good one. But for all his flair, his shtick is off.

[10] By this point, it should be rather apparent that the pragmatic *a priori* is not the *a priori* of continental philosophy – the latter is *merely* ontological (in the previously discussed sense of the word). It is situated in metaphysical principles qua principles, and carries the idea of knowledge sans experience (which to a pragmatist is absurd, impossible, and rather narcissistic); while the pragmatic *a priori* places the living need to incorporate extant phenomena, as well as decorporate defuncted phenomena, as the foundational arbitrator within experience, which is to say, as the first philosophy of consequentiality; i.e. the pragmatic a priori places the *necessity to generate experience in order to live* before all subsequent metaphysical constructions, catalogs, or other such a posteriori interpretations of said experience.

[11] In Pragmatism, like in Darwin's Ontology, 'instinct' carries specific meaning – it is not unreason, nor is it a psychical characteristic determined by genetic coding, i.e. what is commonly called animal instincts: on the contrary, an instinct is an active incorporation of the so called *objective situation* within the *subjective object* which is accomplished without conscious (self-aware) intent (teleology). This is to say that an instinct is a metaphysical accident expressed in the completion of an act (either physical or psychical) wherein some element of a situation is successfully and completely incorporated by the

'instincting' being, such that the subsequent though practically immediate re-action successfully 'completes' a restructuring of some specific element of that immediate situation. If the instinct is 'good', then the situational restructuring will result in an environmental fostering of the living of that being; if not, it will result in less potential for the successful growth and/or maintenance its continued living. Utterly dysfunctional instinct ultimately results in untimely demise.

[12] Here I am using the word 'fit' in its normative sense: if my clothes fit me, this does not indicate their superiority to other clothes. Rather, if my clothes fit me then there is a coherent relationship between me and my clothes which actually serves both me and my clothes. (If they are too small they will tend to burst their seams, as well as impede my physicality. Likewise, if my trousers are too long they will tend to drag on the pavement and disintegrate faster than not, as well as quite possibly trip me up and further damage my already ugly mug.)

[13] There is a disagreement between the ideation of progress in Hume the philosopher, and that of Hume the historian, who, in contradiction with Hume the philosopher, appears to hold to the Whig theory of the progress of history – that history is itself a record of steady, if sometimes punctuated, progress toward some knowable better-ness. Likewise, Hume was sometimes an early proponent of an absurd reductionism, as Midgley aptly demonstrates by pulling from the Enquiry Concerning Human Understanding (*Midgley, 1991 pg. 199 Wisdom, Information and Wonder*):

> When we run over libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume of divinity, or school metaphysic, for instance let us ask: Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matters of fact? No. Commit it then to the flames for it can contain nothing but sophistry and illusion.

Her analysis of this:

> Hume's rules allow meaning only to mathematics and to reports of sense experience everything else is dismissed as nonsense. He does not tell us what he thought ought to be done with the volume containing the Enquiry itself, and with all the rest of empiricist philosophy. This was an early form of the reductive distortion that caused so much trouble later, the hasty adoption of a bizarrely restrictive view of meaning to shore up a shaky metaphysical proposition, without proper attention to the problem of what 'meaning' means.

[14] To repeat myself as to not cause unwarranted confusion, I am not claiming that C. W. postulated, or even pre-figured, Complexity Theory. I am claiming that he was critically aware of the shortcomings of the bifurcated monism of modernity and believed there must be other, better, more functional and more truthful approaches to escaping the 'God did it' argument. Furthermore, the fact of his connection with Peirce in identifying language, logic, and indeed all isolatable aspects of consciousness itself as signage to be differentiated from the varying significants, so that the relationships involved can be studied as their own complex, as well as the fact of his connection with James in identifying subjectivity as a function of relating rather than as a monistic entity, leaves us to conclude that his ideation was a necessary, though not sufficient, factor in the development of complexity theory. I.e. there is a sharp contrast between the commonly accepted beliefs about complexity and that of Wright. See *Gleick (1987 pg. 303*) and compare this with Wright above, "as inorganic nature approaches a regulated confusion, the more it tends to bring forth that perfect order, of which fragments appear in the incomplete system of actual organic life… The classification of organic forms represents to the naturalist, not the structure of a regular though incomplete development, but the broken and fragmentary form of a ruin."

[15] This is not provable. However, while it *may* be at least theoretically possible (if not, at this time, rationally conceptual) that there may come a time when culture is utterly in sync with science (or philosophy etc), to act on the presumption that such a time has come is patently absurd. It is equally absurd to presume that there ever was a time when people were utterly devoted to religion. And to think any such era *will* come, particularly if by result of *your own actions*, is to allow utopian visions to obscure your mental map of the world. It is a corruption of reason by a doctrine alien to both Darwin's Ontology and Pragmatism: it is the *wish* to believe.

[16] In his decision in the case of Tammy Kitzmiller, et al. v. Dover Area School District, et al. (*Transcripts of Kitzmiller v Dover, 2005*), Judge Jones wrote, "the religious nature of ID [intelligent design] would be readily apparent to an objective observer, adult or child" (*pg 24*). He later clarifies (*pg 64*):

> After a searching review of the record and applicable caselaw, we find that while ID arguments may be true, a proposition on which the Court takes no position, ID is not science. We find that ID fails on three different levels, any one of which is sufficient to preclude a determination that ID is science. They are: (1) ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation; (2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's; and (3) ID's negative attacks on evolution have been refuted by the scientific community

[17] I hasten to repeat, this was published in 1870; I am writing this particular endnote on 01-01-09, a little hung-over but resolved to have my work finished (and on the year of

Darwin no less!) The comparison of dates is important; in my immediate emotional situation (one of grumpy determination), I cannot help but recognize that this quotation almost certainly will be twisted entirely beyond the bounds of reason to be used as 'evidence' that 'proves' both certain doom for evolutionary theory as well as the certainty that Darwin based his science on 'faith' in a proposition for which there is no 'proving' (re: deliberately misunderstood).

This is not what Wright is saying. Quite the opposite, here and elsewhere Wright is commenting favorably on Darwin's successful acts of 'religio' (reconnecting or binding together) – in this specific instance, the binding together of inductive and deductive methods into a more competent methodology for discovering *what actually is*; the binding together of physics and metaphysics so as to better postulate *what actually is*; the binding together of objective motivations with subjective experiences so as to better grasp *what actually is*.

If 'Evolutionism' is a religion, then it is a working one, useful in fitting reason with reality; whereas 'Intelligent Design' (more honestly called Creationism) is (more and more each of these 150 years) a highly dysfunctional religion, dependent on subjective motivation, deliberate misinformation, and rational obfuscation – and which, I would hypothesize, stems from some combination of three causes: (1) an inability to differentiate *what actually is* from *what I need* (and/or *what I think I need*); (2) an inability to maintain a coherent identity – successfully differentiated both from its various signifiers, as well as from the immediate metaphysical ecology of which it has emerged; (3) an inability either to allow love or to take responsibility for its refusal – an incapacitation of the function of kenosis coupled with (or derived from) ignorance of the scale thick quality of being, and a narcissistic rejection of one's own subjectivity as a fragment of a vast complex rather than as an exception to all that actually is.

Faith, belief bound into action, only serves well when bound with reason.

Any 'Darwinism' that hinders this union – this living evolution of reason, this binding together of coherent being through and in union with the binding together of and with the actual coherent complex that is both us and our surrounds, this meditative and ameliorative knowing – must be discarded; (as has happened with so-called Social Darwinism, which has nothing to do with Darwin or Darwin's Ontology, but results from ridiculously dysfunctional readings of Darwin mixed with unhealthy doses of blatantly subjective motivations and foolish claims to absolute certainty in metaphysical knowing). What is important is that this (dare we say, Darwinian) imperative applies with equal panache to today's dinosaurs as it did to those of yore; religion too must evolve or face certain extinction. The asteroid has hit; the change is now; old patterns fail and new ones are born. T. Rex, all his cousins and their entire 'lineage', right up to the present day, all either transmute or die. 'Isms' of all stripes, after centuries of comfort within broadly familiar paradigmatic niches, once again scatter to little islands ecologies whereupon habit fails and limitation may again breed creatively. Or not and a lineage ends. Indeed, the time to discard specific bindings, or metaphysical habits, has happened with chaotic

regularity throughout the history of human religion. And science. And culture. Etcetera. The only question is: how long will it take to turn the hermeneutic circle – to reconstruct a functioning religio. The two corollaries are, how far will the destruction extend, and how many will die (individuals and species – actual, not metaphorical) before we do; that is, *if* we do.

Besides all this, in the nearly 150 years since *Origin*, this "incompleteness of the proofs" has been and is continually being rectified (and how!); a process *ad infinitum* – or at least lasting as long as there are sentient beings willing to quest rationally after a meaning within, of and for the beauty and structure of life, as well as the aesthetic of being itself.

[18] This being so, it is however also true to distinguish between the complexity of a living organism and that of Gaia, and certainly between an organism and the immediate cocoon or 'outerness' of its being. I do not hold that there is no difference between an organism and its environment, or that there is no quantifiably unique set of consequences to the differences – in scale, relational distance, degree of separation, structure of interaction and incorporation as well as agglomeration and execration, etcetera. My argument is only that there is a oneness in its being as neither could be without the other, and that it is the interaction (the transaction, some would hasten to correct) that actually is, that 'makes' the 'isness' that we both catalogue and experience as 'us' and 'the world' around us.

[19] To be clear, biology only makes sense in light of Darwin's work; however, the tools and techniques of biology have become far, far more sophisticated than they were in the mid 19th century. I say Darwin is basically irrelevant to contemporary biology because although no contemporary biologist can master his trade without accepting his basic premise (*without which nothing in biology makes any sense*), Darwin's toolkit was too light to accomplish the work now before us. This in no way invalidates the *elan* of Darwin's Ontology, but rather confirms it.

[20] See, for example, *The Influence of Darwin on Philosophy*, or *The Live Creature* and *Having an Experience* (the first and third chapters of *Art as Experience*), or *The Scientific Factor* (the third chapter of *Reconstruction in Philosophy*), or *The Reflex Arc Concept in Psychology*, or *The Child and the Curriculum*, etcetera.

[21] I will leave it for others to argue whether religion is better understood as an adaptive response, a rational choice, or an irrational barnacle growing on the 'body' of a culture. I answer, all and none of the above. At various times in various places some mixture of the these depictions will fit; but I argue that first and foremost religion begins as spandrel, which then survives or fails dependant on its utility within particular situations coupled with its ability to adapt to changing circumstances. With certain caveats in place, I endorse David Sloan Wilson's argumentation in favor of religion (that is, specific existent forms of metaphysical presumptions bound within socio-political communities) as an adaptive response. I differ with his strict focus on adaptation and would rather posit the importance of spandrels in the origination of what we normatively call: religion.

[22] This is not to refuse the (distinct but distinctly hypothetical) possibility that such psychological bindings or religions may possibly exist, somewhere or somewhen, bound within structure that is not organic (e.g. artificial, or machine intelligence); however, current experience shows us that no such do exist. Moreover, I argue in complete agreement with Anton Markos in *Berusky, Andele a Stroje* (*Ladybugs, Angels and Machines)*; that the intentional construction of subjectivity will most probably fail; intention is itself a factor that limits the potential interaction, resulting at best in the construction of highly competent idiocy. Rather, the most basic element of subjectivity is the of a minding organism and its environment, the *religio* that defies active intention due to its complex/compound nature.

While we endeavor always to allow new experience to rebind our knowing (and so force us to reconstruct our philosophy and science as it does so our religion), we also cleave to the religio of which we are a part, which is part of us – and hence to the actual situation through which we exist. While I personally enjoy science fiction as much as I relish scientific philosophy (for similar reasons though in different contexts), it nevertheless remains that inorganic psychology is a well-studied theoretical abstraction whereas organic psychology is a vastly understudied actuality.

[23] Granted that life can be interrupted momentarily, and then restored. However, this possibility is quite limited; as we have steadily pointed out, the structure of the living organism cannot maintain itself without a steady rhythm of continued in- and ex-corporation such that this rhythm can go off beat only momentarily (the extent of which is contingent on the circumstances in which this happens). This is to say that while an organism can 'die' only to be 'resurrected' through medical intervention, organic structure does fall into immediate decay – and beyond some unspecifiably relative point, it will not respond to even the most fancily imagined intervention; likewise, dependant upon the extent of the decay, it will never return to what it was before the death event.

[24] For an interesting (and possibly even socially useful) but ultimately (deeply and badly) flawed exercise in Butlerian evolution, see Leonard Shlain's *The Alphabet Versus the Goddess*. Typical of such efforts, Shlain claims to be uncovering a 'hidden' neo-platonic human archetype – a 'wholeness' that had been lost to mankind due to the 'masculinity' (which he defines as a simple linearity) of literacy that has corrupted the 'femininity' of Socrates, Buddha and Jesus. This is another absurdity, but one that is typical of the manner in which 'even Aristotle Platonizes'. This is to say, by attributing agency to the abstracted concept of feminine, Shlain muddies the metaphysical waters such that his readers are less likely to notice either that he presumes a demonstrably false Butlerism by presuming that evolution is driven mechanically by willful action, and that he has no ideas as to the semblance, source, or origin of the self – beyond that of mystical know-nothingism. Central to Shlain's argument is Butler's concept of evolution: literacy, literature, and libraries extend mankind's agency, and this agency drives mankind's modern evolution. Shlain is proposing a new era of feminine principles based on some 'iconic' revolution, which (through its deliberate institutionalization) will 're-balance' the various powers of male and female. As I said, this may be socially useful; I completely

accept that no society can prosper well or long, so long as half its population is considered less worthy than the other half based on some useless and archaic abstraction (male = strong/smart/capable, female = weak/vulnerable/stupid) and any attempt to rectify this heritage is to be (on some level) respected. *However*, I cannot agree with anyone who claims that 'progress' consists of replacing one set of absurd myths with another; nor can I adopt ideation that I see as incoherent, however palliative it may be to someone else. This same discussion will return as we turn to Wright's relationship with his friend, John Fiske.

[25] As with other fairy tales, the ridiculous 'Lady Hope' story has been debunked again and again – and in fact the Darwin family had actually prepared for the emergence of such tripe and had kept a careful record of Darwin's last days in anticipation of the PR wars that would be (and in fact are still being) waged throughout the many decades following his death. This does not stop generations of biblical literalists from publishing fictitious accounts of Darwin's 'miraculous' conversion and supposed renunciation of his evolutionary theory (all of which have again and again been proven false).

[26] To a fundamentalist, life is but a fairy tale read by children. And yet fundamentalism is a phenomenon of Modernism. It is derived not only from the persistence of ancient myths, but also from the rise of the printing press – which then facilitated the development of that certain kind of individualized arrogance (I would even call it psychosis) wherein the reading of one's 'scripture' requires no interpretation (formal or otherwise), no relating from one exact situation to another and no enactment of a conceptualization. Previous to the dissemination of print, religious stories were introduced by *telling*, an action imbued with interpretation. Few acolytes ever got their actual hands on their holy books; hence few had the chance to claim an absolute yet subjective 'reading' thereof. The most common fallacy was not fundamentalism, but objectivism. But cheapened by availability, the books changed. And enter the fundamentalist, whose 'holy' book(s) are not relative (not related) but absolute (exist purely, in and of their own 'self' with no connection to any other being – other than some presumed absolute, of course); and the principles found therein are 'replicated' within the believer via directed transmission (the willful agency of a supernatural being). Likewise, a Darwinian fundamentalist believes that the tik-tok of a 'Darwinian' History is no interpretation, no theory to be questioned, but a rap sheet read into the court records, the 'indubitable' sequence of a Sherlock Holmes. The derogatory depiction of many so-called Darwinian Histories as 'just-so stories' fits.

In reference to this take on Fundamentalism, I point you to Karen Armstrong, whose value as a speculative thinker stands – despite serious difficulties within her philosophy. Armstrong comes from a very different background and focuses her study in a very different direction than my own. And in my view, she has earned much of the criticism she has garnered. Like Fiske, she exploits confusions in her religious postulations and generates unhealthy confusion in her ontology, epistemology, and etcetera. (The sentiment is not the problem, the myopia is.) And yet I completely agree with her basic premise that "religion isn't about believing things. It's about what you do. It's ethical

alchemy. It's about behaving in a way that changes you." This syncs with our discussion of religion and *religio*, and foreshadows James and Peirce *(Armstrong 2005 and 2006)*.

[27] It should be noted that Green gave much to Pragmatism, including a framework for extrapolation within legal affairs that offers yet another view of Darwin's Ontology (one which came to be of great importance to his editor, the (then much younger) legendary Justice Oliver Wendell Holmes Jr.). His argumentation is that cause and effect is Darwinian; it deals in 'constellations' of causes jointly concocting the datum of experience. The following could be read as a neat summary of causation within Darwin's Ontology. From "Proximate and Remote Cause" *(Green, 1933 pgs. 11-12)*

> The phrase "chain of causation," which is a phrase in frequent use when this maxim is under discussion, embodies a dangerous metaphor. It raises in the mind an idea of one determinate cause, followed by another determinate cause, created by the first, and that followed by a third, created by the second, and so on, one succeeding another till the effect is reached. The causes are pictured as following one upon the other in time, as the links of a chain follow one upon the other in space. There is nothing in nature which corresponds to this. Such an idea is a pure fabrication of the mind.
>
> There is but one view of causation which can be of practical service. To every event there are certain antecedents, never a single antecedent, but always a set of antecedents …
>
> From every point of view from which we look at the facts, a new cause appears. In as many different ways as we view an effect, so many different causes, as the word is generally used, can we find for it. The true, the entire, cause is none of these separate causes taken singly, but all of them taken together. These separate causes are not causes which stand to each other in the relation of proximate and remote, in any intelligible sense in which those words can be used. There is no chain of causation consisting of determinate links ranged in order of proximity to the effect. They are rather mutually interwoven with themselves and the effect, as the meshes of a net are interwoven. As the existence of each adjoining mesh of the net is necessary for the existence of any particular mesh, so the presence of each and every surrounding circumstance, which, taken by itself we may call a cause, is necessary for the production of the effect.
>
> In this view of causation there is nothing mysterious. Common people conduct their affairs by it, and die without having found it beyond their comprehension. When the law has to do with abstract theological belief, it will be time to speculate as to what abstract mystery there may be in causation; but as long as its concern is confined to practical matters it is

> useless to inquire for mysteries which exist in no other sense than the sense in which every thing is a mystery.

[28] Here I must admit to blurring the lines: being is not homologous in all these references. Clearly, metaphysically abstract being (such as a scientific theory) is not identical to physical being (such as a living organism or a non living scrap of granite), nor is it the same as an object constructed with specific intent of expressing a further abstraction (such as a work of art, including the ephemera of performance art). Certainly there are massive differences between a theater performance and a living being, though there are similarities sufficient to allow me to get away with lumping all such being together – with sufficient caveats and only for the purpose of furthering clarification...

[29] Admittedly, I am applying this sentence slightly out of context. I say slightly because while Whitehead's immediate focus does not sync with ours, it comes amidst an argument grounded within Darwin's Ontology. As such, it may be worth giving a moment to the entire paragraph: – *(Whitehead, 1958 pg. 23)*

> "Fatigue" is the antithesis of Reason. The operations of Fatigue constitute the defeat of Reason in its primitive character of reaching after the upward trend. Fatigue means the operation of excluding the impulse towards novelty. It excludes the opportunities of the immediate stage, at which life finds itself. That stage has been reached by seizing opportunity. The meridian triumph of a method is when it facilitates opportunity without any transcending of itself. Mere repetition is the baffling of opportunity. The inertia weighing upon Reason is generation of a mere recurrent round of change, unrelieved by novelty. The urge of Reason, clogged with such inertia, is fatigue. When the baffled urge has finally vanished, life preserves its stage so far as concerns its formal operations. But it has lost the impulse by which the stage was reached, an impulse which constituted an original element in the stage itself. There has been a relapse into mere repetitive life, concerned with mere living and divested of any factor involving effort towards living well, and still less of any effort towards living better. This stage of static life never truly attains stability. It represents a slow, prolonged decay in which the complexity of the organism gradually declines towards simpler forms.

[30] Reference the later, Lovelock, *The Gaia Hypothesis*; and the former, Raj Chakrabarti, et al. *(2008)* – Chakrabarti's Princeton team claims to have discovered "that certain kinds of biological structures exist that are able to steer the process of evolution toward improved fitness," mistakenly resurrecting Wallace's 'control hypothesis'. Even if their claims that individual proteins act on their own behalf to restore themselves after being damaged can be validated, still this would be no evidence for a source layer of biological control that drives evolution. It would rather only be more evidence that emergence is a scale thick phenomena. And by experience we argue that emergence is more likely to occur in a natural setting, i.e. in situations that are not 'controlled'.

[31] I should hasten to point out that while Wright ascribed the particular epistemic 'family tree' sketched out in the preceding paragraph, James and Peirce both postulated slight variations thereon and we will get to them by and by. I too would argue for a variant of Wright's tree. These differences, however, do not affect our immediate discussion.

[32]As noted in a footnote to Gurney's letter on Wright, written by J.B. Thayer: Sir William Hamilton was Wright's first philosophical influence. Thayer tells us that as of their senior year (Thayer and Wright were classmates), Wright still considered most philosophy to be useless even as speculation, and only grudgingly completed his philosophy assignments, the singular exception being the aforementioned assignment by Walker. However, within a few months of discovering Hamilton's 1829 essay, *The Philosophy of the Conditioned*, Wright practically inhaled every word Hamilton had ever published, before moving on to Hume and Mill, and finally to Darwin as primary sources for his ideation. Gurney also notes that Wright turned from Hamilton, as he later did from Mill and even Hume, whenever he came to find them less than useful in the generation of further complexities. But that this did not happen within/to his study of Darwin, who remained Wright's primary influence from the publication of *Origin*, until his death.

[33] To be clear, there is much to respect in Charles Hartshorne, particularly his emphasis on the humility required by the forced recognition that we *be* only as parts of a whole, and also his critique of the narcissism of traditional worship (not to mention his labors with Peirce's manuscripts). However, I consider his arguments concerning the actual existence of God to be on par with those of Wallace, that is to say, a repetition of Aristotle's worn over notions of final causation, well baked in the traditional style with plenty Neo-Platonisms. However well he seasons it with Darwin's Ontology, it remains the same stale fare. We will touch again on this notion, and defend this claim, later in this thesis.

[34] One short example of how Fiske's 'Darwinism' was marred by the perfect trifecta of 19th century subjective motivation; racism, sexism, and class snobbery, that is, by the manner in which he prioritized the maintenance of an abstracted, idealized self over the need to incorporate actual experience into the coherence of a novel, conditional and transient self, is found in his discussion of the development of the nervous system in individual beings. Specifically, he states that there is a correlation between the length of infancy and the sophistication of the adult mind (which is itself a valid inference, and acceptable if only he could supply some test of its worth, unfortunately such a crass requirement did not fall into his ideation of 'science'), before indulging himself in gratuitous, unsupported and self-propping speculation – 'proof' positive that his is the best (most intellectually advanced) sort of being: *(Fiske, 2003 vol. 4 pg. 130-131, The Progress from Brute to Man)*

> Infancy, psychologically considered, is the period during which the nerve connections and correlative ideal associations necessary for self-maintenance are becoming permanently established. Now this period,

> which only begins to exist when the intelligence is considerably complex, becomes longer and longer as the intelligence increases in complexity. In the human race it is much longer than in any other race of mammals, and it is much longer in the civilized man than in the savage.* Indeed among the educated classes of civilized society, its average duration may be said to be rather more than a quarter of a century, since during all this time those who are to live by brainwork are simply acquiring the capacity to do so …
>
> * Possibly there may be a kindred implication in the fact that women attain maturity earlier than men.

Needless to say, this sort of speculation – the self serving kind, contorting its illustrations so as to generate not a functional map of a vast territory, but a fun house mirror of the sort that makes the viewer appear taller, stronger, and with seriously impressive frontal lobes – is as common to Fiske as it is to his mentor, Spencer. It is unfortunately prevalent throughout humanity, be it educated or not, civilized or not, male or not. Darwin, however, did not indulge himself (much) in such speculation (the exception being his rather blatant sexism) and Wright decried it as having nothing to do with Darwin's theory, or the metaphysical and philosophical implications therein.

[35] Here I am speaking of myth making in the sense described by Joseph Campbell in his (utterly speculative*) Myths to Live By*, specifically: *(Campbell 1993 pg. 88)*

> Now the first and most important effect of a living mythological symbol is to waken and give guidance to the energies of life. It is an energy-releasing and -directing sign, which not only "turns you on," as they say today, but turns you on in a certain direction, making you function in a certain way - which will be one conducive to your participation in the life and purpose of a functioning social group. However, when the symbols provided by the social group no longer work, and the symbols that do work are no longer of the group, the individual cracks away, becomes dissociated and disoriented.

Wright would have had no problem with this depiction of mythology, which can be taken as corollary of our earlier discussion (*science cares not a whit from whence a proposition is originated, but only how it performs*). Moreover, I contend Wright recognized this necessity of mythic rendering as a factor *within* self-conscious minding. The primary lesson Wright took from Francis Bacon was to be wary of 'the seductions of the theater', to escape this idolatry of his own philosophy by careful attendance to consequentiality and special care in critiquing his own attachments. He did not, however, dismiss the agency of such pageantry, only that it has, or that it's existence proves an 'objective' significant, or supernatural source. The existence of human reason does not depend the actual agency of some such *significant*; rather it depends upon the presence of signage sufficiently functional to bind together a cohesive self. In this, religions (in the normative

sense) serve to spotlight ('unconsciously') selected signage, thereby shoring up the iconography of the self and rendering into being a coherent, though disassociated, self.

[36] To better explain the friendship between these two men, I ask you to imagine that P.Z Myers and Deepak Chopra had met at university, become fast friends, and openly critiqued each others work while not backing one step from their stated positions. Picture these two as school chums, pub-mates, life long colleagues and neighbors, and old friends. This comparison is faulty, of course, and no disrespect is intended; after all, now isn't then and these two men are not those two. But all caveats aside, this is a fair approximation of the situation. If it happens that you don't know Myers, an excellent beginning read is *Pharyngula (2006)* – then search for 'cracker-gate'. As for Chopra, just look. Personally I find the man as baffling as Wright seemed to have found Fiske – absurd but also brilliant, at least at certain times and in certain contexts; such a shame that such skill at systematic thought would be spent so superfluously. Yet though our study must endeavor to be logical, life itself is not, and neither is friendship. Wright seemed to have all the time in the world for others but yet a great impatience for stupid. So why was Fiske not summarily dismissed, and whither hence the respect?

Well, in truth he was and he wasn't (dismissed and respected, that is), but only and decidedly *a posteriori*, and even then only on points – but their mutual generosity seems to have been a long settled affair (and did not interfere with the dust-ups common enough amongst friendships founded upon flamboyant personalities). There are several considerations here: first, Wright was rather more generous in his approach to the theoretical life than a strict accounting of the scientific neutrality that is often ascribed to him would seem to indicate; second, Wright's scientific neutrality actually left him more open to the wonderment of the religious impulse than can be implied by a strict reading of his philosophy (and it is clear that he made no attempt to dogmatically constrain his own sense of wonderment); and third, he truly appreciated the value that pure speculation can bring (notwithstanding its limitations, of course) as well as the place that spectacle holds in human knowing. I may be reading too much into his relationship with Fiske (and this caricature of a biography certainly does the situation no justice) but considering the constellations that formed the immediacy of Wright's world, I think the assessment fair.

[37]Just the mention of James' unique father is a temptation for digression to great to ignore, and it carries with it a plausible cover. It serves us to look again at the point of religion, if only as a foreshadowing of Peirce. This cogent passage concerns what he considered exemplary of the unwitting genius of the religious impulse, coupled with its near-on inevitable, and inevitably poisonous, aspect. From Peirce's *Evolutionary Love*: *(CP 6.287-8)*

> Henry James, the Swedenborgian, says: "It is no doubt very tolerable finite or creaturely love to love one's own in another, to love another for his conformity to one's self: but nothing can be in more flagrant contrast with the creative Love, all whose tenderness *ex vi termini* must be reserved only for what intrinsically is most bitterly hostile and negative to

> itself." This is from *Substance and Shadow: an Essay on the Physics of Creation*. It is a pity he had not filled his pages with things like this, as he was able easily to do, instead of scolding at his reader and at people generally, until the physics of creation was wellnigh forgot. I must deduct, however, from what I just wrote: obviously no genius could make his every sentence as sublime as one which discloses for the problem of evil its everlasting solution.

[38]If you still have problems accepting my lumping of fundamentalist Christianity together with 'German Darwinism' as conceived by Wright, you might be looking for more evidence (experience) capable of terra-forming the perspectives of your Korzybski maps in such a way as to make the idea more palatable. And I am happy to oblige. Of course, entire libraries can be filled with books on the subject of Christian dysfunction and this isn't one of them. As such, I will try to restrain myself from loosing the point while still regaling you with a relevant tale.

At a debate sponsored by Christianity Today *(Does the God of Christianity Exist? 2009)*, Hitchens met with 5 theists (simultaneously!) all of whom seem better credentialed (academically speaking) than poor Mr. Jackson. The following remarks are those of one Pastor Douglas Wilson, a man with a long and troubling history of historical revisionism and Christian dominionism, author of *Letter from a Christian Citizen* and founder of New Saint Andrews College (an institute which pretends to offer a *purely* Christian education – which is to say wherein education is defined as successful when it serves to isolate the student from perspectives which differ from those deified by/within the school community). The following is my own transcript of some of his opening remarks:

> Christopher [Hitchens] thinks the universe is a certain way, and I want to maintain that the way Christopher thinks the universe is, would not generate a debate like this, it would not generate this kind of collision. To illustrate, if you were to take a bottle of Mountain Dew and a bottle of Dr. Pepper, [. . .] if you took the two bottles of pop and shook them up and put them on the table and they were both fizzing over, it wouldn't occur to you to ask which one was winning the debate, they aren't debating they are just fizzing. They're not debating, it's just matter in motion. They're not debating it's just a chemical reaction. What does that mean if you are an atheist and you say that all that is the cosmos is just matter in motion, it's just stuff moving around, it's just this infinite billiard table with the balls going in every direction. It's just this complex chemical reaction.
>
> Now we are complex chemical reactions. I think – according to Christopher – I think Christian thoughts because that's what these chemicals always do at this temperature and under these conditions, I don't think them because they are true or false, I think them because this is just the way it is. Now the problem is that that doesn't just apply to me, that also applies to him also. So he is making this claim about how the

> universe is, but he's not making the claim because it's true, he's making this claim because he's fizzing just like I am. I fizz Christianly, he fizzes atheistically, but we're both fizzing. Neither of us are arguing or debating. In order for a true debate to occur we have to be made in the image of god. In order for true exchange of views we have to have something here [gesturing to himself], in us, that goes beyond matter in motion that goes beyond our physical construction.
>
> Now this relates to something else this I think it applies to morality, I think it applies to rationality I think it applies to aesthetics, truth, goodness and beauty, I think that this reduction that I am proposing is something that makes it impossible for an atheist to mount a case against the Christian faith. That doesn't mean that there is not room for questions … I would want to distinguish between a doubt and a question. Doubts are those sorts of things that can never be answered in principle. A doubt cannot be answered; a question can be answered. Why does Paul say this and James say this, why does one of the synoptic gospel say this the other synoptic gospel say that, Those are reasonable questions, I want to maintain, however, that Christians don't need to answer anything coming from the atheist quarter because those are simply doubts, universal doubts; they are not questions because atheism can't support the kind of universe that is necessary to generate a question. In order to generate a question you have to know where you are to begin with. God had to put us here.

Hitchens does make the point soon after that 'fizzing' is not his word –basically that he does not accept a strictly Hobbesian Ontology. The following debate centers greatly around the notion that all five of his opponents claimed to know the 'facts' of god (without actually copping up to it). But Wilson combines solipsism with so-called relativism and states it quite neatly, *some people fizz this way, and others that*. He then tells us that questions can only be answered by blind (irrational) abduction of some complete system. And the proof of this is taken as obvious (in other sections he argues more clearly that the 'universal coherence' of Christianity is proof of its righteousness, its 'truth'). Doubt is banished to roam the wilderness and take in unwary travelers. His semiotic is barbarian; he thinks his symbols are *actual*, that they have independently originated and maintained ontological status. And he imagines that reason is not possible without blind attachment to an arbitrary set of mythical symbology. This is both an absurd argument, and one that depends upon the very 'relativism' that he attempts to decry. His battle is not against Darwin alone, but against The Enlightenment, and against enlightenment itself.

In a very telling moment, 95 minutes into the debate, our good Pastor makes the statement:

> What we (Christian apologists) are saying is that Christianity is narratival; it's creation, fall, flood, messiah, and the eschaton. There's a last chapter.

> You can't be reading through the Lord of the Rings and be half-way through The Two Towers and say, you know, I've had it up to here with Gollum and throw the book against the wall.

Hitchens responded by saying, "actually that's just what I did". Why on earth cannot a person put down a book that fails to interest them? And immediately the answer comes, because it's not a book, it's rather a skyhook. And you're not in Kansas anymore. Indeed, in his closing argument, the pastor makes the claim that unless one believes specifically in exact acts of supernatural causation specifically on the part of a metaphysical 'father' of one Rabbi Jesus of Nazareth – and interpret these acts specifically in accord with Pastor Wilson, then one cannot accept that psychicality, or even physicality exists. Some "skyhook" *must* exist to explain the oddly horizontal position of Hitchens' hind end, after all, the 'chair' in which Hitchens was sitting could not possibly exist physically if not metaphysically 'actualized' by the incarnated soul/father of a long dead rabbi. Hilarious. There is no point in engaging here.

Actually, the most telling aspect of this debate to our issue of German Darwinism comes in the closing arguments where one after another, all five Christianist theists facing Hitchens, claimed that his 'admission' that Christianity is a functionally self-contained belief system was evidence that it was true – moreover, one after another they claimed that Hitchens' statements as to the absurdity of some of the more ludicrous aspects of Christian theology were evidence that he does not believe it merely because he doesn't like it – that he is, in essence, a rebellious and unappreciative little brat. In other words, after staking their argumentation on internal coherence, they blatantly ignore all and any evidence that could contradict their self-acknowledged base-level abduction. And accuse their single opponent of childish narcissism. In a nod to Freud, this is called: *projection*.

Much of the argument in this debate revolves around issues answerable within/through Darwin's Ontology; and Hitchens certainly holds his own. I found myself cheering him again and again – and for more than merely his skill at bearding the lion in his den. Yet some of his answers as to cosmology, ontology, the nature of transcendence and the origin of morality, are rather lacking. In some small measure, the book you now hold in your hands speaks to the very substance of that lack.

[39] I will not attempt to defend the entire sweep of this statement in a simple footnote – much of this entire chapter can construe such an argument. Moreover, my basic thesis that Darwin's is the most pertinent attempt to 'domesticate' an Ontology, and *use* it knowingly and well within human discourse, is itself an extension of this smaller claim about James. I will, however, point to the manner in which philosophy has adapted to James. From Megan Rust Mustain: *(2006)*

> To read philosophy in a Jamesian way is to determine what responses an author evokes and what needs those responses satisfy. To do philosophy in a Jamesian way is to determine what needs currently require satisfaction and to craft philosophies that respond to them. To test our philosophies is

> to determine to what extent the needs chosen were the right ones, and to what extent the philosophies actually satisfy them. This test, James insists, can only be conducted experimentally, that is, in the living experiences of women and men. And where our philosophies fall short, as they almost surely will, our task is to reconstruct them in light of new evidence and previously unexamined human interests.

This would seem to have become *the* familiar method of philosophy (of checking our Korzybski maps for clarity, consistency and readability) within large (but certainly not all) sectors of academia, as well as the larger popular culture. By contrast, the more traditional methods, the metaphysical constructions and/or rational equations and/or vast systems intended to 'mirror' reality, are no longer commonly used, nor are they as useful.

[40] In this, his father figures highly. Henry James Sr. was a brilliantly eccentric Swedenborgian ('new-agy') theologian, and James saw quite young that theology is but one of the many processes by which we 'create' our gods, and which represents a large part of how we 'select' our metaphors. In this we see that "God making could be part of the process by which a society realizes its aspirations: first it embodies them in the conception of a particular God, and then proceeds to imitate that God." *(Hoffer, 1952 pg. 75)* You will notice, of course, that neither Hoffer nor James have anything to say about the actual existence of God; in fact, *Varieties* catalogues and contrasts scores of lived experiences without once laying any claim to knowledge of the actual existence of the *objects* of religious devotion. To James, such a question was moot, but never did he consider it trivial. For him, the universe is large enough to encompass any number of such 'gods' – though always such 'beings' 'survive' only as they serve in furthering our individual psychological needs. In this, it makes no difference whether these needs are healthy minded or whether they serve a sick soul – though in terms of our living the difference is profound. The importance of 'god' lies in the functioning of our selves – the range of interpretation of 'god' *generally* represents (and creates) a continuum running from healthy to sick psychological states.

[41] Russell states his position plainly; "Hitler accepts or rejects doctrines on political grounds, without bringing in the notion of truth or falsehood. Poor William James, who invented this point of view, would be horrified at the use which is made of it" – *(Russell, 1958 pg. 102)*. In this single statement, he displays the vastness of his ignorance of the philosopher he impugns. James argued that our beliefs *could not survive as merely political means* or generally without regard for actual viability in the natural (indeterminate, interactive, and situationally specific) world. More, he argued that the psychological incorporation of such dysfunctional belief is powerfully harmful. In his absurdity, Russell is as pathetically and self-righteously wrong as that creature of right-wing politics Jonah Goldberg, in his absurd claim that 'Fascism, properly understood, is a phenomena of the political left'. But this is an issue for another time. However loudly such absurdities cry out for contemptuous dismissal, neither deserves our attention at this moment. Our beliefs rather focus our attention elsewhere, to nature, to reality, and to better scholarship – wherein it is clear that in these two instances, these two men are

equal in allowing their believing to drive their minding, rather than the other way around. They are guilty of what they accuse.

[42] Russell's *The Analysis of Mind* shows a profound influence of James' doctrine of Pure Experience – though Russell did not admit it. But to understand why Russell so greatly misunderstood James, I point to D.H. Lawrence, who once admonished Russell; "It is not the hatred of falsity which inspires you. It is the hatred of people, of flesh and blood." *(Monk, 1996 pg. 87)* It may very well be that this is a common failing of Idealistic Thinkers, and the very failing which Pragmatism endeavors to mitigate. Even a cursory glimpse at the life and letters of William James (not to mention his dismissal of his father's elaborated theology) shows that for James (as for Darwin) flesh and blood, messy as it is, is to be celebrated, enjoyed, lived – for only in/through living, do ideals exist. In fact, we *are* flesh and blood – and we are *not* some abstracted ideal locked in a deadly struggle with our own flesh. The ancient modernism of Russell is the classically idealistic dualism of Plato and Descartes dressed for a new occasion. But "Objective evidence and certitude are doubtless very fine ideals to play with, but where on this moonlit and dream-visited planet are they found?" (*James, 1956 pg.14*) Apparently, they are found in hating. Sadly, it seems to be: "Add a few drops of venom to a half truth and you have an absolute truth." *(Hoffer, 1954 pg. 129)*

While idealists by definition turn away from 'petty' things (such as life itself) and cast their thoughts upon the lofty (but unreal) heights of (human) abstraction, every Pragmatic thinker begins *here*, with the messy, bloody, fleshy organism – the living event, and treats *this* as the center of our thinking. Again it is clear, that Pragmatism is founded upon the heritage of Darwin, which itself refutes a host of irrefutable abstractions (notions that are inherently incapable of falsification). Philosophical disputations of Pragmatism almost always stem from a rejection of Darwin's Science – though, as with Russell (and Fiske before him), this rejection is often buried within a celebration of 'science' as its own (presumed to be irrefutable) abstraction.

Yet this is not a book about Russell's difficulties, but about Darwin's Ontology. And in a fitting twist of complexity (common to thinking beings) Russell also offered us this neat demonstration of Darwin's Ontology: *(Russell 2007 pg. 157)*

> All acquisition of knowledge is an enlargement of the Self, but this enlargement is best attained when it is not directly sought. It is obtained when the desire for knowledge is alone operative, by a study which does not wish in advance that its objects should have this or that character, but adapts the Self to the characters which it finds in its objects.
> …
> Knowledge is a form of union of Self and not-Self; like all union, it is impaired by dominion, and therefore by any attempt to force the universe into conformity with what we find in ourselves.

These statements, and indeed much of Russell's philosophy, demonstrate both Darwin's Ontology – and James' development thereof. It is a tragedy that he failed to see it.

[43] The good reader may remember, that *instinct* is not 'programmed' by our DNA, rather it describes those moments of successful mutual reciprocity, wherein action and ecosystem re-in-form each other. This interpretation of genetic level function is well supported by the most accessible short pieces that I can recommend on the topic, this appropriately titled posting from the aforementioned PZ Myers: *The Genome is not a Computer Program. (Myers, 2008)*

[44] It may be worth a few minutes to read the paragraphs that immediately follow, which aptly demonstrates the chain of working that binds James within a Darwinian Ontology. *(James, 1997 pgs 234-9)*

> The pragmatic thesis … is that the relation called 'truth' is thus concretely *definable*. Ours is the only articulate attempt in the field to say positively what truth actually *consists of*. Our denouncers have literally nothing to oppose to it as an alternative. For them, when an idea is true, it *is* true, and there the matter terminates, the word 'true' being indefinable. The relation of the true idea to its object, being, as they think, unique, it can be expressed in terms of nothing else, and needs only to be named for any one to recognize and understand it. Moreover it is invariable and universal, the same in every instance of truth, however diverse the ideas, the realities, and the other relations between them may be.
>
> Our pragmatist view, on the contrary is that the truth-relation is a definitely experienceable relation, and therefore describable as well as namable; that it is not unique in kind, and neither invariable nor universal. The relation to its object that makes an idea true in any given instance, is, we say, embodied in intermediate details of reality which lead towards the object, which vary in every instance, and which in every instance can be concretely traced. The chain of workings which an opinion sets up *is* the opinion's truth, false-hood, or irrelevancy, as the case may be. Every idea that a man has works some consequences in him, in the shape either of bodily actions or of other ideas. Through these consequences the man's relations to surrounding realities are modified. He is carried nearer to some of them and farther from others, and gets now the feeling that the idea has worked satisfactorily, now that it has not. The idea has put him into touch with something that fulfils its intent, or it has not.
>
> This something is the *man's object*, primarily. Since the only realities we can talk about are such *objects-believed-in*, the pragmatist, whenever he says 'reality,' means in the first instance what may count for the man himself as a reality, what he believes at the moment to be such. Sometimes the reality is a concrete sensible presence. The idea, for example, may be

> that a certain door opens into a room where a glass of beer may be bought. If opening the door leads to the actual sight and taste of the beer, the man calls the idea true. Or his idea may be that of an abstract relation, say of that between the sides and the hypothenuse of a triangle, such a relation being, of course, a reality quite as much as a glass of beer is. If the thought of such a relation leads him to draw auxiliary lines and to compare the figures they make, he may at last, perceiving one equality after another, *see* the relation thought of, by a vision quite as particular and direct as was the taste of the beer. If he does so, he calls *that* idea, also, true. His idea has, in each case, brought him into closer touch with a reality felt at the moment to verify just that idea. Each reality verifies and validates its own idea exclusively; and in each case the verification consists in the satisfactorily-ending consequences, mental or physical, which the idea was able to set up. These 'workings' differ in every single instance, they never transcend experience, they consist of particulars mental or sensible, and they admit of concrete description in every individual case. Pragmatists are unable to see what you can possibly *mean* by calling an idea true, unless you mean that between it as a *terminus a quo* in some one's mind and some particular reality as a *terminus ad quem*, such concrete workings do or may intervene. Their direction constitutes the idea's reference to that reality, their satisfactoriness constitutes its adaptation thereto, and the two things together constitute the 'truth' of the idea for its possessor. Without such intermediating portions of concretely real experience the pragmatist sees no materials out of which the adaptive relation called truth can be built up.
>
> The anti-pragmatist view is that the workings are but evidences of the truth's previous inherent presence in the idea, and that you can wipe the very possibility of them out of existence and still leave the truth of the idea as solid as ever. But surely this is not a counter-theory of truth to ours. It is the renunciation of all articulate theory. It is but a claim to the right to call certain ideas true anyhow; and this is what I meant above by saying that the anti-pragmatists offer us no real alternative, and that our account is literally the only positive theory extant. What meaning, indeed, can an idea's truth have save its power of adapting us either mentally or physically to a reality?
>
> How comes it, then, that our critics so uniformly accuse us of subjectivism, of denying reality's existence?

This is fairly descriptive of the view of Darwin's Ontology as applied to the workings of human consciousness, which is precisely what James sought to accomplish. After all, Natural Selection would have no purchase if nothing were related. Of course, even this long passage is barely enough to support my purpose, and I can only hope it draws you into exploring that much larger 'reality', the world of that James envisioned.

True to his character, James answered that last question by pointing away from *people*, and to the 'necessary preponderance of subjective language' in our thinking. But James was a much nicer man than I, and he lived a more cosseted reality. I would argue that while function within the origination of subjectivity is such that our language, like our *religion*, will always tempt us, individually and collectively, into venial self-absorption, the 'real problem' results from individual pointy-headed, socio-pathic, self-ish, behavior. The choices of actually responsible morons whose immorality and stupidity feed into each other, generates a heritage of descent which inevitably flames out quickly and spectacularly, and always takes others with it. And while philosophical balderdash may seem unimportant, I remind you that there is a 'philosophy' behind every intentional murder, but more, there will always be some 'philosophy' within/behind all genocide.

Looking back at Russell, it occurs to me as pure and unwarrantable speculation, that somewhere in him, he may have realized that idealism tends to deify monoculture – and also that monoculture is genocide, and genocide suicide. Hence the crazy/stupid acting out. He blamed others for those aspects of his own thoughts, the consequences of which he could not handle. But this is unfair to Russell, who was a great man – and who sought to remain (who *worked*) true to himself by never denying his other-self, which is the larger reality he inhabited (however often he – like all of us – failed therein). It is not, however, unfairly representative of the rest of us schmucks, who so very seldom make such an attempt. This distinction is important. At the end of the day, James' question can only be answered on a continuum: some folks are simply mistaken, and they have settled (found their selves) for (within) ideations which do not (or no longer) serve to 'complete' the wholeness of their self, and they refuse (or lack the capacity) to adapt themselves (which is to loose some aspect of their selves) to/within ever changing circumstances. And all this creates its own feedback loop, which is the classic egoism of expectations, and which tends to emerge within even the best of us in the form of total bat-shit.

[45] Whitehead also wrote volumes on Religion, always with a strongly Jamesian approach and *valued* every strong attempt to reconstitute (Make) religion *within* the natural world. (Importantly, this does not include fundamentalist acting out of religious arrogance but is, in fact, its polar opposite. I argue elsewhere in this thesis that he was wrong in at least some of his religious speculations, yet never would it fit to accuse the man of religious fundamentalism.) E.g. *Religion in the Making*, *Symbology*, *The Adventure of Ideas, and Science in the Modern World*.

[46] Walter Cannon's 5 arguments against James-Lange are based entirely in a failure to identify strictly mechanistic reactions, e.g. his technique is to sever the nerves of test animals and seek responses to induce reactions from opposite sides of mutilation (as if James was argued that the animal was still 'whole'), or to give an artificially stimulated, physical instantiation of emotion (a shot of adrenaline) and demand to see a natural emotion. The conclusions Cannon generated are only meaningful if we assume a Hobbesian biology in a Newtonian world – but James was working with the assumptions of Darwin's Ontology and cedes no such thing. Likewise, Cannon's third argument, that

James-Lange should be rejected because natural visceral responses are ‘unspecific’ and often ‘insensitive’, is rejected as mere repetition of Descartes demand for ‘clarity’ and ‘distinction’ as the *sole determiner* of ‘true’ notions. *(Cannon, 1987)*

[47] The following is from a letter written by James to his brother, the novelist Henry James, following Wright’s death, while Peirce was staying in Paris: *(Perry, 1935 pg 363)*

> We have received your first letter from Paris, and last night the Tribune arrived with your first official one blazoned forth, as you will no doubt see before you get this. ["Paris Revisited," N. Y. Tribune, Dec. 1875.] I am amused that you should have fallen into the arms of C. S. Peirce, whom I imagine you find a rather uncomfortable bedfellow, thorny and spinous, but the way to treat him is after the fabled "nettle" receipt: grasp firmly, contradict, push hard, make fun of him, and he is as pleasant as anyone; but be overawed by his sententious manner and his paradoxical and obscure statements wait upon them, as it were, for light to dawn and you will never get a feeling of ease with him any more than I did for years, until I changed my course and treated him more or less chaffingly. I confess I like him very much in spite of all his peculiarities, for he is a man of genius, and there's always something in that to compel one's sympathy. I got a letter from him about Chauncey Wright in which he said he had just seen you …
>
> How long does he stay in Paris and when does he return? I may feel like asking him to bring me back an instrument or two when he comes. Please tell him I got his letter and enjoyed it, and that a subscription paper is now passing round to defray the cost of publishing Wright's remains, forty names at $20 each are what is hoped for. Norton will be editor, and if it is decided to have any extended introductory notice, I will tell him that Peirce is willing to write an account of his [Wright's] philosophical ideas. Norton did intend giving it to Fiske, who would make a very inferior thing of it. * …
>
> > * This enterprise was carried through, but without Peirce's collaboration. The title was Philosophical Discussions, by Chauncey Wright, with a Biographical Sketch of the author by Charles Eliot Norton, 1877. [Notion by R.B. Perry]

[48] Evidence for this claim is found throughout Peirce’s writings; and is particularly obvious in the essay *Evolutionary Love*. The following is an extended excerpt which contains several arguments of note: first, Darwinian evolution is identified alternatively and equally as ‘economical’ ‘mechanistic’ and grounded solely in ‘individual greed’ – a depiction fitting for Dawkinsian Neo-Darwinism but not Darwin who wrote of evolution as resulting from and creating complexes – wherein multiple intertwining scales of wholenesses *all* exert selection pressure, populations and not just individuals. Second,

Peirce ties Darwin together within an ideational 'population', while hinting that Darwin had no concept that he was a member of such a cohort, and hence his theories carry no hint of either 'group selection' or the manner in which natural selection is an unequivocally scale-thick process, or that adaptations can evolve at any level of biological hierarchy, from genes to ecosystems. (Granted, neither Peirce nor Darwin knew of genes, I'm extending the scale to include what we now know). This begs us to question whether or not Peirce had read *Descent*; but more, it shows us that Peirce thought Darwin as too shallow to understand his own theory. Finally, he emphasizes the element of chance (sporting) variation within Darwin's theory nearly to the exclusion of all else – with the point that Darwin's mechanisms cannot allow for fortuity therein (this contrasts our earlier discussion of accidental variations, or spandrels). The exception to this focus is the fact of struggle, which he contrasts with his proposed agapastic evolution, essentially Darwin's Ontology *plus* a heavy layering of Christian Apologetics.

It is a long excerpt, but entire passage reveals more than just Peirce's arguments. Peirce makes his strongest point in the last few sentences wherein he claims that Darwin's 'tychasticism' requires us to give up on continuity – in minds, in the world, and in the interaction of the two. My argument is that Darwin's Ontology demands continuity every bit as strongly as his Science. Peirce did not see this, hence he wrongly saw need to reject – not Darwin's Science, per say, but the ground wherein it 'works'. Again, Peirce did work within Darwin's Ontology, though he did not credit Darwin with doing the same. Indeed, in the first sentence of the following excerpt, Peirce accuses Darwin of the Whiggism that both men rejected. From *Evolutionary Love*: *(CP 6.294-6.304)*

> The Origin of Species of Darwin merely extends politico-economical views of progress to the entire realm of animal and vegetable life. The vast majority of our contemporary naturalists hold the opinion that the true cause of those exquisite and marvelous adaptations of nature for which, when I was a boy, men used to extol the divine wisdom, is that creatures are so crowded together that those of them that happen to have the slightest advantage force those less pushing into situations unfavorable to multiplication or even kill them before they reach the age of reproduction. Among animals, the mere mechanical individualism is vastly reâenforced as a power making for good by the animal's ruthless greed. As Darwin puts it on his title-page, it is the struggle for existence; and he should have added for his motto: Every individual for himself, and the Devil take the hindmost! Jesus, in his sermon on the Mount, expressed a different opinion.
>
> Here, then, is the issue. The gospel of Christ says that progress comes from every individual merging his individuality in sympathy with his neighbors. On the other side, the conviction of the nineteenth century is that progress takes place by virtue of every individual's striving for himself with all his might and trampling his neighbor under foot whenever

he gets a chance to do so. This may accurately be called the Gospel of Greed.

Much is to be said on both sides. I have not concealed, I could not conceal, my own passionate predilection. Such a confession will probably shock my scientific brethren. Yet the strong feeling is in itself, I think, an argument of some weight in favor of the agapastic theory of evolution -- so far as it may be presumed to bespeak the normal judgment of the Sensible Heart. Certainly, if it were possible to believe in agapasm without believing it warmly, that fact would be an argument against the truth of the doctrine. At any rate, since the warmth of feeling exists, it should on every account be candidly confessed; especially since it creates a liability to one-sidedness on my part against which it behooves my readers and me to be severally on our guard.

Let us try to define the logical affinities of the different theories of evolution. Natural selection, as conceived by Darwin, is a mode of evolution in which the only positive agent of change in the whole passage from moner to man is fortuitous variation. To secure advance in a definite direction chance has to be seconded by some action that shall hinder the propagation of some varieties or stimulate that of others. In natural selection, strictly so called, it is the crowding out of the weak. In sexual selection, it is the attraction of beauty, mainly.

The Origin of Species was published toward the end of the year 1859. The preceding years since 1846 had been one of the most productive seasons -- or if extended so as to cover the great book we are considering, the most productive period of equal length in the entire history of science from its beginnings until now. The idea that chance begets order, which is one of the corner-stones of modern physics (although Dr. Carus considers it "the weakest point in Mr. Peirce's system ") was at that time put into its clearest light. Quetelet had opened the discussion by his Letters on the Application of Probabilities to the Moral and Political Sciences, a work which deeply impressed the best minds of that day, and to which Sir John Herschel had drawn general attention in Great Britain. In 1857, the first volume of Buckle's History of Civilisation had created a tremendous sensation, owing to the use he made of this same idea. Meantime, the "statistical method" had, under that very name, been applied with brilliant success to molecular physics. Dr. John Herapath, an English chemist, had in 1847 outlined the kinetical theory of gases in his Mathematical Physics; and the interest the theory excited had been refreshed in 1856 by notable memoirs by Clausius and Rankine In the very summer preceding Darwin's publication, Maxwell had read before the British Association the first and most important of his researches on this subject. The consequence was that the idea that fortuitous events may result in a physical law, and further that

this is the way in which those laws which appear to conflict with the principle of the conservation of energy are to be explained, had taken a strong hold upon the minds of all who were abreast of the leaders of thought. By such minds, it was inevitable that the Origin of Species, whose teaching was simply the application of the same principle to the explanation of another "non-conservative" action, that of organic development, should be hailed and welcomed. The sublime discovery of the conservation of energy by Helmholtz in 1847, and that of the mechanical theory of heat by Clausius and by Rankine, independently, in 1850, had decidedly overawed all those who might have been inclined to sneer at physical science. Thereafter a belated poet still harping upon "science peddling with the names of things" would fail of his effect. Mechanism was now known to be all, or very nearly so. All this time, utilitarianism -- that improved substitute for the Gospel -- was in its fullest feather; and was a natural ally of an individualistic theory. Dean Mansell's injudicious advocacy had led to mutiny among the bondsmen of Sir William Hamilton, and the nominalism of Mill had profited accordingly; and although the real science that Darwin was leading men to was sure some day to give a death-blow to the sham-science of Mill, yet there were several elements of the Darwinian theory which were sure to charm the followers of Mill. Another thing: anaesthetics had been in use for thirteen years. Already, people's acquaintance with suffering had dropped off very much; and as a consequence, that unlovely hardness, by which our times are so contrasted with those that immediately preceded them, had already set in, and inclined people to relish a ruthless theory. The reader would quite mistake the drift of what I am saying if he were to understand me as wishing to suggest that any of those things (except perhaps Malthus) influenced Darwin himself. What I mean is that his hypothesis, while without dispute one of the most ingenious and pretty ever devised, and while argued with a wealth of knowledge, a strength of logic, a charm of rhetoric, and above all with a certain magnetic genuineness that was almost irresistible, did not appear, at first, at all near to being proved; and to a sober mind its case looks less hopeful now than it did twenty years ago; but the extraordinarily favorable reception it met with was plainly owing, in large measure, to its ideas being those toward which the age was favorably disposed, especially, because of the encouragement it gave to the greed-philosophy.

Diametrically opposed to evolution by chance are those theories which attribute all progress to an inward necessary principle, or other form of necessity. Many naturalists have thought that if an egg is destined to go through a certain series of embryological transformations, from which it is perfectly certain not to deviate, and if in geological time almost exactly the same forms appear successively, one replacing another in the same order, the strong presumption is that this latter succession was as

predeterminate and certain to take place as the former. So, Naegel, for instance, conceives that it somehow follows from the first law of motion and the peculiar, but unknown, molecular constitution of protoplasm, that forms must complicate themselves more and more. Koelliker makes one form generate another after a certain maturation has been accomplished. Weismann, too, though he calls himself a Darwinian, holds that nothing is due to chance, but that all forms are simple mechanical resultants of the heredity from two parents. It is very noticeable that all these different sectaries seek to import into their science a mechanical necessity to which the facts that come under their observation do not point. Those geologists who think that the variation of species is due to cataclysmic alterations of climate or of the chemical constitution of the air and water are also making mechanical necessity chief factor of evolution.

Evolution by sporting and evolution by mechanical necessity are conceptions warring against one another. A third method, which supersedes their strife, lies enwrapped in the theory of Lamarck. According to his view, all that distinguishes the highest organic forms from the most rudimentary has been brought about by little hypertrophies or atrophies which have affected individuals early in their lives, and have been transmitted to their offspring. Such a transmission of acquired characters is of the general nature of habit-taking, and this is the representative and derivative within the physiological domain of the law of mind. Its action is essentially dissimilar to that of a physical force; and that is the secret of the repugnance of such necessitarians as Weismann to admitting its existence. The Lamarckians further suppose that, although some of the modifications of form so transmitted were originally due to mechanical causes, yet the chief factors of their first production were the straining of endeavor and the overgrowth superinduced by exercise, together with the opposite actions. Now, endeavor, since it is directed toward an end, is essentially psychical, even though it be sometimes unconscious; and the growth due to exercise, as I argued in my last paper [“Man's Glassy Essence”], follows a law of a character quite contrary to that of mechanics.

Lamarckian evolution is thus evolution by the force of habit. -- That sentence slipped off my pen while one of those neighbors whose function in the social cosmos seems to be that of an Interrupter was asking me a question. Of course, it is nonsense. Habit is mere inertia, a resting on one's oars, not a propulsion. Now it is energetic projaculation (lucky there is such a word, or this untried hand might have been put to inventing one) by which in the typical instances of Lamarckian evolution the new elements of form are first created. Habit, however, forces them to take practical shapes, compatible with the structures they affect, and, in the form of heredity and otherwise, gradually replaces the spontaneous energy that

sustains them. Thus, habit plays a double part; it serves to establish the new features, and also to bring them into harmony with the general morphology and function of the animals and plants to which they belong. But if the reader will now kindly give himself the trouble of turning back a page or two, he will see that this account of Lamarckian evolution coincides with the general description of the action of love, to which, I suppose, he yielded his assent.

Remembering that all matter is really mind, remembering, too, the continuity of mind, let us ask what aspect Lamarckian evolution takes on within the domain of consciousness. Direct endeavor can achieve almost nothing. It is as easy by taking thought to add a cubit to one's stature as it is to produce an idea acceptable to any of the Muses by merely straining for it before it is ready to come. We haunt in vain the sacred well and throne of Mnemosyne; the deeper workings of the spirit take place in their own slow way, without our connivance. Let but their bugle sound, and we may then make our effort, sure of an oblation for the altar of whatsoever divinity its savour gratifies. Besides this inward process, there is the operation of the environment, which goes to break up habits destined to be broken up and so to render the mind lively. Everybody knows that the long continuance of a routine of habit makes us lethargic, while a succession of surprises wonderfully brightens the ideas. Where there is a motion, where history is a-making, there is the focus of mental activity, and it has been said that the arts and sciences reside within the temple of Janus, waking when that is open, but slumbering when it is closed. Few psychologists have perceived how fundamental a fact this is. A portion of mind, abundantly commissured to other portions, works almost mechanically. It sinks to a condition of a railway junction. But a portion of mind almost isolated, a spiritual peninsula, or cul-de-sac, is like a railway terminus. Now mental commissures are habits. Where they abound, originality is not needed and is not found; but where they are in defect spontaneity is set free. Thus, the first step in the Lamarckian evolution of mind is the putting of sundry thoughts into situations in which they are free to play. As to growth by exercise, I have already shown, in discussing "Man's Glassy Essence," in last October's Monist, what its modus operandi must be conceived to be, at least, until a second equally definite hypothesis shall have been offered. Namely, it consists of the flying asunder of molecules, and the reparation of the parts by new matter. It is, thus, a sort of reproduction. It takes place only during exercise, because the activity of protoplasm consists in the molecular disturbance which is its necessary condition. Growth by exercise takes place also in the mind. Indeed, that is what it is to learn. But the most perfect illustration is the development of a philosophical idea by being put into practice. The conception which appeared, at first, as unitary splits up into special cases; and into each of these new thought must enter to make a practicable idea. This new

thought, however, follows pretty closely the model of the parent conception; and thus a homogeneous development takes place. The parallel between this and the course of molecular occurrences is apparent. Patient attention will be able to trace all these elements in the transaction called learning.

Three modes of evolution have thus been brought before us: evolution by fortuitous variation, evolution by mechanical necessity, and evolution by creative love. We may term them tychastic evolution, or tychasm, anancastic evolution, or anancasm, and agapastic evolution, or agapasm. The doctrines which represent these as severally of principal importance we may term tychasticism, anancasticism, and agapasticism. On the other hand the mere propositions that absolute chance, mechanical necessity, and the law of love are severally operative in the cosmos may receive the names of tychism, anancism, and agapism.

All three modes of evolution are composed of the same general elements. Agapasm exhibits them the most clearly. The good result is here brought to pass, first, by the bestowal of spontaneous energy by the parent upon the offspring, and, second, by the disposition of the latter to catch the general idea of those about it and thus to subserve the general purpose. In order to express the relation that tychasm and anancasm bear to agapasm let me borrow a word from geometry. An ellipse crossed by a straight line is a sort of cubic curve; for a cubic is a curve which is cut thrice by a straight line; now a straight line might cut the ellipse twice and its associated straight line a third time. Still the ellipse with the straight line across it would not have the characteristics of a cubic. It would have, for instance, no contrary flexure, which no true cubic wants; and it would have two nodes, which no true cubic has. The geometers say that it is a degenerate cubic. Just so, tychasm and anancasm are degenerate forms of agapasm.

Men who seek to reconcile the Darwinian idea with Christianity will remark that tychastic evolution, like the agapastic, depends upon a reproductive creation, the forms preserved being those that use the spontaneity conferred upon them in such wise as to be drawn into harmony with their original, quite after the Christian scheme. Very good! This only shows that just as love cannot have a contrary, but must embrace what is most opposed to it, as a degenerate case of it, so tychasm is a kind of agapasm. Only, in the tychastic evolution, progress is solely owing to the distribution of the napkin-hidden talent of the rejected servant among those not rejected, just as ruined gamesters leave their money on the table to make those not yet ruined so much the richer. It makes the felicity of the lambs just the damnation of the goats, transposed to the other side of the equation. In genuine agapasm, on the other hand, advance takes place

> by virtue of a positive sympathy among the created springing from continuity of mind. This is the idea which tychasticism knows not how to manage.

[49] To be more exact, Peirce offers a detailed definition of synechism (truly a short essay), which establishes this point. Notice how closely Peirce uses the term to represent the requisite general presumption of Darwin's Science that all life is related on continuums that stretch in time historically as well as across time situationally – both with formative effect on the whole of our being. (The second is often harder for Neo-Darwinists to see, but in its simplest agency, which is that selection only occurs within ecosystems, it can hardly be denied.) In this, Peirce demands a rejection of simple mechanism (in any form) as representative of the whole of the natural world (*physis*). Moreover, he grounds this demand in the most powerful of Darwin's arguments: that the form of our experience of living that is our own bodies, is not inexplicable to living experience – which is to argue that no supernatural causation is needed to explain our lives and our selves. From Baldwin's Dictionary of Philosophy and Psychology, Synechism: *(CP 6.169-173)*

> That tendency of philosophical thought which insists upon the idea of continuity as of prime importance in philosophy, and in particular, upon the necessity of hypotheses involving true continuity.
>
> A true continuum is something whose possibilities of determination no multitude of individuals can exhaust. Thus, no collection of points placed upon a truly continuous line can fill the line so as to leave no room for others, although, that collection had a point for every value towards which numbers endlessly continued into the decimal places could approximate; nor if it contained a point for every possible permutation of all such values. It would be in the general spirit of synechism to hold that time ought to be supposed truly continuous in that sense. The term was suggested and used by C. S. Peirce (July, 1892). Cf. in the Monist, ii. 534.
>
> The general motive is to avoid the hypothesis that this or that is inexplicable. For the synechist maintains that the only possible justification for so much as entertaining a hypothesis, is that it affords an explanation of the phenomena. Now, to suppose a thing inexplicable is not only to fail to explain it, and so to make an unjustifiable hypothesis, but much worse it is to set up a barrier across the road of science, and to forbid all attempt to understand the phenomenon.
>
> To be sure, the synechist cannot deny that there is an element of the inexplicable and ultimate, because it is directly forced upon him; nor does he abstain from generalizing from this experience. True generality is, in fact, nothing but a rudimentary form of true continuity. Continuity is nothing but perfect generality of a law of relationship.

> It would, therefore, be most contrary to his own principle for the synechist not to generalize from that which experience forces upon him, especially since it is only so far as facts can be generalized that they can be understood; and the very reality, in his way of looking at the matter, is nothing else than the way in which facts must ultimately come to be understood. There would be a contradiction here, if this ultimacy were looked upon as something to be absolutely realized; but the synechist cannot consistently so regard it. Synechism is not an ultimate and absolute metaphysical doctrine; it is a regulative principle of logic, prescribing what sort of hypothesis is fit to be entertained and examined. The synechist, for example, would never be satisfied with the hypothesis that matter is composed of atoms, all spherical and exactly alike. If this is the only hypothesis that the mathematicians are as yet in condition to handle, it may be supposed that it may have features of resemblance with the truth. But neither the eternity of the atoms nor their precise resemblance is, in the synechist's view, an element of the hypothesis that is even admissible hypothetically. For that would be to attempt to explain the phenomena by means of an absolute inexplicability. In like manner, it is not a hypothesis fit to be entertained that any given law is absolutely accurate. It is not, upon synechist principles, a question to be asked, whether the three angles of a triangle amount precisely to two right angles, but only whether the sum is greater or less. So the synechist will not believe that some things are conscious and some unconscious, unless by consciousness be meant a certain grade of feeling. He will rather ask what are the circumstances which raise this grade; nor will he consider that a chemical formula for protoplasm would be a sufficient answer. In short, synechism amounts to the principle that inexplicabilities are not to be considered as possible explanations; that whatever is supposed to be ultimate is supposed to be inexplicable; that continuity is the absence of ultimate parts in that which is divisible; and that the form under which alone anything can be understood is the form of generality, which is the same thing as continuity.

There is another feature of synechism that is of particular importance to our claim that classical Pragmatism is an extrapolation upon/within Darwin's Ontology. Susan Haack uses synechism to clarify a significant failure of Rorty's Neo-Pragmatism: where Peirce found compounding layers of being reciprocally self-forming, i.e. synechism, Rorty saw only the cynicism of individuals chasing their own tails – ironically, to be sure. And she does this casually, as a moment of self-indulgence while busy defining synechism (placing it) as a load-bearing pillar of classical Pragmatism, which is of particular importance within/to Peirce's notions of chance and love (tychism and agapism), as well as the function of logic, the metaphysics of objectivity, the (brutal) reality of ideals, etcetera. Basically, her essay: *Not Cynicism, but Synechism: Lessons from Classical Pragmatism* argues that all of Peirce is interwoven within, and expansions upon, that most significant hypothesis of Darwin's Ontology, that things *are* only as they share that status. *(Haack 2005)*

[50] Here again the whole paragraph is quite telling: (CP 5.431)

> Not only may generals be real, but they may also be physically efficient, not in every metaphysical sense, but in the common-sense acception in which human purposes are physically efficient. Aside from metaphysical nonsense, no sane man doubts that if I feel the air in my study to be stuffy, that thought may cause the window to be opened. My thought, be it granted, was an individual event. But what determined it to take the particular determination it did, was in part the general fact that stuffy air is unwholesome, and in part other Forms, concerning which Dr. Carus has caused so many men to reflect to advantage—or rather, by which, and the general truth concerning which Dr. Carus's mind was determined to the forcible enunciation of so much truth. For truths, on the average, have a greater tendency to get believed than falsities have. Were it otherwise, considering that there are myriads of false hypotheses to account for any given phenomenon, against one sole true one (or if you will have it so, against every true one), the first step toward genuine knowledge must have been next door to a miracle. So, then, when my window was opened, because of the truth that stuffy air is malsain, a physical effort was brought into existence by the efficiency of a general and non-existent truth. This has a droll sound because it is unfamiliar; but exact analysis is with it and not against it; and it has besides, the immense advantage of not blinding us to great facts—such as that the ideas "justice" and "truth" are, notwithstanding the iniquity of the world, the mightiest of the forces that move it. Generality is, indeed, an indispensable ingredient of reality; for mere individual existence or actuality without any regularity whatever is a nullity. Chaos is pure nothing.

It must be said that Peirce did not, in this last sentence, foreshadow Chaos Theory, wherein Chaos can be described as latent being. In this paragraph, I think 'chaos' can be read in its normative meaning as that lack of structure which is a lack of habit and inheritance, and hence, generative of nothing. As pure speculation, I would argue that were Peirce alive today, he would find a lot of agreement with the goings on at the Santa Fe Institute and other such bastions of one of today's most vitally binding science: Chaos.

[51] Sadly, Peirce's assertions as to the reality of god boil down to the familiar just look-and-see argument which lies in the background of every one of August Berkshires famed *34 Unconvincing Arguments for God*. Happily, he did not park himself there. What is of interest here is that Peirce ties this tired proof to notions of time emerging from/within interaction (by surviving risk), to then foster growth through/within reciprocity (which is shared being or mutual becoming), which is represented by Love (here defined as kenosis enacted) and which serves as the necessary recognition and encouragement of potential – which, ultimately, is god. Clearly. Peirce's God had nothing to do with the paternalistic imparting of fire and famine (or touchdowns and tenacity), but could only respond to

events as they happen – and even then only at a vast remove. (Can you order around your liver?) This is Panentheisim, the postulation that ultimate being, or 'god', represents process, emergence, and love. From 1892, *The Law of Mind*: *(CP 6.126-44)*

> Reference to the future is an essential element of personality. Were the ends of a person already explicit, there would be no room for development, for growth, for life; and consequently there would be no personality. The mere carrying out of predetermined purposes is mechanical. This remark has an application to the philosophy of religion. It is that a genuine evolutionary philosophy, one that makes the principle of growth a primordial element of the universe, is so far from being antagonistic to the idea of a personal creator that it is really inseparable from that idea.
>
> According to that logical doctrine which the present writer first formulated in 1873 and named Pragmatism, the true meaning of any product of the intellect lies in whatever unitary determination it would impart to practical conduct under any and every conceivable circumstance, supposing such conduct to be guided by reflexion carried to an ultimate limit.
>
> We can know nothing except what we directly experience. So all that we can anyway know relates to experience. Where would such an idea, say as that of God, come from, if not from direct experience? Open your eyes—and your heart, which is also a perceptive organ—and you see God.
>
> Everybody can see that the statement of St. John (God is Love) is the formula of an evolutionary philosophy, which teaches that growth comes only from love, from the ardent impulse to fulfill another's highest impulse. The philosophy we draw from John's gospel is that this is the way mind develops; and as for the cosmos, only so far as it yet is mind, and so has life, is it capable of further evolution. Love, recognizing germs of loveliness in the hateful, gradually warms it to life, and makes it lovely.

Here we have the heritage of St. Francis re-conceptualized for a Post-Darwinian world. Though the notions are at best vaguely argued, they would sound familiar to anyone who has encountered the heritage of John Fiske within contemporary religious thought. But with Peirce they are more distinct (if not so clear) than anything Fiske ever wrote. Moreover, Peirce is largely unencumbered by the age-old notions of teleology and necessity that still drives most of the so-called New Age Movement (which is largely a heritage of Fiske, Henry James Sr. et al.). And hence Peirce is better able to serve as a foundation for Whitehead and Hartshorne's reconstruction of both religion and god. Again, there is irony here in that Peirce is so seldom identified as a religious thinker (especially as compared to such as Fiske) and almost never thought of as a founder of a religious movement. And this is not without reason, it must be said that Peirce did not prioritize developing his notions of God. In his 60 plus years of writing and well over

100,000 pages of philosophy, there are remarkably few paragraphs, and only a few essays focusing exclusively upon the reconstruction of god as essential to human understanding. Rather than attempt to build a religious movement, Peirce spent his life reconstructing logic to withstand Darwin's world, and hence making it capable of contextualizing religion within the greater, natural existence wherein all our ways and means, all our beliefs and habits of belief, can 'react with the other like things in the environment' in such a way to generate more and deeper living. In this, Peirce's religious devotion (his tendency to action) exemplifies Darwin's Ontology.

[52] My argument here entirely follows upon tightly upon Phyllis Chiasson's *Revisiting a Neglected Argument for the Reality of God*. For Peirce, atheism represents a 'pessimistic' view that damages the 'pure play' of abduction wherein we starve our selves for having prematurely closed out our options. But as Chiasson makes clear, when we follow through on Peirce's own argumentation, we can reclaim meaning from theism and establish it as both natural and general: *(Chiasson, 2009 par. 12-26)*

> The Optimist/Pessimist dichotomy that Peirce describes in his 'Neglected Argument is as much about abduction as it is about God. What he really seems to be suggesting is that you can't perform abductive reasoning properly if you're a pessimist. This makes perfect sense if you consider that his first stage of abduction (Pure Play or Musement) is supposed to be undergone without rules or restrictions as to what can or cannot be considered. A pessimistic outlook eliminates the possibility that you can examine anything with an 'open' mind. There are all sorts of relations you're not at liberty to make if you've decided a priori that they're not worth making …
>
> …Thus, it becomes increasingly clear that Peirce is suggesting in this essay that that it is the inability to access hopeful options due to a pessimistic performance of the Musement stage of abductive reasoning that results in atheism.
>
> …[However] The capacity (or willlingness) to engage in the activity of abductive reasoning from an optimistic perspective can--without ever arriving at an hypothesis of God--produce qualitatively based hypotheses of other sorts which provide the same sort of vision and hopefullness that Peirce implied was necessary for directing one's choice of purpose and resulting conduct in positive ways.
>
> …What one calls a hopeful vision that must be connected to the belief in God, another might be willing to agree is one sort of (form of) long-term optimism. This latter form of optimism needn't be hooked to the survival of a 'time-based" self--but rather to 'the out of time" experience that is abduction. The optimistic application of abductive reasoning allows an individual to engage in an aesthetic exploration of options and to then

> filter these options through the lens of ethics (or right conduct) before establishing one or another hypothesis as worthy of development and testing out in the inquiry that is one's life. Peirce called this 'right reasoning'. John Dewey called this activity undergoing an 'aesthetic experience'.
>
> Though God is a value-laden term for most people--the idea of God's Reality, in Peirce's sense, does not have to signify a specific being--nor need it have a religion connected up to it. It appears that Peirce's use of the term, God, may have signified an ongoing inquiry into the hypothesis that there is meaning resulting from the way in which an individual conducts his life. This meaning is a consequence of deliberate choices of conduct based upon having abductively developed the hypothesis that what he does matters to both the immediate and ultimate outcome of things that may be beyond his ken.
>
> Because of this hypothesis--which through repeated testing is likely to become a belief--such an individual sees that there's an ongoing need to refine his conduct as various beliefs and propositions interact with experience. "All you have any dealings with", wrote Peirce in another essay, "are your doubts and beliefs, with the course of life that forces new beliefs on you and gives you the power to doubt old beliefs."

Thus we forgive Peirce the shallow 'look-and-see' defense he gave to god, and revitalize his claims for the concept by stripping it of its claim of supernatural status, and differentiate *religio* from religion such that we can speak of the formation of meaning completely from within Darwin's Ontology.

[53] E.g. from *A Guess at a Riddle*: *(EP 1.271-273)*

> Now the adaptation of a species to its environment consists, for the purposes of natural selection, in a power of continuing to exist, that is to say, in the power of one generation to bring forth another; for as long as another generation is brought forth the species will continue and as soon as this ceases it is doomed after one lifetime. This reproductive faculty, then, depending partly on direct fecundity, and partly on the animal's living through the age of procreation, is precisely what the Darwinian theory accounts for. This character plainly is one of those which has an absolute minimum, for no animal can produce fewer offspring than none at all and it has no apparent upper limit, so that it is quite analogous to the wealth of those players. It is to be remarked that the phrase "survival of the fittest" in the formula of the principle does not mean the survival of the fittest individuals, but the survival of the fittest types; for the theory does not at all require that individuals ill-adapted to their environment should die at an earlier age than others, so long only as they do not reproduce so

many offspring as others; and indeed it is not necessary that this should go so far as to extinguish the line of descent, provided there be some reason why the offspring of ill-adapted parents are less likely than others to inherit those parents' characteristics. It seems likely that the process, as a general rule, is something as follows. A given individual is in some respect ill-adapted to his environment, that is to say, he has characters which are generally unfavorable to the production of numerous offspring. These characters will be apt to weaken the reproductive system of that individual, for various reasons, so that its offspring are not up to the average strength of the species. This second generation will couple with other individuals, but owing to their weakness, their offspring will be more apt to resemble the other parent, and so the unfavorable character will gradually be eliminated, not merely by diminished numbers of offspring, but also by the offspring more resembling the stronger parent. There are other ways in which the unfavorable characters will disappear. When the procreative power is weakened, there are many examples to show that the principle of heredity becomes relaxed, and the race shows more tendency to sporting. This sporting will go on until in the course of it the unfavorable character has become obliterated. The general power of reproduction thereupon becomes strengthened, with it the direct procreative force is reinforced, the hereditary transmission of characters again becomes more strict, and the improved type is hardened.

But all these different cases are but so many different modes of one and the same principle, which is, the elimination of unfavorable characters. We see then that there are just three factors in the process of natural selection; to wit: 1st, the principle of individual variation or sporting; 2nd, the principle of hereditary transmission, which wars against the first principle; and 3rd, the principle of the elimination of unfavorable characters.

Let us see how far these principles correspond with the triads that we have already met with. The principle of sporting is the principle of irregularity, indeterminacy, chance. It corresponds with the irregular and manifold wandering of particles in the active state of the protoplasm. It [is] the bringing in of something fresh and first. The principle of heredity is the principle of the determination of something by what went before, the principle of compulsion, corresponding to will and sense. The principle of the elimination of unfavorable characters is the principle of generalization by casting out of sporadic cases, corresponding particularly to the principle of forgetfulness in the action of the nervous system. We have, then, here, a somewhat imperfect reproduction of the same triad as before. Its imperfection may be the imperfection of the theory of development.

[54] To be clear, James would almost agree, with a single but utterly vital caveat. All four men considered science our best hope at rendering belief practical in affairs of survival within a chancy world, with Wright insisting that religion is a practical thing, an affair of consequence within a natural world. James would add to this to unremarkable claim that the practical function of religion makes it most capable at instituting belief within a society. For James, religion is the making of some specific belief into a social habit or a cultural norm – whether or not the belief serves to benefit the society. Of course, to the extent that any given society adopts maladapted notions as its social norms, that society fails – but this does not lessen the power that religion has within society. For James, religion is 'better' at 'fixing' belief in terms of 'setting' it (think of religion as the 'fixer' that is mixed with resin in a two-part epoxy system), while science is better at 'fixing' belief, in terms of 'setting it to *right*', or adapting the belief to better 'fit' whatever situation we actually discover (as opposed to those we merely imagine).

[55] *Commens* … the living world that is Darwin's Ontology: *(EP 2: 478)*

> There is the Intentional Interpretant, which is a determination of the mind of the utterer; the Effectual Interpretant, which is a determination of the mind of the interpreter; and the Communicational Interpretant, or say the Cominterpretant, which is a determination of that mind into which the minds of utterer and interpreter have to be fused in order that any communication should take place. This mind may be called the commens. It consists of all that is, and must be, well understood between utterer and interpreter, at the outset, in order that the sign in question should fulfill its function. This I proceed to explain.
>
> No object can be denoted unless it be put into relation to the object of the commens. A man, tramping along a weary and solitary road, meets an individual of strange mien, who says, "There was a fire in Megara." If this should happen in the Middle United States, there might very likely be some village in the neighborhood called Megara. Or it may refer to one of the ancient cities of Megara, or to some romance. And the time is wholly indefinite. In short, nothing at all is conveyed, until the person addressed asks, "Where?" – "Oh about half a mile along there" pointing to whence he came. "And when?" "As I passed." Now an item of information has been conveyed, because it has been stated relatively to a well-understood common experience. Thus the Form conveyed is always a determination of the dynamical object of the commind.
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> *

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