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Epistemological Panic in the face of Nonduality

Does nothing matter?

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Part 2 of *Beyond the Standard Model of Universal Awareness: Being Not Even Wrong?*

Does nothing matter: "mattering" of "nothingness"?

Conflict between systems: Arguably philosophers have engaged in noble efforts to clarify the context within which all-encompassing theories emerge and decline ([Nicholas Rescher](#), *The Strife of Systems: an essay on the grounds and implications of philosophical diversity*, 1985). It is very challenging to engage cognitively with that context and the process, especially given the commitment to the next emerging theory and the exciting claims made for it. The process has been partially addressed in the debate over the contrasting perspectives of [T. S. Kuhn](#) (*The Structure of Scientific Revolutions*, 1962) and [Karl Popper](#) (*Conjectures and Refutations: the growth of scientific knowledge*, 1963). Rescher (1985) concludes his study of such distinctly unintegrative conflict with the comment:

For centuries, most philosophers who have reflected on the matter have been intimidated by the strife of systems. But the time has come to put this behind us -- not the strife, that is, which is ineliminable, but the felt need to somehow end it rather than simply accept it and take it in stride. To reemphasize the salient point: it would be bizarre to think that philosophy is not of value because philosophical positions are bound to reflect the particular values we hold.

Astrophysicists and cosmologists are now (in desperation?) offering theories based on a contextual [multiverse](#) of which the current Universe is to be understood as one of myriad "[pocket universes](#)". Arguably many individuals feel themselves to be "pocket universes" in their own right -- if not "pocket individuals" within "pocket societies". Might this justify a [Declaration of Universal Independence](#) (2009)?

Despite such challenging contradictions, the sense of process and flow to which individuals potentially have access in their understanding of daily life has been explored, controversially, in terms of [process thinking](#) and [flow psychology](#) ([Alfred North Whitehead](#), *Process and Reality*, 1929; [Mihály Csíkszentmihályi](#), *Finding Flow: the psychology of engagement with everyday life*, 1998).

Potential of nothing: Amazingly, of more fundamental significance in their response to the inadequacy of the Standard Model, is the "legitimacy" that astrophysicists now feel it appropriate to give to the energy inherent in "[nothing](#)" and "nothingness" ([John D. Barrow](#), *The Book of Nothing*, 2000). The potential significance of nothing had of course been contemptuously deprecated by science, both as understood in some spiritual disciplines (as in Buddhism) and in earlier reflections on the [ether](#) (notably by [Dmitri Mendeleev](#), discoverer

of the Periodic Table). Nothingness has however now become fashionable -- and a focus of public funding -- however "fashionable" is to be understood as part of a psychosocial process of relevance to physicists in quest of a Theory of Everything.

This might be welcomed to the extent that new insights emerge from creative reflection on "nothingness" -- given the extent to which this is a problematic psychosocial experience for many people. Arguably there is a clear case for individuals to "re-cognize" their processes of waking up -- their daily cognitive big bang -- especially if it leads to insights on how to live sustainably on nothing. Of course the desirability of this quality of understanding has long been promoted in a variety of spiritual traditions.

It has even been proposed that the quest for a Theory of Everything be replaced by a quest for a Theory of Nothing ([Russell K. Standish, *Theory of Nothing*, 2006](#)). This could be especially appropriate in a period in which the optimistic individual quest for acquisition of "everything" is increasingly confronted by the economic reality of how to live with "nothing" -- whatever the funding levels of physics. The CERN [Large Hadron Collider](#) -- for pursuit of the hypothesized "God Particle" -- is but one example.

The challenging recognition by astrophysicists is that there is an energy associated with nothingness which is capable of engendering matter in some way as yet completely unexplained. A feature of the social process associated with such recognition is that no insights whatsoever are to be sought from other disciplines, which have long reflected on this process -- insights necessarily to be considered meaningless irrespective of their nature. Effectively the essence of nothing? It might of course be fruitful to reflect on the distinction between meaningful and meaningless reflections on nothingness.

The cross-fertilization between such perspectives has been considered in much greater detail in an earlier paper ([Import of Nothingness and Emptiness through Happening and Mattering, 2008](#)).

In quest of a "meta-model": engaging in a meta-modelling process?

From "gods" to "theories": In rejecting religion in favour of science, it might be assumed that humanity was relieved of its dysfunctional engagement with a vast array of "gods". *Wikipedia* offers comprehensive [listings of deities](#) of the different religions, cultures and mythologies of the world (see also Michael Jordan, *Encyclopedia of Gods: over 2,500 Deities of the world*, 1993). H. L. Mencken ([Memorial Service](#)) offers a list of some 500 "dead gods". He indicates that: *They were gods of the highest standing and dignity -- gods of civilized peoples -- worshipped and believed in by millions. Many of them are mentioned with fear and trembling in the Old Testament.* Appropriate sacrifices were of course made to many of them at the instigation of their priesthoods. Some even mediated an evil "dark force".

Curiously humanity is now obliged to engage with a vast array of "theories" -- a "pantheon" of theories to which other kinds of sacrifice are also made (for the natural sciences, see Robert E. Krebs, *Encyclopedia of Scientific Principles, Laws, And Theories*, 2008). As with the gods, many are "incommensurable", claiming exclusive purview within the worldview within which they expect belief. But, as with the gods, many are now "dead". Most might be expected to be declared "dead" at some time. Where once some were theories of the highest standing and dignity -- a framework of belief for civilized peoples of any intelligence -- any credence now given to them is deprecated (and indicative of a "bad career move"). For those still attracting believers, there is an extensive literature on the challenges of incommensurable theories.

String theory as *nec plus ultra*: The challenge has been highlighted in the case of the quest to produce a unified explanation of physics -- fundamental to a coherent understanding of how the Universe works. Much enthusiasm has been associated with the potential of [string theory](#) in response to the difficulties of the Standard Model and in an effort to move beyond it. [Superstring theory](#) is now dominant in physics. However, for one commentator (Jim Holt, [Unstring: in string theory, beauty is truth, truth beauty -- is that really all we need to know?](#) *The New Yorker*, March 2006):

For more than a generation, physicists have been chasing a will-o'-the-wisp called string theory. The beginning of this chase marked the end of what had been three-quarters of a century of progress. Dozens of string-theory conferences have been held, hundreds of new Ph.D.s have been minted, and thousands of papers have been written. Yet, for all this activity, not a single new testable prediction has been made, not a single theoretical puzzle has been solved. In fact, there is no theory so far -- just a set of hunches and calculations suggesting that a theory might exist. And, even if it does, this theory will come in such a bewildering number of versions that it will be of no practical use: a Theory of Nothing.

The focus on beauty is consistent with that of Christopher Alexander (mentioned above). In a review of string theory and its potential, [Peter Woit](#) (*Not Even Wrong: the failure of string theory and the continuing challenge to unify physics*, Jonathan Cape, 2006) explains that "superstring theory" really refers not to a well-defined theory, but to unrealized hopes that one might exist. As a result, this is a "theory" that makes no predictions, not even wrong ones, and this very lack of falsifiability has allowed it not only to survive but to flourish -- as the *nec plus ultra* of human reflection on the nature of the Universe.

Conceptual arrogance: The cognitive value for humanity of string theory -- in comparison with the demonstrable viability of quarrelsome religions and their leadership (in defiance of lack of falsifiability) -- is perhaps highlighted by Woit's statement (in a concluding chapter *On Beauty and Difficulty*) that:

There is often a somewhat intellectually macho attitude among some mathematicians, an attitude that, since they overcame great hurdles to understand something, there's no reason to make it easier and encourage others less talented and dedicated than themselves. However, this sort of arrogance among mathematicians pales in comparison with the degree of arrogance one sometimes encounters among superstring theorists. They often seem to be of the opinion that only real geniuses are able to work on the theory, and that anyone who criticises such work is most likely just too stupid and ignorant to understand it. There is a

striking analogy between the way superstring theory research is pursued in physics departments and the way postmodern "theory" has been pursued in humanities departments....The barriers to understanding that this kind of work entails make it very hard for any outsiders to evaluate what, if anything, has been achieved. (pp. 206-207)

Presumably superstring theory will eventually be superseded if physicists are to have continuing scope for fundamental physics -- an issue of "job security"? Like one of the gods of yore, it will be "dead".

The problem for individuals and for global society will however remain. What will enable a more appropriate engagement with their universe -- if not with the Universe? By deliberately disassociating the psychosocial processes of physics (especially as quarrelsome eccentric geniuses of competing schools of thought) from what calls for "explanation", the incomprehensible complexity of any emergent Theory of Everything will only be matched by its irrelevance. Indeed a Theory of Nothing -- but of little value.

With respect to current challenges of climate change science (and scientists), [George Monbiot](#) (*The Trouble with Trusting Complex Science*, *The Guardian*, 8 March 2010; also syndicated under the title *The Unpersuadables: when facts are not enough*) argues that:

Scientific specialisation is now so extreme that even people studying neighbouring subjects within the same discipline can no longer understand each other. The detail of modern science is incomprehensible to almost everyone, which means that we have to take what scientists say on trust. Yet science tells us to trust nothing, to believe only what can be demonstrated. This contradiction is fatal to public confidence.

Monbiot made a further point, consistent with the remarks above regarding the poorly recognized prevalence of "the dark":

But there's a deeper suspicion here as well. Popular mythology - from Faust through Frankenstein to Dr No - casts scientists as sinister schemers, harnessing the dark arts to further their diabolical powers. Sometimes this isn't far from the truth. Some use their genius to weaponise anthrax for the US and Russian governments. Some isolate terminator genes for biotech companies, to prevent farmers from saving their own seed. Some lend their names to articles ghostwritten by pharmaceutical companies, which mislead doctors about the drugs they sell.

In explicitly reinforcing Monbiot's argument regarding the extent to which scientists seek to deceive, [Nicholas Maxwell](#) (author of *From Knowledge to Wisdom: a revolution for science and the humanities*, 2007), makes a further point with regard to physics:

Physics only ever accepts theories that are unified - that attribute the same laws to all the phenomena to which the theory in question applies - even though many empirically more successful disunified rivals can always be concocted. This means that physics persistently accepts a substantial thesis about the universe independent of evidence: there is some kind of underlying unity in nature, to the extent at least that all seriously disunified theories are false. This substantial, influential and highly problematic assumption needs to be acknowledged within science, so that it can be criticised and, we may hope, improved. The aim of science is not truth per se, but rather truth presupposed to be unified, or explanatory. (*Scientists should stop deceiving us*, *The Guardian*, 12 March 2010)

Missing is any exploration or understanding of the variety of ways in which knowledge might indeed be "unified" -- as with ensuring the "coherence" of any collective initiative or sense of personal integrity. This was a specific concern of the [Integrative Knowledge and Transdisciplinarity Project](#), which profiled some 600 understandings.

Comparable psychosocial challenges: Irrespective of the challenge of the relationships between rival string theories, and the potential of superstring theory itself, the situation regarding any "unified" understanding of the Universe is analogous to that to be found in relationships between:

- the **disciplines**, various interdisciplinary processes, and aspirations to a unifying transdisciplinarity
- the **religions**, various interfaith processes, and aspirations to a meaningful global ethic and unifying spiritual understanding
- the **cultures and ethnic groups**, various multicultural processes, and aspirations to some form of unity in diversity
- the **political ideologies**, various multipartisan initiatives, and aspirations to viable forms of global governance
- the **languages**, various multilingual contexts, and aspirations to coherent communication reflecting the range of epistemological perspectives

These are of course old challenges, variously formulated and variously addressed. One can go questing for a *Functional Synthesis of Viewpoints* (1968) and embody the aspiration in a *Functional Classification in an Integrative Matrix of Human Preoccupations* (1982) as used to order thousands of profiles of problems and strategies in an online *Encyclopedia of World Problems and Human Potential*. But the challenge of the incommensurable and associated disagreement remains (and was in fact designed into that compilation). Repeating the concluding point of Nicholas Rescher (*The Strife of Systems: an essay on the grounds and implications of philosophical diversity*, 1985):

For centuries, most philosophers who have reflected on the matter have been intimidated by the strife of systems. But the time has come to put this behind us -- not the strife, that is, which is ineliminable, but the felt need to somehow end it rather than simply accept it and take it in stride.

What might "take it in stride" mean in cognitive practice -- especially given the insightful use of that metaphor by Francisco Varela (*Laying Down a Path in Walking: essays on enactive cognition*, 1997) Is this a model of the transdisciplinary process as previously explored (*Transcending Duality as the Conceptual Equivalent of Learning to Walk*, 1994; *Walking Elven Pathways: enactivating the pattern that connects*, 2006)?

Characteristics of a meta-model: The question is what kind of "meta-model" is capable of encompassing both cognitive incommensurables at any one time and the dynamics of the emergence and passing away of frameworks, whether understood as "revolutions" (Kuhn), the process of conjecture and refutation (Popper), or some form of process reality (Whitehead)? And how might individuals and society engage cognitively and in practice with such a "meta-model"?

Where is the research on disagreement and the hazards of handling incommensurables -- rather than seeking to eliminate them in tokenistic, reconciliatory "tolerance"? Does the absence of such research figure appropriately in some meta-model? Or, rather than pursuing a mythical model regarding the nature of any universe, how might an "ecology" of belief systems be fruitfully understood -- given the challenge of understanding "nature" itself? Some previous thoughts include:

- *Criteria for an Adequate Meta-model* (1971)
- *Using Disagreements for Superordinate Frame Configuration* (1992)
- *An Inconvenient Truth -- about any inconvenient truth* (2008)
- *Overpopulation Debate as a Psychosocial Hazard: development of safety guidelines from handling other hazardous materials* (2009)
- *Dynamically Gated Conceptual Communities* (2004)
- *Checklist of Nasty Methodological Questions -- regarding development analyses and initiatives* (1981)
- *Evaluating Synthesis Initiatives and their Sustaining Dialogues: possible questions as a guide to criteria of evaluation of any synthesis initiative* (2000)
- *Comprehending an Ecology of Cultures as Articulated by a Dynamic System of Metaphors* (1992)
- *Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation*, 2007

The ecology of cultures was notably the focus of a recent conference (*Cultural Clashes: social construction and cultural ecology*, Poznan, 2008) addressing global flows of peoples and information, cultural conflict, competing paradigms of knowledge, ideological differences and potentials for dialogue.

Strategic engagement: higher orders of vigilance?

It is easy to frame the generation of models and meta-models -- even of the modelling process and its catastrophes -- as an indulgence at a time of global challenge and of existential challenges for many.

Anticipating surprise: The question is how any new cognitive insight enables and enhances strategic engagement. The point is perhaps usefully made by using a quadrilemma to distinguish:

- expecting the expected -- the focus of any conventional worldview
- expecting the unexpected -- emergency preparedness and the precautionary principle
- expecting both the expected and the unexpected -- a posture of strategic nimbleness and resilience
- expecting neither the expected nor the unexpected

As is evident from the titles of the following, these strategic postures are variously recognized and challenged:

- *Karen A. Cerulo. Never Saw It Coming: cultural challenges to envisioning the worst* (2006)
- *Jared M. Diamond. Collapse: how societies choose to fail or succeed* (2005)
- *Paul Ormerod. Why Most Things Fail: evolution, extinction and economics* (2005)
- *Joshua Cooper Ramo. The Age of the Unthinkable: why the New World Disorder constantly surprises us and what we can do about it* (2009)
- *Nassim Nicholas Taleb. The Black Swan: the impact of the highly improbable* (2007)
- *Charles Handy. The Age of Unreason* (1989)

Aesthetics of surprise: The value attached to beauty as a form of truth, both by physicists and by Alexander (above), suggests the merit of reflecting on its strategic role in relation to policy formulation (*Aesthetics of Governance in the Year 2490*, 1990). The question is the cognitive framing of the strategic posture appropriate to navigating the unexpected whatever form it may take. For example, the resilient capacity required in society to navigate the **adaptive cycle** is stressed by *Thomas Homer-Dixon (The Upside of Down: catastrophe, creativity, and the renewal of civilization*, 2006).

The mindset is perhaps best recognized in Eastern martial art philosophy -- and perhaps best articulated in poetic form (*Ensuring Strategic Resilience through Haiku Patterns: reframing the scope of the "martial arts" in response to strategic threats*, 2006). This extends to an engagement with death which may be a key to understanding the process of emergence and passing away of gods and theories (Winston L. King, *Death Was His Koan: Samurai Zen of Suzuki Shosan*, 1986). Given the hypothesized "curled up dimensions" of string theory -- from 10 to 26 -- what might be the higher orders of vigilance required in the face of more complex forms of risk? (*Engaging with Questions of Higher Order: cognitive vigilance required for higher degrees of twistedness*, 2004).

There is of course an extreme irony to the fact that it is within cultures impregnated with poetic discourse to a high degree that suicidal bombers emerge. What might then be the cognitive framework within which it is possible to engage their "hearts and minds" (*Poetic Engagement with Afghanistan, Caucasus and Iran: an unexplored strategic opportunity?* 2009)?

Of strategic relevance are the insights of another culture significantly inspired by poetry and aesthetics, namely the Chinese. Such insights are notably embodied in the [game of go](#), currently considered to be of significance to understanding the "unconventional" approaches of Chinese foreign policy (David Lai, *Learning from the Stones: a go approach to mastering China's concept, Shi*. Strategic Studies Institute (United States Army War College), 2004), especially given earlier recognition of their relevance to the Vietnam war ([Scott Boorman](#), *A Protracted Game: a wei-ch'i interpretation of maoist revolutionary strategy*, 1969). Especially relevant to the above argument is the valued capacity to recognize and handle "negative space" in that game.

Negative capability: Curiously it is the poet [John Keats](#) who may have articulated most succinctly the requisite attitude in acclaiming "negative capability":

... it struck me, what quality went to form a Man of Achievement especially in literature and which Shakespeare possessed so enormously -- I mean Negative Capability, that is when man is capable of being in uncertainties, Mysteries, doubts without any irritable reaching after fact and reason. (1817)

This is far from the obsessive preoccupation with being "positive", as variously argued (*Being Positive Avoiding Negativity: management challenge of positive vs negative*, 2005; [Barbara Ehrenreich](#), *Bright-sided: how the relentless promotion of positive thinking has undermined America*, 2009). Might this be a quality to be attributed to Donald Rumsfeld's strategic insight in the light of his notorious poem (*The Unknown*, 2002) -- as previously argued (*Unknown Undoing: challenge of incomprehensibility of systemic neglect*, 2008)?

The significance of "negative space" has been discussed by Victor A. Grauer (*Toward a Unified Theory of the Arts, Music Theory Online*, 1996), as exemplified by the game of *go*:

In most cases of more or less traditional expression, negative and positive syntax may be seen as opposing (or, in another sense, complementing) one another on many levels. On the lowest level, negative syntax produces the disruptions that articulate (analogous to, say, the "phonetic" stream). Positive syntax pulls these articulations together to produce the next ("phonemic") level. On higher levels, the same process is repeated, negative syntax opposing the positive field just enough to make *perceptible* the differences which positive syntax will bring together to produce *thinkable* (meaningful) gestalts on the next level.

The above dialectic resembles the workings of the Japanese game of *go*, where each side tries to incorporate space previously carved out by the other. In all but modernist discourse, positive syntax always wins. Thus, in traditional works of art, all the space, even that once occupied by the negative field, ends by belonging to the positive field. The negative is usually present only in repressed, all but subliminal form.

Embracing error: The challenge, as articulated for the [Global Strategies Project](#), is one of *Reframing the Unknown* in response to the strategic denial addressed by [Donald N. Michael](#) (*Leadership's Shadow: the dilemma of denial*, 1994) as previously discussed (*The Future of Leadership: reframing the unknown*, 1994). As Michael indicated, aspects of the requisite strategic attitude would appear to be the "requirement to embrace error":

More bluntly, future-responsive societal learning makes it necessary for individuals and organizations to embrace error. It is the only way to ensure a shared self-consciousness about limited theory on the nature of social dynamics, about limited data for testing theory, and hence about our limited ability to control our situation well enough to be successful more often than not (*Learning to Plan and Planning to Learn*, 1997)

Being not even wrong: The cognitive nimbleness required might then need to embrace the condition of being "[not even wrong](#)", so deprecated by physicists (and used provocatively by Woit with regard to string theory). It would seem to include the recognition by theologians of the value of "unsaying" or [apophasis](#), in contrast to the obsession with definition, as previously argued (*Being What You Want: problematic kataphatic identity vs. potential of apophatic identity?* 2008). Hence the vedic adage of *Neti Neti* ("neither this, nor that") -- expecting neither the expected, nor the unexpected. Similarly, in the case of *mu* in Japanese and Korean Zen tradition, this has been interpreted as indicative of the delusional nature of categorical thinking, when any yes or no response to a question is both right and wrong. As such it features prominently in the study by Douglas Hofstadter (*Gödel, Escher, Bach*, 1979) where it is used fancifully in discussions of [symbolic logic](#), particularly [Gödel's incompleteness theorems](#).

Transcending duality: epistemological panic of nonduality?

Nonduality: The challenge implicit in the above argument has been partly addressed by Gregory Bateson (*Angels Fear: towards an epistemology of the sacred*, 1987, compiled posthumously, with commentary, by Mary Catherine Bateson). This followed his earlier exploration, cited above (*Mind and Nature: a necessary unity*, 1979). Bateson saw the challenge of the future as one of transcending the dualism that has bedevilled explanation in the past. But he offers the following warning of relevance to the arguments above concerning the nature and responsibilities of science:

The title of the present book is intended to convey a warning. It seems that every important scientific advance provides tools which look to be just what the applied scientists and engineers had hoped for, and usually these gentry jump in without more ado. Their well-intentioned (but slightly greedy and slightly anxious) efforts usually do as much harm as good, serving at best to make conspicuous the next layer of problems, which must be understood before the applied scientists can be trusted not to do gross damage. Behind every scientific advance there is always a matrix, a mother lode of unknowns out of which the new partial

answers have been chiseled. But the hungry, overpopulated, sick, ambitious, and competitive world will not wait, we are told, till more is known, but must rush in where angels fear to tread.

He makes a "politically incorrect" point, relevant to this argument as another recognition of "hidden" dynamics, but with a conclusion that merits careful attention:

I have very little sympathy for these arguments from the world's "need." I notice that those who pander to its needs are often well paid. I distrust the applied scientists' claim that what they do is useful and necessary. I suspect that their impatient enthusiasm for action, their rarin'-to-go, is not just a symptom of impatience, nor is it pure buccaneering ambition. I suspect that it covers deep epistemological panic.

Clearly any notion of "nonduality" is a fundamental threat to cognitive "business as usual".

Intellectual property: But even more insight may be derived from the duality he seeks to transcend -- Pleroma-Creatura -- in the context in which his views are made known. The introductory chapters of the book have been reproduced with appreciative acknowledgement on a website, accompanied by the remark "*protected by copyright and may not be reproduced in whole or in part without permission*" a form of Creatura, that is cognitively "invisible" within those realms -- a point previously mentioned with regard to any paper published by physicists in a peer-reviewed journal to ensure its "existence" in the body of knowledge. Bateson himself discusses at some length the challenge of names in a chapter on *The World of Mental Process* (1987) -- but without mentioning this issue.

The implication is that any future *Theory of Everything* will be "subject to" **intellectual property** rights -- as with the existing proposal for a *Theory of Nothing* (2006). Mathematicians exploring the ultimate forms of symmetry accept the appropriateness of the proof of the so-called "**enormous theorem**" -- of biblical proportions at some 15,000 copyrighted pages in length -- far beyond the capacity of any single individual, however specialized, but in which all are called to believe. The term is curious in that it incorporates points, usually ignored, that Bateson makes with respect to naming in Creatura and any mapping there of Pleroma. However "intellectual property" might then be "re-recognized" as implying that anything derived from the cognitive process -- anything intellectual -- necessarily has a property (if not properties). It is in that sense conditioned, notably by the conventional perspective from which it is framed. This recalls the argument mentioned earlier (*Einstein's Implicit Theory of Relativity -- of Cognitive Property? Unexamined influence of patenting procedures*, 2007).

This seemingly abstract and sterile argument has extremely concrete implications -- well-recognized by the indigenous peoples of the world with their unique relationships to the land, as documented by **Darrell A. Posey** (*Cultural and Spiritual Values of Biodiversity*, 1999). As is most evident in the case of the Aborigines of Australia, whose "unconventional" relationship to the land is not in terms of "property" but through the **Dreaming** -- a sleep-related metaphor. This gave rise to the controversial, "conventional", legal assumption of *Terra Nullius* -- territory which has never been subject to the sovereignty of any state, or over which any prior sovereign has expressly or implicitly relinquished sovereignty.

Bateson's arguments, as presented -- as with the *Theory of Nothing* -- are then best understood as a form of *Terra Meus* -- not even *Terra Nostra*. But, rather than that frozen "rock logic", reference might be better made to the dynamics of *Cosa Nostra* and its dark waters of *Omertà* (*Dynamically Gated Conceptual Communities*, 2004). Such concerns are of course relevant in the agonizing territorial disputes associated with Jerusalem -- *Terra Nostra, par excellence?* -- and the desperate quest for a "two-state" solution. Is the associated possessiveness a phenomenon as ubiquitous and mysterious as gravity is to astrophysicists -- calling for an equivalent degree of research? Do the gravitational relationships between (orbiting) celestial bodies offer a suggestive model of the constraint of cognitive possessiveness?

Epistemological panic: Explorations of nonduality are therefore in themselves fraught with risk as is implied by Bateson's title of *Angels Fear* (1987) -- derived from "*fools rush in where angels fear to tread*".

Who might those angels be in this context? In their mythical setting, angels offer coherence and order in the specific realms over which they hold dominion. In this context, are they those who are offering coherence and order in various cognitive domains and belief systems, whether astrophysics, religion, politics, or the like (as noted above)?

Where then might they angelically "fear to tread"? Again, as noted above, their fear would appear to relate to the chaotic realm **between** the domains over which they so confidently claim unquestionable sovereignty. This realm is *Terra Nullius, par excellence*. Therein is reason for epistemological panic -- there be dragons!

One tentative effort to map its chaotic condition is to make use of the **complex plane** (*Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation*, 2007). This approach has been further developed by **Robert Daoust** (*Map for an Algonomic Pain Management*, 2009), combining several other mapping approaches, including that of the *I Ching*.

For those venturing into that chaotic realm, Bateson names particular "fools" of his choice. More interesting is the significance traditionally associated with fools, notably in indigenous societies or in symbolism (such as the Fool in the Tarot deck). But there is indeed a case for explicit warnings of "cognitive hazards" and "psychohazards" (*Challenge of psychosocially hazardous encounters with otherness*, 2009; *Psychoactive hazard warnings*, 2009).

Adventuring into "nonduality": Given its potential significance, this realm is necessarily problematic in many respects including:

- the volume of literature and number of fora, as indicated by the assiduous compilations of Jerry Katz (*Nonduality.com: The Varieties of Nondual Expression; One: Essential Writings on Nonduality*. 2007), notably those relating to the Advaita tradition

(Dennis Waite, *Back to the Truth: 5000 years of Advaita*, 2007)

- the constraint on use of insights typically defined as intellectual property and subject to copyright
- the divisiveness of dialogue in nonduality fora, echoing that within other domains
- the nature of the involvement of "gurus" (Bateson's fearful "angels"?), with various competing claims (regarding *Terra Nostra*) undermining their capacity to dialogue, irrespective of the insight they may offer
- the apparent lack of self-reflexivity by those adventuring in nonduality with respect to psychosocial relations in that domain

Despite the valuable insights, those adventuring into nonduality have their own challenges (which merit exploration in another context). As a cognitive Mount Everest, what might be called the "Mount Analogue function" of nonduality is highly jeopardized by the waste (fewnets?) disposed by previous climbers, as on Everest -- although perhaps ultimately its best protection (René Daumal, *Mount Analogue: a novel of symbolically authentic non-Euclidean adventures in mountain climbing*, 1952).

With respect to this adventure, Bateson's assertion in concluding a conference on the effects of conscious purpose on human adaptation is of fundamental cognitive significance: *We are our own metaphor* remains of fundamental cognitive significance (1972, p. 304). It is consonant with that of Kenneth Boulding (*Ecodynamics; a new theory of societal evolution*, 1978):

Our consciousness of the unity of the self in the middle of a vast complexity of images or material structures is at least a suitable metaphor for the unity of a group, organization, department, discipline, or science. If personification is only a metaphor, let us not despise metaphors -- we might be one ourselves. (p. 345)

Naming things: It has long been recognized that naming a problem is the first major step in a remedial response. This was the underlying impulse in the [problem naming](#) and profiling of the world problems assembled in the *Encyclopedia of World Problems and Human Potential*. In despair at the dramatic loss of biodiversity -- effectively the antagonistic relationship between humans and nature -- George Monbiot frames the challenge in terms of *The Naming of Things* (*The Guardian*, 15 March 2010). Curiously this loss of named species occurs in a period of "identity theft" on a massive scale -- enabled by exploitation of the global communication environment. But not only does this constitute a problem in transactions significant to livelihood, it also reinforces the implication that "identity" is something that can be stolen rather than being inherent -- recalling the most deprecated of superstitions.

Might the challenge of exploration of nonduality echo in some way the conditions of supersymmetry hypothesized at the origin of the Universe -- prior to any symmetry-breaking heralding the emergence of the consciousness with which humanity is familiar? What form might any "curling up" of dimensions then take? Potentially significant in this respect are higher degrees of self-reference -- beyond that ably articulated by Michael Schiltz (*Form and Medium: a mathematical reconstruction, Image [&] Narrative*, 6, 2003) in relation to the calculus of indications of George Spencer-Brown (*Laws of Form*, 1969/1994), and the subject of a separate comment (*Beyond the plane: form and medium in terms of the calculus of indications*, 2006).

Arguably such considerations regarding how distinctions are made (in *Creatura*) combine with those of Christopher Alexander (*Notes on the Synthesis of Form*, 1964) and the concerns of Bateson regarding naming. Whilst formally of value, these exclude the challenge of the engagement with the existential dimension of primary significance in cognitive embodiment and comprehension of nonduality -- a necessary engagement implicit in Monbiot's expression of despair. Curiously both the formalism and its comprehension would appear to be more fruitfully embodied ("encoded") in the phrases of the highly metaphorical Chinese classic, the *Tao Te Ching*, most notably with respect to naming:

The names that can be named are not definitive names. Naming engenders ten thousand things... Thirty spokes share the wheel's hub. It is the empty centre hole that makes it useful... Therefore profit comes from what is there. Usefulness comes from what is not there.

Does the marriage of visual coding and metaphor, portraying an array of dynamically interwoven psychosocial conditions, suggest that some traditional Chinese coding schemes (*I Ching*, *Tao Te Ching*, *T'ai Hsüan Ching*) have more to offer in ordering a nondualistic domain -- whilst bypassing the traps of naming -- and interfacing with currently acknowledged riches of mathematics (*Hyperspace Clues to the Psychology of the Pattern that Connects*, 2003; *9-fold Higher Order Patterning of Tao Te Ching Insights: possibilities in the mathematics of magic squares, cubes and hypercubes*, 2003)? One indication is their use in encoding the variety of attitudes to property and its possession -- the *Terra Nostra* challenge of Jerusalem (*Discovering Richer Patterns of Comprehension to Reframe Polarization*, 1998).

Mirroring of nonduality discourse: Given this challenge of naming, adventuring into nonduality might be compared to venturing into a completely mirrored domain -- with every surface then offering myriad self-referential reflections. Is this the way in which the "curled up" dimensions of supersymmetry are encountered cognitively -- and the explanation for the fruitless nature of discourse "about" nonduality? Going further with this metaphor, the integrity of any emergent insight depends both on the reflective quality of the mirrored surface (a long-standing concern in Buddhist meditation) and the configuration of those surfaces. Hence the appreciation of [Diamond Way Buddhism](#)? The challenge for viable discourse is then the pattern of faceting and how it holds dualities through symmetry (*Patterning Archetypal Templates of Emergent Order: implications of diamond faceting for enlightening dialogue*, 2002). The symbolism of jewels in relation to the highest values is suggestive not only of how they may be admired from without but the sense in which what they signify may then be both dwelt within and indwelling. If "jewels" are an elegant and superordinate resolution of the challenges of "duals" through their geometry, that they should be [homonyms](#) offers a delightful mnemonic -- to contrast with the "duels" with which duality is conventionally associated.

Given the "geometric adaptation" sought by Alexander (2009), what might emerge from the riches of symmetry, so intimately related to

duality in polyhedra and echoed in their appreciation in "sacred geometry", as separately discussed (*Harmony-Comprehension and Wholeness-Engendering: eliciting psychosocial transformational principles from design*, 2010)? What coherence does it offer to cultures, such as those of classical Greece and Rome, that recognized a degree of psychosocial functional complexity through the dynamics of their 12-fold pantheons -- as with the Greek **Dodekathion** and the corresponding Roman **Dii Consentes**? Ironically their primary psychosocial function in the current global civilization is as protected trademarks, typically in the fashion industry. But might a coherent 12-fold functionality be appropriately recognized in the polyhedral configuration of a "dodecameral mind", as previously suggested (*Union of Intelligible Associations: remembering dynamic identity through a dodecameral mind*, 2005)?

Can voluminous arguments in text form be transformed into geometrical forms more immediately comprehensible and memorable through their symmetry -- whatever the complexity (*Metaphorical Geometry in Quest of Globality -- in response to global governance challenges*, 2009)? Put differently, can the various planes of reflection be usefully reframed as a configuration of "ex-planations" ?

Meaninglessness and collapse: The above argument raises the question as to whether the tortuous explorations of complexity by physicists (in explaining the Universe) and the ineffectual strategic preoccupations of global governance (in response to a crisis of crises) may both be indicative of cognitive avoidance of epistemological panic.

It may be argued that the explosive development of instantaneous global communication on every topic is increasingly matched by a progressive inhibition in the emergence of global meaning -- due to information overload and diminishing attention spans. As argued separately, this is most evident in the challenge of meaningful consensus in any domain, but especially in relation to governance (*Emerging Memetic Singularity in the Global Knowledge Society*, 2009; *Future Generation through Global Conversation: in quest of collective well-being through conversation in the present moment*, 1997). In that respect the fashionable priority strategies -- as with climate change -- function primarily as fig leaves to inhibit recognition of more fundamental challenges and the cognitive "psychohazards" of responding to them (*Overpopulation Debate as a Psychosocial Hazard: development of safety guidelines from handling other hazardous materials*, 2009; *Mapping the Global Underground*, 2010).

In a new study, **Jeremy Rifkin** (*The Empathic Civilization: the race to global consciousness in a world in crisis*, 2010) argues that:

There is, I believe, a grand paradox to human history. At the heart of the human saga is a catch-22 - a contradiction of extraordinary significance - that has accompanied our species, if not from the very beginning, then at least from the time our ancestors began their slow metamorphosis from archaic to civilised beings thousands of years before Christ....The catch-22 is that, as civilisation has extended the reach of empathy beyond the family and the tribe until it covers all of humankind, the expanding infrastructure of industry and transport has needed ever larger inputs of energy, increasing entropy and wrecking the planet.... Our rush to universal empathic connectivity is running up against a rapidly accelerating entropic juggernaut in the form of climate change and the proliferation of weapons of mass destruction.

This is an argument that echoes that of **Thomas Homer-Dixon** (*The Upside of Down: catastrophe, creativity, and the renewal of civilization*, 2006). Rifkin argues for the development of "biosphere consciousness": *Only by concerted action that establishes a collective sense of affiliation with the entire biosphere will we have a chance to ensure our future*. It is an argument made by a number of authors cited above. But whether as an integration of "mind and nature" (Bateson, 1979), through a "participatory mind" (Skolimowski, 1994), or an "embodied mind" (Lakoff, 1999, Varela, 1991), responding effectively to the condition of the planet only becomes meaningful when it is recognized to be our own existential condition, as previously argued (*Cognitive Implications of Lifestyle Diseases of Rich and Poor: transforming personal entanglement with the natural environment*, 2010). As indicated there, it is of course fundamental physics that has given precision and legitimacy to some understandings of "entanglement" -- but of course it is the objectivity of that physics which so systematically reinforces the dysfunctional duality of mind and nature such as to endanger civilization as we know it.

Perilous quest for simplicity: The Copenhagen climate change debacle suggests a need to avoid simplistic, naive expectations in this regard, especially since such appeals for universal consensus echo failed appeals with regard to many other global challenges calling for "political will" -- code for righteously assuming what everyone else ought to do. These also echo programmes, language and assumptions of many religions over the centuries -- now seen to be questionable, as argued separately (*Insights for the Future from the Change of Climate in Copenhagen*, 2010). Traces of this mindset are however evident in Monbiot's frustration (above) at the failure of the "unpersuadables" to accept "the facts" of science. How far is the stereotype of an "unpersuadable" from that of a "kafir" (an "unbeliever" from an Islamic perspective, although readily confused with the racist *kaffir*)? The sense of repeating an unfruitful pattern from which learning is not derived is well summarized by the adage of **George Santayana**: *Those who cannot remember the past are condemned to repeat it*. It is associated with a progressive erosion of collective memory -- perhaps to be caricatured as a civilizational form of Alzheimer's disease (*Societal Learning and the Erosion of Collective Memory*, 1980).

The draining of depth of integrative, "global" meaning from global communication, together with the inability to elicit global political will, suggest a quality of civilizational impotence of the kind highlighted by **Jared Diamond** (*Collapse: how societies choose to fail or succeed*, 2005). Within a global knowledge society, any such collapse might be best described in terms of a "memetic singularity" (*Emerging Memetic Singularity in the Global Knowledge Society*, 2009).

Coincidentally the Vatican has issued recommendations to priests regarding their sermons, notably indicating that they should be brief -- no more than 8 minutes -- to cater for people with short attention spans (*The Word of God*, 2010). This corresponds to the social networking trend pioneered by **Twitter** -- with messages no more than 140 characters in length (offering the prospect that priests might considering "tweeting" their flocks with homilies). It is the "blip culture" of **Alvin Toffler** (*The Third Wave*, 1984) to be contrasted with the appreciation silence by **Ralph Waldo Emerson**:

Good as is discourse, silence is better and shames it. The length of the discourse indicates the distance of thought betwixt the speaker and the hearer. If they were at a perfect understanding in any part, no words would be necessary thereon. If at one in all, no words would be suffered.

How might "blips" get re-configured as "jewels" of meaning -- multifaceted, polyhedral, visual analogues to the linearity of the "140 characters" of Twitter or conventional homilies? More intriguing however is the sense in which social networks, sustained by their web interactivity, may already be forming polyhedral structures through that connectivity -- emergent "jewels" if understood dynamically rather than statically (*Polyhedral Empowerment of Networks through Symmetry: psycho-social implications for organization and global governance*, 2008). Perhaps the "silence" is to be appreciated and cultivated otherwise? Possibly motivating homilies and calls to collective actions would prove more psychoactively engaging if configured non-linearly -- an "eightfold" homily, for example, recalling the mnemonic structure of the Eightfold Way, whether of [particle physics](#), [Buddhism](#), or [policy analysis](#).

Snoring? Returning to the original metaphor of awakening -- in contrast to such apparent abstractions, and to falling asleep in the face of artful [homiletics](#) -- there is a case for fruitful reflection on snoring and its insights regarding any "other". This is potentially fruitful given the "nonduality" of the common conflation of "self" and "other" during that process -- and the subsequent denial when finally awake (*Snoring of The Other: a politically relevant psycho-spiritual metaphor?* 2006).

Given the insights of cosmologists, the subtle challenge in nondualist discourse may be how to say nothing fruitfully.

References

Christopher Alexander:

- Notes on the Synthesis of Form. Harvard University Press, 1964 [\[summary\]](#)
- The Nature of Order: an essay on the art of building and the nature of the Universe, 2004 [\[summary\]](#)
- Harmony-Seeking Computations: a science of non-classical dynamics based on the progressive evolution of the larger whole. *International Journal for Unconventional Computing (IJUC)*, 2009 [\[text\]](#)

John D. Barrow:

- The Book of Nothing. Vintage, 2000
- Theories of Everything: the quest for ultimate explanation. Oxford University Press, 1990

Gregory Bateson. Mind and Nature: a necessary unity. Hampton Press, 1979

Gregory Bateson with Mary Catherine Bateson. Angels Fear: towards an epistemology of the sacred. Hampton Press, 1987 [\[summary\]](#)

Mary Catherine Bateson. Our Own Metaphor: a personal account of a conference on the effects of conscious purpose on human adaptation. New York, Knopf, 1972.

Janine M. Benyus. Biomimicry: innovation inspired by nature. William Morrow, 1997

David Bohm. Wholeness and the Implicate Order. Routledge, 1980 [\[summary\]](#)

Kenneth Boulding. Ecodynamics; a new theory of societal evolution. London, Sage, 1978.

Karen A. Cerulo. Never Saw It Coming: cultural challenges to envisioning the worst. University of Chicago Press, 2006

Mihaly Csikszentmihalyi. Finding Flow: the psychology of engagement with everyday life. Basic Books, 1998

Philip J. Davis and Reuben Hersh. The Mathematical Experience. Birkhauser, 1981

Jared M. Diamond. Collapse: how societies choose to fail or succeed. Penguin, 2005

Nathan Freier. Known Unknowns: unconventional 'strategic shocks' in defense strategy development. Strategic Studies Institute, U.S. Army War College, November 2008 [\[text\]](#)

Charles Handy. The Age of Unreason. Harvard Business Press, 1989

Peter Harries-Jones. A Recursive Vision: ecological understanding and Gregory Bateson. University of Toronto Press, 1995

Douglas Hofstadter:

- I Am a Strange Loop. Basic Books, 2007 [\[summary\]](#)
- Gödel, Escher, an Eternal Golden Braid. Basic Books, 1979 [\[summary\]](#)

Thomas Homer-Dixon. The Upside of Down: catastrophe, creativity, and the renewal of civilization. Island Press, 2006 [\[summary\]](#)

Michael Jordan. Encyclopedia of Gods: over 2,500 Deities of the world. Facts on File, 1993

Jerry Katz:

- Nonduality.com: The Varieties of Nondual Expression [\[resources\]](#)
- One: Essential Writings on Nonduality. Sentient Publications, 2007) [\[text\]](#)

Robert E. Krebs. Encyclopedia of Scientific Principles, Laws, And Theories. Greenwood, 2008

T. S. Kuhn. *The Structure of Scientific Revolutions*. Continuum, 1962 [[summary](#)]

David Lai. *Learning from the Stones: a go approach to mastering China's concept, Shi*. Strategic Studies Institute (United States Army War College), 2004 [[text](#)]

George Lakoff and Rafael Núñez. *Where Mathematics Comes From: how the embodied mind brings mathematics into being*. Basic Books, 2000 [[summary](#)]

George Lakoff and Mark Johnson. *Philosophy In The Flesh: the embodied mind and its challenge to Western thought*. Basic Books, 1999

Hilary Lawson. *Reflexivity: the post-modern predicament*. HarperCollins, 1985

Nicholas Maxwell:

- *From Knowledge to Wisdom: a revolution for science and the humanities*. Pentire Press, 2007
- *What's Wrong With Science?* Pentire Press, 2009

Donald N. Michael:

- *Leadership's shadow: the dilemma of denial*. *Futures* 26, 10, Dec 1994
- *Learning to Plan and Planning to Learn*. Miles River Press, 1997

Paul Ormerod. *Why Most Things Fail: evolution, extinction and economics*. Wiley, 2005 [[extracts](#)].

Raj Patel. *The Value of Nothing: how to reshape market society and redefine democracy*. Picador, 2010

Clifford Pickover. *Strange Brains and Genius: the secret lives of eccentric scientists and madmen*. Harper Perennial, 1999

Karl Popper. *Conjectures and Refutations: the growth of scientific knowledge*. Routledge, 1963 [[summary](#)]

Darrell A. Posey (Editor). *Cultural and Spiritual Values of Biodiversity: a complementary contribution to Global Biodiversity Assessment, Intermediate Technology*, 1999 (for the United Nations Environment Programme)

Joshua Cooper Ramo. *The Age of the Unthinkable: why the New World Disorder constantly surprises us and what we can do about it*. Little, Brown and Company, 2009

Nicholas Rescher. *The Strife of Systems: an essay on the grounds and implications of philosophical diversity*. University of Pittsburgh Press, 1985

Jeremy Rifkin. *The Empathic Civilization: the race to global consciousness in a world in crisis.*, Jeremy P. Tarcher, 2010 [[summary](#)]

Steven M. Rosen:

- *Topologies of the Flesh: a multidimensional exploration of the lifeworld*. 2006 [[text](#)]
- *Dimensions of Apeiron: a topological phenomenology of space, time, and individuation*. Value Inquiry Book Series, 2004 [[text](#)]

Brian Rotman. *Signifying Nothing: the semiotics of zero*. Macmillan, 1987

Donald Rumsfeld. *The Unknown*, 2002

Henryk Skolimowski. *The Participatory Mind: a new theory of knowledge and of the universe*. Arkana, 1994 [[summary](#)]

Alan Sokal:

- *Transgressing the Boundaries: toward a transformative hermeneutics of quantum gravity*. *Social Text*, 1996
- *Beyond the Hoax: science, philosophy and culture*. Oxford University Press, 2010

Russell K. Standish. *Theory of Nothing*. BookSurge, 2006 [[summary](#)]

Susan G. Sterrett. *Wittgenstein Flies a Kite: a story of models of wings and models of the world*. Pi Press, 2005 [[text](#)]

Nassim Nicholas Taleb. *The Black Swan: the impact of the highly improbable*. Random House, 2007 [[contents](#)]

Paul Thagard. *Conceptual Revolutions*. Princeton University Press, 1992

Francisco Varela. *Laying Down a Path in Walking: essays on enactive cognition*. Zone Books/MIT Press, 1997

Francisco Varela, E Thompson, and E Rosch. *The Embodied Mind: cognitive science and human experience*. MIT Press, 1991

Paul Watzlawick. *The Invented Reality: how do we know what we believe we know?* W. W. Norton. 1984

David Weeks and Jamie James. *Eccentrics: a study of sanity and strangeness*. Kodansha Globe, 1996

Alfred North Whitehead. *Process and Reality*. Free Press, 1929 [[summary](#)]

Peter Woit. *Not Even Wrong: the failure of string theory and the continuing challenge to unify physics*. Jonathan Cape, 2006



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