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Engaging with Globality through Knowing Thyself

4th Dimension: Embodying engagement with otherness

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Dimension 4 of a four-fold exploration. Produced on the occasion of the "coronation" of Barack Obama (as president of the country from which insightful leadership is expected in response to global problems) and of the "crowning experience" of the Davos World Economic Forum (for the instigators and observers of the global credit crisis and its consequences). [*Engaging with Globality* -- Dimension 1: *Cognitive Realignment*; Dimension 2: *Cognitive Circlets*; Dimension 3: *Cognitive Crowns*; Dimension 4: *Knowing Thyself*]

[Overview of *Engaging with Globality*](#)

Dimension 1: Cognitive Realignment -- making points and aligning a target

Dimension 2: Cognitive Circlets -- learning/action cycles

Dimension 3: Cognitive Crowns -- all-encompassing, well-rounded experience

Dimension 4: Knowing Thyself -- embodying engagement with otherness

Questionable cognitive constraints

Emergent cognitive unrest implicit in social unrest

Cognitive implication "down the rabbit hole"?

Encouraging paradoxical strategies

Interfacing confidently between locality and globality

Transcending categories characteristic of in-the-box thinking

Cognitive interfacing with otherness: engaging with abundance

Radical questioning: delinking from detachment

Engendering categories: self-constraining world-making and system building

Playfully engaging with globality through re-categorizing and re-classifying

Realistic unknowing, requisite humility and appropriate questioning

Dimension 5?

Annex A: [Engaging with Globality through Playful Re-categorizing](#)

Annex B: [Global Governance via a Double-breasted Strange Attractor](#)

Annex C: [Engaging with Globality through Dynamic Complexity](#)

Annex D: [Intercourse with Globality through Enacting a Klein bottle](#)

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Introduction

The argument in [Dimension 2](#) and [Dimension 3](#) has been framed as though those "crowned" by social processes -- in the expectation of their adequacy to the challenge of governance -- might seek to act in new and more appropriate ways. Namely that they might act in a manner distinct from the track record of their predecessors -- who have so effectively enabled the emergence of the current set of crises (*Emergence of a Global Misleadership Council: misleading as vital to governance of the future?* 2007).

As noted in the [Overview of *Engaging with Globality*](#), in 2008 and 2009 **the world is witness to the vain attempt to encompass global reality** -- globality -- in a budgetary net of **line** items typically configured as a spreadsheet matrix. Hence the discussion in [Dimension 1](#). But there is effectively little strategic skill in loops, curvature and handling the "curved ball" of crisis -- hence the commentary on the cognitive significance of **circlets** in [Dimension 2](#). Both lines and circles in various combinations are structural elements through which globality can be represented and comprehended in a more integrative manner -- hence the focus on cognitive **crowns** in [Dimension 3](#). A summary of the 4-part argument is provided separately (*Metaphorical Geometry in Quest of Globality*, 2009).

However, whether "circlets" or "crowns", a wearer is implied and has (cognitively) to "get into" the **holes** they offer -- to "**go down the rabbit hole**" into the mirror world of self-reflexivity -- and be able then to "get out", without getting "stuck". It is these cognitive

dynamics that are the focus here. Whether reference is made to the metaphors of "rabbit hole" or "mirror" -- transformed into tales for children by mathematician-logician [Lewis Carroll](#) (*Alice's Adventures in Wonderland*, 1865) and its sequel *Through the Looking-Glass, and What Alice Found There*, 1871) -- the concern here is **how to respond to the global strategic challenge of cognitive reflexivity and implication** (*Stepping into, or through, the Mirror: embodying alternative scenario patterns*, 2008).

It is in this strange cognitive realm where, as recognized in *The Pivot* of [Chuang-tzu](#):

The possible becomes impossible; the impossible becomes possible.
Right turns into wrong and wrong into right;
the flow of life alters circumstances
and thus things themselves are altered in their turn.

As the sequel to the argument for collective intelligence in [Dimension 2](#) and [Dimension 3](#), **the approach here is reversed to present the role of cognitive circlets and crowns for the individual** endeavouring to engage with globality meaningfully and responsibly, and in an integrative manner. Realistically, **this must necessarily be independent of any reliance on distant coronations, groups or institutions** -- except insofar as they can be "personalized" through transformation into symbols of cognitive significance. The focus is on **enabling personal insight**.

The emphasis in this part is necessarily "extraordinary", hence the 4-dimensional context proposed. **If "ordinary" was sufficient in responding sustainably to the challenge of globality, then no more than a 3-dimensional context would be necessary.** However questions regarding any inadequacy would then emerge of which the most generic is that indicated by the title of the mathematical exploration of Ron Atkin (*Multidimensional Man: can man live in three dimensional space?* 1981). **What might be the cognitive significance of the dynamics associated with 4-dimensionality** -- beyond the understandings on which physicists focus (Dan Falk, *In Search of Time: the science of a curious dimension*, 2008)?

Indeed, **does a viable form of sustainability, and a meaningful sense of identity, only emerge within the dynamics of 4-dimensionality** (*Emergence of Cyclical Psycho-social Identity: sustainability as "psycically" defined*, 2007) -- otherwise best understood to be inexplicable (*Being What You Want: problematic kataphatic identity vs. potential of apophatic identity?* 2008).

Distinct from the understanding of the "Masters of the Universe" (of [Dimension 1](#)) is that of Albert Einstein ("master of the four dimensions"?). The cognitive conventions of [Dimension 1](#), [Dimension 2](#) and [Dimension 3](#) may totally preclude some form of "cognitive miracle" as distinguished by Einstein:

There are only two ways to live your life.
One is as though nothing is a miracle.
The other is as though everything is a miracle.

Questionable cognitive constraints

Reliance on the insight of others: As conventionally presented, reliance is typically to be placed on some paternal figure, group ("[The Global Elders](#)"), or institution, supposedly capable of "fixing" these crises or offering wisdom into how to do so. The problematic track record of the UN system over many decades is a lesson in this respect (cf [Shirley Hazzard](#), *Defeat of an Ideal: a study of the self-destruction of the United Nations*, 1973). As noted in [Dimension 1](#), with the plethora of meetings on every topic over the years, it is not to be expected that gatherings such as the World Economic Forum or the World Social Forum would escape the tendency for many arguments to be repeated (*ad nauseam*) -- whether then to be applauded or deprecated. Despite the financial and economic crises, and the other urgent global issues, this appears to be continuing in the gatherings of 2009.

Hope-mongers: There is indeed a case for hope and it is widely made -- and most notably by Barack Obama (*The Audacity of Hope*, 2006), newly crowned. However the financial crisis of 2008, its consequences and news of widespread unrest at the time of writing, offer a salutary lesson in this respect. It might be said that global civilization has been made a victim of hope-mongering and that this process will most probably continue, thereby exacerbating the "credibility crunch" with respect to governance of any kind (*Credibility Crunch engendered by Hope-mongering: "credit crunch" focus as symptom of a dangerous mindset*, 2008). The emerging deceptions -- of factions which had been persuaded to vote for the hope articulated by Obama -- are **an indicator that that bubble of hope may also implode**.

The remedial bailout funds are effectively being pumped from deep artesian "wells" of hope and confidence -- however the level of associated "groundwater" is decreasing rapidly and is not being replenished (mirroring the situation in many areas faced with looming water shortage). "Water shortage" may indeed be a symbolic indicator of "hope shortage" -- just as "global warming" may be a suggestive indicator of "social unrest".

Legal constraints: Little recognized is the fact that much of the knowledge, on which human ingenuity might depend for the creative breakthroughs required, is actually subject to restrictive intellectual property and secrecy regimes. The hoped for response of "collective intelligence" is therefore severely handicapped by vested conceptual interests -- an analogue to the "pork barrel" approach to urgent remedial stimulus responses to a national emergency (as in the USA at the time of writing). As with the inability to act legally and retrospectively against those who have accumulated exorbitant wealth in triggering the financial disaster, so the **legal constraints on access and use of potentially vital information take precedence over enabling any potential human ingenuity** -- supposedly in the cause of "national security", irrespective of any global crisis!

Outcomes: It seems unlikely therefore that things will be "fixed" as some believe -- even in the medium-term. People are however now expected to hope that the measures taken will be adequate -- despite their being taken by the same authorities complicit in sustaining the earlier bubble of hope (now recognized to have been dangerously unrealistic). There will nevertheless be many extremely valuable learnings in the process of living in such "interesting times".

Repetition, circularity and self-reflexivity: On the occasion of Davos 2009, Kofi Annan reiterated a point widely acknowledged in other contexts: *World faces 'crisis of governance'* (CNN.com, 28 January 2009). It would be correct to say that there is considerable skill in talking around this question -- in the manner analyzed mathematically by Ron Atkin (in [Dimension 2](#)). The question is whether it is possible to transcend the pattern of empty discussion.

As noted in [Dimension 1](#), the degree of self-reflexivity in international gatherings, like the World Economic Forum and the World Social Forum, is slight regarding the repetitive, circular processes of argumentation. This ensures that their history is constantly repeated in the response to crises -- as warned for large-scale events by [George Santayana](#): *Those who cannot remember the past, are condemned to repeat it*.

Critical evaluation: Curiously this avoidance of critical self-assessment was even reinforced by Kofi Annan (Dispatches from Davos, *World Street Journal*, 28 January 2009) in which he argues that:

It is vital for everyone that the discussions at Davos look outwards, not inwards. For what this unprecedented crisis has shown is no country, no matter how prosperous or powerful, can now alone protect itself against the challenges of an interconnected world

The argument here is that **there is however urgent need for some kind of inner focus to compensate for this pattern of avoidance, supposedly framed as a basis for "moving on"**. But curiously the challenge is mirrored by that for any individual faced with the continuing incoherence of the global system. Hence the focus here on [Engaging with Globality through Knowing Thyself](#).

Emergent cognitive unrest implicit in social unrest

The generic variants of the inadequacies giving rise to the social unrest (described in [Dimension 1](#)), and the complicity of authorities in neglecting their implications, make it appropriate to speak of a form of cognitive unrest. This is indicated, for example, by [Joseph Stiglitz](#) (*Fear and loathing in Davos*, *The Guardian*, 6 February 2009) or by [George Soros](#) (*The New Paradigm for Financial Markets: the credit crisis of 2008 and what it means*, 2008) for whom a [Theory of Reflexivity](#) is "indispensable" to an understanding of the "superbubble" that resulted in the economic crisis (as discussed in [Dimension 3](#)).

Implicit cognitive unrest: This cognitive unrest is analogous to the anticipated levels of social unrest about which there is such concern. The less tangible forms are effectively concealed by the focus on those more visible manifestations. It may well be the cognitive unrest that is catalyzing and sustaining the social unrest ([Climate Change as a Metaphor of Social Change: systemic implications of emissions, ozone, sunlight, greenhouse and overheating](#), 2008; [Climate of Change Misrepresented as Climate Change: insights from metaphorical confusion](#), 2008).

Just as recent months have highlighted the "surprising" incidence of mega-financial fraud based on [Ponzi schemes](#) (involving billions of dollars), there would appear to be some probability that equally "surprising" cognitive analogues are waiting to be discovered. **The question is whether those with skills of a higher order are effectively duping the gullible into "buying into" patterns of belief through a hierarchical process analogous to the operation of a Ponzi scheme.** The "promises" and "guarantees" effectively offered by many authorities would appear to follow this pattern -- or call for careful distinction from it. It is of course such a distinction that was absent in the case of the complicity of many highly respected sectors in sustaining the financial bubble of recent decades.

The problem for those engaged in such schemes is however succinctly highlighted by Abraham Lincoln's proverbial declaration: "*You can fool some of the people all the time, all the people some of the time, but you can't fool all the people all the time*".

Problematic access to relevant knowledge: Now to be recognized as "sloshing" around the knowledge and communication space (whether as "primeval soup" or "primevil sewage") are:

- the degree of **information overload**
- the assumption that overload can be reliably avoided by **dependence on authoritative recommendations**
- the restrictive consequences of **intellectual property** and the potentially prohibitive costs of access
- the inhibiting implications of **secrecy** regimes with regard to knowledge relevant to rapid response
- the inhibiting implications of **increasingly questionable peer review** processes and **mutual citation pacts** ****
- the challenge of deriving knowledge (if not wisdom) from the variety of **unrelated sources and models**
- the plethora of **mutually contradictory opinions and theories** offered by "authorities"
- increasing constraints of **time, attention span and memory**
- a widespread **culture of delay**, involving promises, postponement and procrastination
- **secret agreements** and memoranda of understanding limiting freedom of maneuver in policy-making
- **legacy procedures and contractual commitments**, questionable under no circumstances

Such constraints highlight the merits of defining -- through the metaphor of a [chained library](#) -- the global availability of knowledge, potentially of urgent relevance in crisis response. This suggests that the most valued knowledge is now held in a similarly archaic manner -- held to be valuable precisely because of its relative inaccessibility (and irrespective of its content). Chaining books to bookshelves was a procedure common in monastic libraries of the past. It is especially ironic how copyright restrictions are notably applied to any published insights with "syn" in the title (as with *Synergetics* and *Syntegrity*, or *Synthesis*). More generally there is the question of the unexplored incidence of "cognitive diseases" ([Memetic and Information Diseases in a Knowledge Society](#), 2008).

Ironically modern texts are now potentially and advantageously "chained" together through hypertext links -- although this is rarely done and with little consideration for the higher degrees of conceptual order they might then form ([Hyperaction through Hypercomprehension and Hyperdrive: necessary complement to proliferation of hypermedia in hypersociety](#), 2006; [Transforming Static Websites into Mobile "Wizdomes": enabling change through intertwining dynamic and configurative metaphors](#), 2007).

Potentially much more problematic is the ranking policy of some search engines dependent on criteria of "popularity" and "relevance". Clearly **there is every possibility of obscuring information precisely because it is "unpopular" and is commonly considered**

"irrelevant" to conventional cognitive frameworks. Could this give rise to a global "cognitive bubble" of political correctness -- analogous to that of the failed financial bubble -- which would completely **undermine any collective capacity to engage with problematic conditions in an innovative manner?**

Would this reinforce a comfortable form of groupthink wrapping the world within a form of gated community (cf *Dynamically Gated Conceptual Communities: emergent patterns of isolation within knowledge society*, 2004; *Groupthink: the Search for Archaeoraptor as a Metaphoric Tale*, 2002) ? Are traces of this phenomenon to be detected in the popularized response to "climate change" (*Climate Change and the Elephant in the Living Room*, 2008; *Climate of Change Misrepresented as Climate Change*, 2008)?

What information was considered "popular" and "relevant" on the *R.M.S. Titanic* -- whether by the captain, the crew, or the passengers -- prior to its encounter with the iceberg? How might the declared **neocron strategy to "control the internet"** be designed into search engine algorithms? With whom would such information be "popular" or "relevant"?

It is from the current condition of this knowledge space that it is assumed that coherence relevant to governance may be drawn, irrespective of other possibilities (*Coherent Policy-making Beyond the Information Barrier*, 1999). **Information overload, is now engendering the cognitive distance previously ensured by geography** -- but what then is "globality" calling for in terms of "circumnavigation", notably by any individual? Whilst it may be assumed that messages can be effectively disseminated around the globe, even if the messages are accessible and received, they are more than likely not to be read or comprehended. Rather than fruitful global "insemination", the communication is essentially "sterile" or liable to give rise to some form of "miscarriage".

The challenge is exacerbated by:

- deliberate or inadvertent **deceit in pursuit of hidden agendas**. The acclaimed efforts to reduce such excesses -- such as the Universal Declaration of Human Rights -- are now frequently used as fig leaves to camouflage the most dubious agendas. A text such as this one is then as much part of the problem as of any supposed solution.
- the assumption that, **no matter the level of chaos, those authorities in power necessarily know best how to envisage and implement the most appropriate response to crisis** -- and how to credibly promote that claim. The only too visible response to Hurricane Katrina, the less well-recognized responses to massacres in East Africa (Rwanda, Dafur, Congo), and the chaotic response to the financial system collapse, are all proof to the contrary.

Cognitive pathology: The concern here is with this jumble of constantly reshuffled categories, papering the walls of cognitive habitats within which we live -- and the lack of coherence, perhaps vital to individual and collective health. The increasing accumulation and consumption of such information even raises the possibility of an individual or collective crisis of **cognitive obesity** analogous to its physical form, and perhaps most evident amongst those preoccupied with surveillance and classification of information (*Memetic and Information Diseases in a Knowledge Society*, 2008). Ironically, in both cases, it may be seen as a form of engagement with an understanding of globality.

More problematic is the incapacity to distinguish the creative reframings from the pathological -- a situation only relieved by the human capacity for humour under the direst circumstances (*Recognized Role of Humour -- in politics, leadership, religion and creativity*, 2005).

Disassociation and disaffection: Irrespective of any social unrest it would seem probable that the cognitive unrest will result in a **withdrawal of value from authoritative worldviews and their articulations**. This echoes the argument of [George Monbiot](#) (in *Dimension 1*) for withholding payment of taxes as an indication of lack of confidence. Such a view has been explored by [Ayn Rand](#) (*Atlas Shrugged*, 1967); its relevance to the economic crisis of 2008-9 being the subject of a comment in *The Economist* (*Atlas felt a sense of déjà vu*, 28 February 2009).

As symbolized by taxation and bailouts, governance has effectively framed itself as forcefully eliciting and arrogating individual confidence directly in order to reassign it to initiatives that do not benefit directly from individual confidence -- whilst claiming that this is in the individual's interest. Somehow **governance is claiming to represent the individual and his or her interests, whilst making it the individual's responsibility to ensure that those interests are taken into account** -- whilst handicapping their ability to do so (and proclaiming the contrary as being the spirit of democracy).

The process of ceasing to attribute value to authority, or to the views it promulgates, is analogous to that of non-acceptance of a monetary token -- a feature of the current financial crisis. It is of course intimately related to the processes of disaffection, apathy and alienation through which many (especially the young) already manifest their lack of respect for those who claim authority and expect respect. It has a long political tradition in anarchism, now framed as dangerous extremism (worthy of criminalization). The view has been extensively articulated by Paul Feyerabend (*Against Method: outline of an anarchistic theory of knowledge*, 1975/1988) in reaction to his study of cognitive deprivation (*Conquest of Abundance: a tale of abstraction versus the richness of being*, 1999).

More profound is the extent to which cognitive unrest is associated with **existential unrest**, notably manifested in [depression](#) -- increasingly of global epidemic proportions and itself a trigger of systemic consequences such as substance abuse.

Cognitive implication "down the rabbit hole"?

Following the imaginative lead of Lewis Carroll -- and in the light of its "universal" appeal -- what and where is the "cognitive rabbit hole" and how does one go "down" it? As mentioned above with respect to "circlets" and "crowns", these potentially imply a wearer. The "hole" is therefore cognitively associated with their centres in some way. However such a topological observation does not facilitate cognitive access to them in the light of what is implied by Carroll's mysteriously magical "rabbit hole".

In a sense the **static** configuration of circlets, or their interlocking in a crown, does constitute a vital pointer. Here in Dimension 4 however, it is appropriate to suspect that the "hole" only "opens" and becomes accessible through the cognitive **dynamics** associated with those circlets and crowns -- implicit in them. And clearly it is to be expected that any such interlocking circlets would have to be cognitively non-trivial, as probably indicated by their symbolic significance. Furthermore, the process of "going down" any hole probably calls for a greater degree of cognitive implication than suggested by a ring-style circlet -- indicative of only "sticking a finger" into the hole, rather than a "whole body" commitment to it.

In this light, the potentially interlocking circlets constituting such a cognitive gateway might therefore involve cognitive challenges such as the following::

- **threatening otherness** and the courageous effort to contain and eliminate it. This is exemplified on a global scale by how "terrorism" has been framed as the greatest challenge to well-being, way of life and the future of civilization. However the pursuit of this spectral enemy of archetypal proportions has been insightfully reframed by such as:
 - **Pogo** in declaring *I have seen the enemy and it is us*, considered credible with respect to terrorism by Joan Chittister (*Pogo may have been right*, *National Catholic Reporter*, 17 June 2003)
 - **Arundhati Roy** (*Mumbai was not our 9/11*, *The Guardian*, 12 December 2008) to the effect that: *The only way to contain (it would be naïve to say end) terrorism is to look at the monster in the mirror.*
- engagement with the **consumption of "more"** and the constant effort to upgrade its quality. This is of course exemplified by the fundamental commitment to consumerism, once basic needs have been satisfied. It may even constitute a continual reframing of those basic needs in terms of potential upgrades. This pursuit may be usefully reframed through recognition of:
 - the extent to which consumption is reducing the resources that enable such consumption, whether it be arable land, water, minerals
 - the fact that population overshoot has now been estimated to require seven Earth-type planets to sustain it
- pursuit of **sexual fulfillment**, or its surrogates, and the continuing effort to enhance and preserve its quality and significance. This pursuit engenders consequences and responsibilities
 - ***
- lifelong quest for larger or more **fundamental significance**, whether framed as contentment, happiness or wisdom.
 - Elliott ***
- continuing quest to **mitigate the effects of ageing** and to sustain or recover the well-being and physical attributes of youth and beauty.
 - immortality ***
 - survival after death ****

Independently, each of these processes may be understood as implying a degree of circularity through which one is cognitively confronted with oneself through a **distorting mirror** -- inhibiting such "re-cognition" of what is embarrassingly familiar, namely "**knowing thyself**" (cf **Douglas Hofstadter**, *I am a Strange Loop*, 2007). Using the symbol of the **Ouroboros**, it is the forced encounter of the questing head with the elusive tail. In each case the encounter is challenging in different ways: oneself as source of terror; cannibalistic consumption of one's own tail ("**cognitive autophagy**"?) or of progeny; recognition that contentment and wisdom are not "elsewhere" but "here" and "now"; and that "immortality" and "survival" may be more mysterious than is conventionally implied.

The mirror metaphor is especially significant in the classical thinking of China (Alex Wayman, *The Mirror as a Pan-Buddhist Metaphor-Simile. History of Religions*, 1974; Peter N. Gregory, *The Sudden/Gradual Polarity: a recurrent theme in Chinese thought*, *Journal of Chinese Philosophy*, 1982; *Sudden and Gradual; approaches to enlightenment in Chinese Thought*, 1991). The latter includes the distinction made by Paul Demiéville (*The Mirror of the Mind*), expressed through two contrasting traditional verses:

- the **gradualist approach**, insists that effort is necessary to rid the mind of these foreign impurities, expressed through the metaphor of wiping and polishing a mirror;
- the **sudden approach** to awakening considers only its essential purity, hence the refusal to recognize the existence of any impurity needing to be removed.

The corresponding, mutually challenging, verses are:

- *The body is the tree of the awakening; The mind is like a clear mirror. Be unceasingly diligent in wiping it and polishing it, So that it will be without dust.*
- *Awakening entails no tree at all, Nor does the clear mirror entail any material frame. The Buddha-nature is eternally pure; Where could there be any dust?*

Curiously no reference is made to the fact that these "opposing" views -- fundamental to two "opposing" belief systems -- might themselves be seen as mirror images of each other. As correspondences, it is between them that one is called to step, as discussed elsewhere (*Climbing Elven Stairways: DNA as a macroscopic metaphor of polarized psychodynamics*, 2007). The mirror metaphor, with its optical associations, also offers a way of reframing speculations about "speculative freemasonry" -- especially given its embodiment in the title *Masonic Mirror and Keystone* (an early periodical).

The "**sudden**" possibility would seem to be related, in terms of immediate accessibility, to Lewis Carroll's "**rabbit hole**" (explored here) -- whereas the "**gradual**" approach would seem to correspond to that of the hopes that continue to be promoted for the fruitful outcome of "**sustainable development**".

The cognitive implications of the mirror have also been discussed with respect to the **mirror recognition test** (*Self-reflective Embodiment of Transdisciplinary Integration (SETI): the universal criterion of species maturity?* 2008)

Together, it is presumably this mirroring that "defines" and "frames" the "hole" into which one can "implicate" oneself -- through which one is free cognitively to step and thereby be oneself reframed (*Stepping into, or through, the Mirror*, 2008). Presumably this is implied by Lewis Carroll (*Through the Looking-Glass*, 1871, or its many **cinematic adaptations**) or by the classical Chinese and Japanese understanding of *The Gateless Gate*. It is perhaps imaginatively echoed in popular representations of future "stargate" technology -- which lends itself to another framing (*People as Stargates: an alternative perspective on human relationships in space-time*, 1996).

Gyre and Gimble of Jaberwocky
as seen *Through the Looking Glass*

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
And the mome raths outgrabe.

Insights into the "rabbit hole": With respect to the understandings of the "rabbit hole" of mathematician Lewis Carroll (and explorations of its [symbolism](#)), the following studies offer further insights:

- [Marc Edmund Jones](#) (*Down the Rabbit-hole: Studies in Alice I*), who notably points out how "Alice" denotes truth
- numerous web references to "*how deep the rabbit hole goes*", notably as related to the existential implications of the popular *Matrix* trilogy which is replete with references to Lewis Carroll's rabbit hole
- mathematical and logical commentaries by mathematician [Martin Gardner](#) (*The Annotated Alice: "Alice's Adventures in Wonderland" AND "Through the Looking Glass"*, 2001)
- a range of web-based [interpretive essays](#) from a variety of perspectives, including: Pinhas Ben-Zvi (*Lewis Carroll and the Search for Non-Being, The Philosopher: the Journal of the Philosophical Society of England*, LXXXX, 1, Spring 2002)

Beyond the matrix: The cognitive implications of the typical spreadsheet-style matrix have been discussed at various points in [Dimension 1](#), [Dimension 2](#) and [Dimension 3](#). Reference was made to the possibility of "folding" it into other forms, especially the torus (*Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics: transforming a matrix classification onto intertwined tori*, 2006). The intertwining of tori, and its representation, is discussed in [Annex C](#). It offers one fruitful way of exploring "beyond" the matrix (*Beyond the Matrix: becoming other wise*, 2007).

Also of relevance mathematically to shifting out of the cognitive plane of such a matrix is the [sudoku](#)-like theme of "magic squares" and its variants, especially in the light of the higher order significance originally attached to them in Chinese culture (*9-fold Magic Square Pattern of Tao Te Ching Insights*, 2006; *9-fold Higher Order Patterning of Tao Te Ching Insights: possibilities in the mathematics of magic squares, cubes and hypercubes*, 2003). The higher dimensionality of the "magic" emerges from the effective "folding up" of the matrix through such a cognitive "pattern which connects". The experience of sudoku addicts is indicative of the attractive power of the "rabbit hole".

Sexuality: Given the challenge of sexuality identified in [Dimension 1](#), Silvia Gherardi (*Gender, Symbolism and Organizational Cultures*, 1995) fruitfully argues:

Today, a postmodern reading can be made of *Alice's Adventures in Wonderland*, for it is not difficult to identify in the Victorian text many of the problematics raised by the critique of modernity: the problem of subjectivity, the weakness of reason, the discourse-based nature of social relations, irony as a destabilizing phenomenon. (p. 97)

Gherardi uses the text as a metaphor for a schizogenic condition, namely the dual presence in organizations and the difficult construction of gender identity at work. She refers to a study by William Empson (*Some Versions of Pastoral*, 1935) to the effect that:

Empson (1935) points out the symbolic completeness of Alice's experience: she is father when she falls down the rabbit hole; she becomes the foetus when she finds herself at the bottom; but the foetus can be born only becoming a mother and by secreting its own amniotic fluid. The whole gamut of sex is therefore enclosed in a girl, in a being with a concealed sex. In some way, identity and sexuality closely interweave in this initiation to the adult world. But it is a world which speaks with a confused voice, or better, it speaks with several voices at once: the language of the unconscious is play, transgression and creativity, but also madness. Alice's language displays the typical patterns of schizophrenia -- which manifests itself in "nonsense", in puns that break words down and restructure them into speech fraught with anxiety, anguish and aggression. (p. 96-7)

The theme here -- in Dimension 4 -- is one of **engaging with globality through self-reflexively reframing the categories of the world as one's own creative responsibility**, namely "knowing the world as thyself" (*Being the Universe -- a metaphoric frontier: co-existent immanence of evolutionary phases*, 1999). However, to that extent, any problems of the world then arise from "fucking with the world" -- to be understood as cognitively "fucking with oneself" -- using the euphemisms of the "Masters of the Universe" (of [Dimension 1](#)). This is a curious perversion of the Biblical understanding of "knowing" another ("*Human Intercourse*": "*Intercourse with Nature*" and "*Intercourse with the Other*", 2007; *Universal Declaration of Responsibilities of Human Intercourse*, 2007; Mark Israel, *Biblical sense of "to know"*). It is consistent with the sense in which the human attitude towards the world has characteristics of a rapist.

Encouraging paradoxical strategies

Ignoring population overshoot: Given the **probable inability to "fix" the global system with the mindset currently brought to bear upon the challenge**, and given the **degree of denial regarding the "root problem" of overpopulation engendering the current complex of crises**, other approaches merit exploration (*Institutionalized Shunning of Overpopulation Challenge: incommunicability of fundamentally inconvenient truth*, 2008). It would appear to be the case that any application of "rational thinking" through the current disciplinary and institutional frameworks is as liable to engender further problems as not (cf *Geo-engineering Oversight Agency for Thermal Stabilization (GOATS)* 2008).

Humour (as discussed [below](#)), together with paradox, may be the only viable means of responding effectively both to the degree of complexity and to the relevance of what is not stated -- what is "under the table" -- whether because it offends convention, powerful interest groups or can be framed as a challenge to "national security". The range of these issues has been reviewed elsewhere (*Global Strategic Implications of the "Unsaid": from myth-making towards a "wisdom society"*, 2003; *Varieties of the "Unsaid" in sustaining psycho-social community*, 2003).

"Sex" as a response to unresolvable dilemmas of communication?: Given the primary commitment of populations to "sex" and

reproduction, and the respect in which this is consequently held by politicians, the most fruitful strategy is to go with that flow, given the collective learning it will engender -- sooner rather than later. Such paradoxical strategies are increasingly recognized as meaningful (*Liberating Provocations: use of negative and paradoxical strategies*, 2005).

Rather than seeking to "push the river", there is therefore a case for "guiding the canoe". **Rather than endeavouring to mitigate the ever-increasing problems directly exacerbated by overpopulation, there is a case for celebrating population increase despite arguments to the contrary** (*Begetting: challenges and responsibilities of overpopulation*, 2007; *Celebrating the Value of Deadly Problems Worldwide: planetary salvation in an era of inept global governance?* 2008). Rather than regretting the "irrational" faith-inspired policies in favour of unchecked population increase, there is a case for promoting such an increase by all means -- in accord with those faiths and in full expectation of their support.

The process might even be extended to reinforcing the current patterns of denial regarding sexual behaviour, namely the condemnation of sexual licence (pornography, etc), as requested by some faiths, forcing such questionable processes further underground.

However, in effectively promoting "more sex", in what follows **the concern is the nature of the learning which "sex" enables**. The notion of "more" therefore includes dimensions that are not necessarily immediately comprehensible or susceptible to conventional modes of articulation -- or which have not been appropriately integrated into other modes of engaging with globality.

In systemic terms, with respect to the subjectivity and objectivity of the sexual dimension, it is appropriate to note the extent to which two seemingly unrelated factors arise via sex hormones **estrogens** (in females) and **testosterone** (secreted in the testes of males and the ovaries of females):

- the degree to which levels of testosterone have been demonstrated to be associated with the subjective drivers of the irresponsible risk-taking leading to the collapse of the financial system in 2008 (J. M. Coates and J. Herbert, *Endogenous steroids and financial risk taking on a London trading floor*, PNAS, April 2008)
- the dramatic increase in infertility resulting from the "scrambling" of testosterone by estrogens (Deborah Cadbury, *The Feminization of Nature*, 1997)

Arguably, human failure to encompass sexuality appropriately is inducing corrective measures in the global system at the hormonal level. In that sense, **it is the interlocking metabolic pathways which "draw" the "map" underlying a potential global system map** -- seemingly deliberately designed out of collective consciousness (John Ralston Saul, *The Unconscious Civilization*, 1995). **Gaia** as the governor of last resort? **Systemic ignorance is not a valid plea before Gaia's cybernetic law !**

Acceding to "globality" through cognitive association of identity, goal, and God? Especially in a faith-based context of governance (or a secular view of the market as "god"), as mentioned in **Dimension 1**, there is a curious association between the dynamics of action impelled towards the "goal" of any undertaking (notably through controlling movement of a metaphoric "ball") and the transmutation of identity it enables in relation to some sense of "globality" (as partially discussed in *Understanding Sustainable Dialogue: the Secret within Bucky's Ball?* 1996).

This engagement would seem to offer a curious echo, for goal-seeking males, of a sperm's quest for the female egg as a fundamental attractor -- and whatever this is sensed to imply (through the process of consummation) for a transformation of identity into a "more global" form. It is the fundamental operation of this generic attractor that is of concern here -- through the exploration of the psycho-sexual dynamic.

Interfacing confidently between locality and globality

In the extraordinary current financial and economic crisis, frequent reference is made to the intangible subtleties of trust and confidence and their fundamental relationship to the viability of any financial system. It is indeed trust and confidence that have been systematically betrayed through the complicity of various authorities in sustaining an illusory bubble of confidence -- now collapsed. Those complicit in this problematic approach base their own confidence in "fixing" it on the insights of **John Maynard Keynes**, notably his study of *The General Theory of Employment, Interest and Money* (1936).

Some commentators have however drawn attention to the less well-known references by Keynes to the challenge of "animal spirits". As noted, for example, by Robert Shiller (*Animal Spirits Depend on Trust*, *Wall Street Journal*, 27 January 2009; George A. Akerlof and Robert J. Shiller, *Animal Spirits: how human psychology drives the economy, and why it matters for global capitalism*, 2008), these refer to the manner in which investment demand is driven by the whims or "animal spirits" of investors. According to Shiller, the term:

... is related to consumer or business confidence, but it means more than that. It refers also to the sense of trust we have in each other, our sense of fairness in economic dealings, and our sense of the extent of corruption and bad faith. When animal spirits are on ebb, consumers do not want to spend and businesses do not want to make capital expenditures or hire people. Animal spirits offer an explanation for why we get into recessions in the first place -- for why the economy fluctuates as it does. It also gives some hints regarding what we need to do now to get out of the current crisis. A critical aspect of animal spirits is trust, an emotional state that dismisses doubts about others.

This reflects a conventional global perspective. To the extent that these animalistic tendencies are however centred on the individual -- despite highlighting non-material intangibles -- they may be understood as vital to any personal sense of "locality" in contrast to the socio-economic "globality" with which the individual is expected to engage. Such **animal spirits may then be understood as the essence of the "locality" with which any rational approach to "globality" is now challenged**.

This contrast highlights the distinction between "here" and "there" -- recognizing that governance of any kind is typically only to be understood in terms of "there". **Hence the challenging cognitive relationship between "local" and "global" identity of any kind. The question "here" is how the relationship with "there" may be established and sustained**.

Transcending categories characteristic of in-the-box thinking

A key question worth asking is whether the perceived problems of the world -- to the extent that they are recognized -- are a consequence of the mindset currently brought to bear upon them. **Is there a way in which the conventional strategic approach of the international community and its institutions -- aided and abetted by think tanks -- has framed a form of "project logic" that has proven to be "not fit for purpose".** (*"Tank-thoughts" from "Think-tanks": metaphors constraining development of global governance*, 2003)

It could be argued that just as such planning logic has resulted in the evident problems for the individual "here" -- urban sprawl, soulless grid layouts in urban centres, traffic gridlock, and the like -- it is resulting in analogous problems "there" in responding to the world problematique. And just as more organic planning "alternatives" are viewed as abhorrent and to be deprecated in urban environments, so they are designed out of consideration in the formulation of global strategic responses to that problematique. Hence the merit of considering the "circlets" interlocked in "crowns", as discussed in [Dimension 2](#) and [Dimension 3](#)

Is it the case that supposedly neatly fixed categories exemplify the challenges of in-the-box thinking? Are there other ways of thinking about categories and engaging with them, as implied by [process philosophy](#) (see also Magoroh Maruyama, *Mindscapes, social patterns and future development of scientific theory types*. *Cybernetica*, 1980; *Systems of Categories Distinguishing Cultural Biases*, 1993)?

The approach taken here is to **move beyond the conventional assumptions that categories are somehow "given" through being appropriately "authorized" by authorities and thereby "set in stone"** -- until "they" ("there") choose to modify them after some lengthy process essential to their own purposes and dynamics. Categories that merit reflection in this light are, for example, "work", "job", "unemployment", "money", as notably promoted by the economists so complicit in the current financial crisis and the failure to explore alternatives. ---, etc (see IHT article of 28th Jan***)

Possibilities: A number of such possibilities have been reviewed in [Dimension 2](#) and [Dimension 3](#). Key to these are a much stronger emphasis on:

- **configuration** of categories, given the challenges of fragmentation and integration of knowledge and the initiatives dependent on such patterning *** polyhedra
- **dynamics** of evolving relationships between categories, especially the need to reconfigure in the light of new understanding
- the implication of **higher dimensionality**, on the assumption that conventional representations are distorted projections of what is best understood in three dimensions or more (***) mandala as 2D project of 3D circlet), venn diagrams), especially in the light of the ready and unquestioned use of such complexity to comprehend the complexity of matter
- benefitting from the emergent **visualization and representational technology** that enables other ways of engaging with complexity, recognizing the possibility that (young) interactive gamers may have better intuitive sense of their personal relationship to the "virtual reality" ("here") in which they are increasingly called upon to "live and move and have their being" than do those relying on conventional models of processes about entities in a "real world" ("there")
- recognizing the extent to which the creative **cognitive processes anchored in new technology** may be effectively defining ("remembering") templates for subtler cognitive processes -- offering a way of transcending any tendency to be condemned to repeat unremembered history (Santayana***) Romanyshyn ***

Engendering categories: This dynamic framework is used here as the context through which categories are given birth, consumed and destroyed. This recalls the mythical role attributed to deities -- in a process of (planetary) world-making and (solar) system-building that echoes the orbital symbolism of circlets and crowns discussed in [Dimension 2](#) and [Dimension 3](#). This implies a degree of dematerialization and virtualization -- both **"delinking" from conventional, objective detachment from reality represented by these categories, as well as radically engaging with that reality as thereby engendered.** (*Dematerialization and Virtualization comparison of nuclear fusion and cognitive fusion*, 2006)

The categories so engendered might then be understood, for example, as a pattern of tones forming a harmony -- as notes that may be played and variously orchestrated by an individual -- eliciting or echoing the "pattern which connects" (Darren Stanley, *Comparative Dynamics: Healthy Collectivities and the Pattern Which Connects*, *Complicity: An International Journal of Complexity and Education*, 3, 2006, 1, pp 73–82)

The complexities and paradoxes of the challenges of engaging meaningfully with globality are only too evident in the arguments of the "simpler" dimensions ([Dimension 1](#), [Dimension 2](#), [Dimension 3](#)). They are even more evident in what follows. Extensive, discursive explanations are indeed widely available. But they variously inhibit such engagement -- as does this exploration.

Social construction of reality: The approach in what follows is partially inspired by explorations of a number of authors regarding the social construction of reality (Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: a treatise in the sociology of knowledge*, 1967), notably Paul Watzlawick (*The Situation Is Hopeless, but Not Serious: the pursuit of unhappiness*, 1993; *Invented Reality: how do we know what we believe we know?* 1984; *How Real Is Real?* 1977).

It is especially influenced by that associated with the focus on [enactivism](#).by such as Gregory Bateson, Humberto Maturana, Francisco Varela, and Eleanor Rosch.

Possibilities have been discussed in *Creative Cognitive Engagement: beyond the limitations of descriptive patterning* (2006) -- as an annex to *Governance through Patterning Language: creative cognitive engagement contrasted with abdication of responsibility* (2006).

Cognitive interfacing with otherness: engaging with abundance

Abundance: As discussed elsewhere (*Dysfunctional disengagement from abundance*, 2008), in an epoch strategically focused on the scarcity of resources, the cognitive challenges and delights of engaging with abundance have been highlighted by a number of authors:

- Steven M. Rosen, *Topologies of the Flesh: a multidimensional exploration of the lifeworld*, 2006; *Dimensions of Apeiron: a topological phenomenology of space, time, and individuation*, 2004;

- Paul Feyerabend, *Conquest of Abundance: a tale of abstraction versus the richness of being*, 1999;
- Sallie McFague, *Life Abundant: rethinking theology and economy for a planet in peril*, 2000;
- David Abram, *The Spell of the Sensuous: perception and language in a more-than-human world*, 1997.

Rosen, for example, highlights the manner in which **the richness of psychosocial engagement with the world has been completely undermined by formal discourse** -- an "eclipse of the lifeworld" in his terms. Ironically, in a period of sensitivity to the challenges of "resources" and "energy", this view is echoed by other authors with respect to a lost sense of "abundance". Abram observes that the **concealment of the sensuous realm** of pre-Renaissance experience was less lucidly focused than the mode of awareness that succeeded it. However, the decisive separation of subject and object did indeed serve the interest of creating sharper understanding, a greater capacity for reflection and intellectual achievement; in that way it helped to fulfill humankind's potential.

These arguments, as made by a range of authors, have perhaps been most succinctly summarized by Jennifer Gidley (*The Evolution of Consciousness as a Planetary Imperative: an integration of integral views*. *Integral Review*, 5, 2007), notably to the effect that:

However, the growing awareness of a potential planetary crisis has highlighted the significance of finding new ways of thinking, if humankind is to move through our current complex challenges. This critical imperative appears to be mobilizing researchers from a wide range of disciplines to broaden the notion of evolution of consciousness beyond its biological bounds.

Non-visual cognition: As the primary source of metaphor in any strategic discussion, potentially richer feature are the **modes of cognition associated with senses other than vision**, as discussed elsewhere (*Strategic Challenge of Polysensorial Knowledge: bringing the "elephant" into "focus"*, 2008).

Future possibilities for individuals have been speculatively explored in the light of the urban jargon term "grokking" (*Authentic Grokking: emergence of Homo conjugens*, 2003). In its original sense it highlighted a cognitive mode of "tasting" the world, a metaphor subsequently promoted by Ken Wilber (*One Taste*, 1999). Arguably the sensual integration of "grokking" points to the mode of cognition appropriate to the abundance of more complex forms of sustainability.

Radical questioning: delinking from detachment

This argument is developed separately in *Declaration of Universal Independence: Delinking from detachment through radical questioning* with respect to the following themes:

- "Re-cognition" of reality
- Radical knowing
- Radical questioning: delinking from detachment
- Cognitive "revolution"
- Re-appropriation of cognitive property
- Withholding "cognitive accreditation"
- Sustainability through cognitive self-reliance
- Re-signing for re-cognition
- Re-engaging with the "universe"

It is argued there that perhaps the most fruitful outcome of the problematic governance of the Bush regime in the USA has been the legitimation, by the world's greatest superpower, of a radical approach to the "re-cognition" of reality. The enactivist approach to "laying down a path" one is walking (as articulated by Varela) may be usefully contrasted with a common practice of "lying about the path" -- whether to oneself or to others -- and exemplified by the pronouncements of world leaders with respect to WMD in Iraq.

Both may be contrasted with a distinction made by the Bush regime between "faith-based" and "reality-based" decision-making at the highest level, as noted in a much-cited article by Ron Suskind (*Without a Doubt*, *The New York Times*, In The Magazine, 17 October 2004) regarding an exchange with an aide in the decision-making circle of President Bush:

The aide said that guys like me were "in what we call the reality-based community," which he defined as people who "believe that solutions emerge from your judicious study of discernible reality." I nodded and murmured something about enlightenment principles and empiricism. He cut me off. "**That's not the way the world really works anymore.**" he continued. "**We're an empire now, and when we act, we create our own reality. And while you're studying that reality -- judiciously, as you will -- we'll act again, creating other new realities, which you can study too, and that's how things will sort out. We're history's actors . . . and you, all of you, will be left to just study what we do.**"

It is quite possible that this is the core issue of the sustaining psychology required for sustainable development and sustainable patterns of consumption. The issue of who is now entitled to think of themselves as "we" is discussed below.

Engendering categories: self-constraining world-making and system building

World-making: It is within the above context that various authors have acknowledged the nature of "world-making", especially as a collective social process of creating a consensual reality. In addition to those named above in relation to the social construction of reality and enactivism, they include Nelson Goodman (*Ways of Worldmaking*, 1978) and the initiatives of intentional communities of many kinds (*Imaginal Education: game playing, science fiction, language, art and world-making*, 2003).

Gated-communities: This seemingly insubstantial process of world-making may be seen as notably taking "concrete" form in the "worlds" created by residential "gated communities", whether or not associated with intentional communities (sects). alternative belief systems, or

ethnic groups. Given the increasing security problems of many such "gated" institutions, these "worlds" may be seen to be characteristic of many institutionalized environments (universities, corporate complexes, research laboratories, universities, military bases, prisons, etc). To the extent that corresponding "gates" are employed (by means of passwords) to protect virtual communities and artificial worlds (*Second Life*, etc), such "world-making" is now widely evident (*Dynamically Gated Conceptual Communities: emergent patterns of isolation within knowledge society*, 2004). It may also be fruitful to see many global fora (conferences, etc) as exercises in enabling, for a period, a "world" for their participants -- possibly to be revisited periodically in the case of periodic events.

Virtual worlds: Of particular interest are those "virtual worlds" (whether open or closed) which individuals and groups are now themselves able to construct in cyberspace. These may incorporate features originally, or independently, associated with fictional *worldbuilding* and *fictional universes*. Also relevant to engendering categories are the many explorations of *constructed and artificial languages* -- consciously devised by an individual or group. There is an extensive literature on the possibilities and implications of engendering artificial societies (see *Journal of Artificial Societies and Social Simulation* published by the *SIMSOC Consortium*).

Personalized worlds: However, by engendering categories as described in the previous section, the individual may also be understood as empowered to create distinct "worlds" not dependent on others -- aggregating experience enabling them to be built as viable environments. These may correspond to distinct activities (different "parts" of a social and working life) possibly associated with different "personalities" evoked in those contexts using "others" (such as Barack Obama) as *dramatis personae* in one's own play. This is an extension of the recognized notion of "living in one's own world" by manifesting it in some form in cyberspace -- if only through preferred decor in a private virtual space. This process may extend to the *subpersonalities* recognized by *transpersonal psychology* -- each associated with its own "world".

System of worlds: The set of such worlds may be understood as forming a "circllet" (as explored in *Dimension 2*), even to be understood as a planetary system of "worlds", possibly composed of several such circllets or even a "universe". As "categories", the individual may then have a sense of how he or she has engendered this system, recognizing that it may not be felt to be centred on a single "star", but rather on a "binary star", or on other analogues to hypothesized astrophysical objects (*Towards an Astrophysics of the Knowledge Universe from astronautics to noonautics?* 2006). As with the distinction between the planetary "worlds", such systems may necessarily be understood as distant from other resources and contradictory perspectives -- from "cognitive anti-matter"?

Domes: In the light of the discussion of "cognitive crowns" in *Dimension 3*, there is an interesting possibility of borrowing insights from the architecture of geodesic domes, as envisaged for space colony construction (Gunnar Tibert, *Deployable Tensegrity Structures for Space Applications*, Stockholm, Royal Institute of Technology, Department of Mechanics, 2002). These might provide indications on how to construct cognitive analogues through appropriately interrelating categories (*Spherical Configuration of Categories -- to reflect systemic patterns of environmental checks and balances*, 1994; *Spherical Configuration of Interlocking Roundtables: internet enhancement of global self-organization through patterns of dialogue*, 1998).

Playfully engaging with globality through re-categorizing and re-classifying

The vital role of humour has been reviewed in *Humour and Play-Fullness: Essential integrative processes in governance, religion and transdisciplinarity* (2005). Its relevance here is argued in Annex A (*Engaging with Globality through Playful Re-categorizing*). Arguably **the global situation is now far too serious to rely in any way on the unimaginative, simplistic manipulation of those who are excessively skilled at just that** -- or even only that (as the extreme financial risk-taking has demonstrated in 2008).

Following the critical argument developed in *Dimension 1*, the explorations of *Dimension 2* (*Cognitive Circllets*) and *Dimension 3* (*Cognitive Crowns*) might appropriately be considered "playful" in their own right.

The argument in *Dimension 1* regarding *Symptoms of denial: gender and the underside of meetings* highlighted the use of sexual metaphor in conventional language relating to strategy and governance.

Exploring sexual metaphor further, in the spirit of "guiding the canoe", other exercises have been developed as an illustration of possibilities in the light of the dynamics associated with the 4th dimension. The approach is framed in *Annex A*. In *Annex B* these dynamics are "superficially" explicit although the significant cognitive processes are implicit. More complex cognitive "implications" are discussed in *Annex C* which provides a bridge to the possibility of *Annex D*. There the dynamics are associated implicitly with the cognitive process mapped by the form. The contents of the annexes are:

- Annex A: *Engaging with Globality through Playful Re-categorizing*
 - Humour
 - Playful examples
 - Logical vs Aesthetic correspondences
 - Meaningful connectivity
 - Surfaces and orifices
 - Consumption and consumerism
 - "Knowing" another
 - Courtship
 - *Kama Sutra*
- Annex B: *Global Governance via a Double-breasted Strange Attractor*
 - Strategic compass
 - Governor control
 - Global strategy and governance modelled by constraining local breast movement?
 - Double-breasted vs Single-breasted?
 - Tensional integrity of bubbles -- and their chirality?
 - Reconstructive "surgery": financial system vs breasts
 - Implications for design of a regulated financial system?
 - Alternation

- Globality, cosmology and birth
- As "above", so "below"?
- Annex C: Engaging with Globality through Dynamic Complexity
 - Multi-global system?
 - "Bailouts" as "Pornbroking"?
 - Intimations of fruitful intercourse?
 - Geometry and topology of thinking and valuing
 - "Globalizing" the matrix
 - Closest packing of spheres
 - Institutional "pantheons"
 - "Sexual relations" within "pantheons"?
 - Internalizing a "dodekathion" to inform the "dodecameral mind"
 - Communicating globality through paradoxical complementarity
 - Integrating "real" and "imaginary" through the plane of complexity
- Annex D: Intercourse with Globality through Enacting a Klein bottle
 - Klein bottle: enacting a cognitive process
 - "Distracting" aids to comprehension
 - Psychodynamics of sexual experience

Given the challenge of rendering the governance of a complex dynamic system comprehensible, sexual metaphors offer a valuable and accessible cognitive interface worldwide. The annexes can be understood as complementary explorations of the same process -- as explained in [Annex A](#).

Realistic unknowing, requisite humility and appropriate questioning

Uncertainty: Fundamental to this argument is the sense of playing with uncertainty. Ironically this may be seen as having been the essence of the operation of the financial markets -- especially as associated with the intimate dependency on trust, confidence and hope, whilst sustaining and exploiting a totally illusory belief system. But in engaging with globality, as explored here, this implies a more radical deployment of trust, confidence and hope -- in which the individual has more direct relationship to the risks associated with the viability of the understandings engendered and sustained.

Unknown: One characteristic of this is necessarily the appreciation of the "unknown", as extensively explored elsewhere (*Unknown Undoing: challenge of incomprehensibility of systemic neglect*, 2008; *The Future of Leadership: reframing the unknown*, 1994). This is related to the challenge of what cannot be said for whatever contextual reason (*Global Strategic Implications of the "Unsaid": from myth-making towards a "wisdom society"*, 2003). This may even extend to recognition of the merit of "unsaying", namely avoidance of overly-defined categories, notably in relation to any sense of personal identity (*Being What You Want: problematic kataphatic identity vs. potential of apophatic identity?* 2008).

In the spirit of this argument, "*Knowing thyself*" might be explored as "*No-ing thyself*". Indeed the case has been variously made for "*No Thyself*" (Jeanne Marie Laskas, *No Thyself: the tragedy of too much promise*, *The Washington Post*, 23 September 2007; Vithal C Nadkarni, *'No thyself' is the new age mantra*, *The Economic Times*, 30 Aug 2008; Tor Nørretrander, *No thyself*, *New Scientist*, 5 October 2002). It might indeed prove to be the route -- beyond obsessive dependence on vision -- to "eye-mortality" !

Surprise: Beyond the cognitive challenge of engaging with abundance, articulated by such as Feyerabend, Rosen and Abram (as mentioned [above](#)), the value of a more proactive approach to the unknown, future possibilities and surprises, is highlighted by the themes of authors such as:

- [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
- [Charles Handy](#). *The Age of Unreason*, 1990
- [Thomas Homer-Dixon](#). *The Upside of Down: catastrophe, creativity, and the renewal of civilization*, 2006
- [Donald N. Michael](#). *Learning to Plan-And Planning to Learn*, 1997
- [Paul Ormerod](#). *Why Most Things Fail: evolution, extinction and economics*, 2005 [[extracts](#)].
- [Nassim Nicholas Taleb](#). *The Black Swan: the impact of the highly improbable*, 2007 [[contents](#)]
- [John Ralston Saul](#). *The Unconscious Civilization*, 1995

Collectively these emphasize the wisdom of a more precautious cognitive mode, perhaps usefully characterized as humility -- in marked contrast to the *Arrogance of the "Masters of the Universe"* and their accomplices (as noted in [Dimension 1](#)). Any form of humility is typically absent from modes of cognition engendered by authority as a means of offering certainty -- except the humility expected of others faced with that authoritative mode of knowing.

Questions: Fundamental to the issues discussed above is the value of a more radical approach to "questions" and "answers", as suggested by studies such as the following:

- [Am I Question or Answer?](#) (2006)
- [Preliminary Netmap Studies of Databases on Questions, World Problems, Global Strategies, and Values](#) (2006)
- [Question Avoidance, Evasion, Aversion and Phobia: why we are unable to escape from traps](#) (2006)
- [Engaging with Questions of Higher Order: cognitive vigilance required for higher degrees of twistedness](#) (2004)
- [Functional Complementarity of Higher Order Questions: psycho-social sustainability modelled by coordinated movement](#) (2004)

notably in relation to the "cognitive catastrophes" through which any form of future crisis is likely to be apprehended:

- [Cognitive Feel for Cognitive Catastrophes: Question Conformality](#) (2006)
- [Conformality of 7 WH-questions to 7 Elementary Catastrophes: an exploration of potential psychosocial implications](#) (2006)

- [Interrelating Cognitive Catastrophes in a Grail-chalice Proto-model: implications of WH-questions for self-reflexivity and dialogue](#) (2006)

Questionable answers: In a time of crisis, the most vital question is whether the appropriate "questions" are being asked, especially given the tendency to focus on immediately accessible and comprehensible "answers" -- and the competitive process through which they are supplied and dubiously evaluated in the "answer economy" (cf [Development as Discontinuous Societal Learning: cyclic transformation of the global answer economy](#), 1982). As argued in [Dimension 1](#), it is the use of a "stimulus" package that is so reminiscent of use of "viagra" in response to the current financial crisis. The caution in this respect is provided by well-known phrases that have been variously paraphrased: *For every human problem there is a solution that is quick, simple, inexpensive -- and wrong.*

With the Middle East as test case for any understanding of globality, and the future adequacy of "human ingenuity":

- what vital questions are not being asked?
- what inappropriate assumptions are still being made?
- why are more appropriate questions not being asked?
- who has a vested interest in not asking them, and why?

The challenge is well expressed by Olivia Judson ([To expand knowledge, we must first admit ignorance](#), *The Guardian*, 26 February 2009):

Of all the limits on expanding our knowledge, unexamined, misplaced assumptions are the most insidious. Often, we don't even know that we have them: they are essentially invisible. Discovering them and investigating them takes curiosity, imagination, and the willingness to risk looking ridiculous. And that, perhaps, is one of the hardest tasks in science.

Should any answer be sought -- when "more sex" will call Gaia effectively into play? Or, as expressed by [James Lovelock](#), "[enjoy life while you can](#)" (*The Vanishing Face of Gaia: a final warning -- enjoy it while you can*, 2009). Again, **systemic ignorance is not a valid plea before Gaia's cybernetic law !**

Dimension 5?

Within the cognitive context of the complex dynamics of this "Dimension 4", any "Dimension 5" is then the imaginative challenge of a [Union of Imaginable Associations](#).

[Chris Lucas](#) (personal communication) argues that there may indeed be a case for 5 dimensions, since the "fractal" focus of the fourth does not include time specifically and it is in the dynamics of iterative feedback that problems escalate or get resolved -- escalating constructivism or escalating destructivism. He sees the blockage in this dimension as evidenced by the refusal to change outdated views by all involved -- especially the "laws" that protect all involved from any and all consequences of their actions. The current emphasis on "stakeholders" assumes that they all have fixed views. At best this is like assembling a photo album of static beliefs. The dynamics of personal development and changing views with knowledge and experience are just left out. In that sense the 5th dimension really becomes a 6th -- people need to accept the dynamics of personal change before any "reframing" can kick in. However this may depend on whether the "dynamics" of Dimension 4 are a **carrier** (wave) of cognition or whether they are understood as an **object** of cognition.

Where are insights to be found to enable the degree of subtle comprehension capable of sustaining appropriate engagement between locality and globality? ([In Quest of Mnemonic Catalysts -- for comprehension of complex psychosocial dynamics](#), 2007).

As noted in [Dimension 3](#), these are potentially to be found through the insights of mathematics and correspondences ([Potential Psychosocial Significance of Monstrous Moonshine: an exceptional form of symmetry as a Rosetta stone for cognitive frameworks](#), 2007; [Sustainability through the Dynamics of Strategic Dilemmas -- in the light of the coherence and visual form of the Mandelbrot set](#), 2005)

The problem in this connection is the degree to which mathematics as a discipline considers itself to be dissociated from the challenges of individual comprehension and remedial responses to psychosocial dynamics ([Dynamics of Symmetry Group Theorizing: comprehension of psycho-social implication](#), 2008; [And When the Bombing Stops? Territorial conflict as a challenge to mathematicians](#), 2000).

Is there indeed a possibility of exploiting the cognitive patterns associated with the application of mathematics and physics to technological challenges, as suggested by nuclear fusion or particle accelerators? ([Dematerialization and Virtualization comparison of nuclear fusion and cognitive fusion](#), 20005; [Enactivating a Cognitive Fusion Reactor Imaginal Transformation of Energy Resourcing \(ITER-8\)](#), 2006; [Cognitive Fusion through Myth and Symbol Making: archetypal dimensions](#), 2006; [Dynamic Exploration of Value Configurations: interrelating traditional cultural symbols through animation](#), 2008)



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Dimension 4: Knowing Thyself -- embodying engagement with otherness. Annex A: Engaging with Globality through Playful Re-categorizing Annex B: Global Governance via a Double-breasted Strange Attractor Annex C: Engaging with Globality through Complexity Dynamics Annex D: Intercourse with Globality through Enacting a Klein bottle. References. Introduction. Today the crown is shared by Private Equity (PE) and Hedge Funds. When you see the PE big shots selling shares to the public, you know the PE party is nearing its riotous end. And the Hedge Fund party is getting crowded, with too many lesser talented investors dragging average returns down - to levels similar to buying an index fund (but with massively bigger fees). - / - Annex A of Engaging with Globality through Knowing Thyself (2008), Dimension 4 of a four-fold exploration. Produced on the occasion of the "coronation" of Barack Obama (as

president of the country from which insightful leadership is expected in response to global problems) and of the "crowning experience" of the Davos World Economic Forum (for the instigators and observers of the global credit crisis and its consequences). Humour. Whereas the gods have been held to play -- even mischievously and irresponsibly -- with humanity, perhaps a more fruitful understanding is to play with the cognitive modes associated with the categories offering an interface with globality. These might indeed then be held to be represented by gods, if only for mnemonic purposes.