Engaging with the Inexplicable, the Incomprehensible and the Unexpected

Introduction

Many experiences are now readily labelled "inexplicable" or "incomprehensible", whether in personal life or in relations between groups and nations. Such a label, perhaps associated with a sense of "injustice", is notably used in the case of accidents, natural disasters, and extreme violence -- perhaps to be also labelled as both "tragic" and "traumatic", given the degree of suffering typically associated with such occurrences.

Every effort is of course made to provide "explanations" and to render the experience "comprehensible". Science and religion continue to compete in providing such frameworks -- notably with reference to statistical probability and to "Acts of God" (Acts of God vs Acts of al-Qaeda, 2005). The legal provisions of the insurance industry provide a degree of reconciliation between these. Some may have recourse to philosophy. All such efforts are typically unsatisfactory for those affected.

As a continuing challenge for the individual at least, the following is an exploration of possibilities of engaging with phenomena -- anomalies that are not adequately foreseen by conventional frameworks. These are also typically "unexpected" as explored by Karen A. Cerulo (Never Saw It Coming: cultural challenges to envisioning the worst, 2006). As with the disastrous flooding at La Faute-sur-Mer resulting from the Xynthia windstorm (2010), and failure to maintain dikes since Napoleonic times, such events are readily qualified as "unacceptable" as by the President of France. Furthermore they may also have "unexpected" consequences, as reviewed by Nassim Nicholas Taleb (The Black Swan: the impact of the highly improbable, 2007). Central to the following exploration is what might be described as the management of information and meaning -- beyond the constraints of convention.
Varieties of incomprehensibility and inexplicability

These may include threats held to be "unimaginable", "unthinkable" or "inconceivable" -- and therefore "unforeseeable". More realistically, they may also include recognized threats held to be "unmentionable" because of their unconventional systemic role (Varieties of the Unsaid -- in sustaining psycho-social community, 2003).

Individuals "running amok": Much is made of individuals acting unexpectedly in shooting and killing many of their acquaintances. Examples include the many school shootings. At the time of writing, the UK is digesting the behaviour of Derrick Bird in killing 12 people of his acquaintance. The trial has started in the USA of Nidal Malik Hasan for killing 13 colleagues on the Fort Hood military base in 2009.

Suicide bombers: The conventions of military intervention have been fundamentally challenged by the willingness of some to blow themselves up -- primarily in response to military targets, but extending (deliberately or inadvertently) to innocent bystanders.

"Collateral damage": The nature of military activity now frequently results in the killing of civilians -- exemplified in Afghanistan by the International Security Assistance Force (ISAF) attacks on wedding parties. This pattern extends to deaths by "friendly fire". It remains a matter of hearsay as to how many innocents are killed (or wounded) as "suspected" insurgents. Clearly the experience of such events, especially by relatives, is typically held to be totally incomprehensible and inexplicable -- and completely unjust.

Massacres: There are many tragic examples of massacres of particular groups (List of events named massacres). Dan Magurshak (The "Incomprehensibility" of the Holocaust: tightening some loose usage, 1990; reprinted from Judaism, 29, 2, Spring 1980, pp. 233-42) notes that some well-informed scholars remind researchers that, as an event that demands serious investigation, the Holocaust may be nonetheless, uniquely incomprehensible. It means that even after ideally exhaustive historical, psychological, and sociological analyses, the researchers would still have failed to penetrate the essence of this event. Magurshak examines this incomprehensibility to show in what legitimate sense the Holocaust may indeed be considered incomprehensible.

Use of weapons of mass destruction: Thousands of innocents are killed or wounded by such weapons. Following the bombing of Hiroshima and Nagasaki, and the fire bombing of various cities, such destruction has now been framed as normal -- however incomprehensible it may be experienced by many and however carefully they may be distinguished from "unjustified", reprehensible massacres (Destructive Weapons of Mass Destruction vs Destructive Weapons of Mass Destruction, 2003). Much was made at the time of the strategies involving the "unthinkable", as articulated by Herman Kahn (Thinking About the Unthinkable, 1962).

Experimentation on humans: Many have suffered from the consequences of experiments on humans with respect to new weapons (radioactive, biochemical), the testing of pharmaceutical treatments, or the development of methods of interrogation (Physicians for Human Rights, Evidence of Human Subject Research and Experimentation in the "Enhanced Interrogation Program", 2010).

Industrial accidents: There are numerous examples of the deaths or maiming of individuals in an industrial or mining context: coal mines, oil rigs, factory explosions (List of industrial disasters). The irresponsibility of those who might have ensured the avoidance of such accidents is considered incomprehensible, together with those complicit in any problematic aftermath. Comparisons have been made between the BP Deepwater Horizon oil spill and the Bhopal disaster (United Carbide/Dow Chemical).

Vehicle accidents: Aviation accidents often give rise to formal explanations which are considered inadequate by those whose relatives died. On a smaller scale, but more frequently, automobile accidents engender similar perplexity.

Device operation: In a society increasingly dependent on electronic and other devices, their operation may be experienced as incomprehensible and inexplicable. Obvious examples include communication devices, computers, ticket machines and VCRs, with their increasing implications for the financial and administrative operations vital to daily life.

Domestic violence: The incidence of such violence, its inexplicability, and the injustice of being unable to escape it, all give rise to a sense of incomprehensibility. Conventional explanations may of course be offered (poverty, stress, substance abuse), although these are typically experienced as failing to go to the heart of the matter.

Public misbehaviour and violence: Considered incomprehensible by many, this includes binge drinking, date rape, mugging and the like.

Paranormal: Many cite paranormal experiences and offer anecdotal accounts of them. Whatever the reality of such inexplicable experiences in the moment, these are typically labelled by convention as hallucinations -- despite many years of research on their possible nature. This is not for a moment to minimize the actual experience of haunted houses, bogeymen or "things that go bump in the night" -- of notable significance in many animist cultures where the appeasement of the mysterious is carefully cultivated.

Attitudinal conversion: There are several examples of distinct experiences which may be considered inexplicable by external observers. These include: passionate attraction (or antipathy), falling in love, religious conversion, being born again (Varieties of Rebirth: distinguishing ways of being "born again", 2004). These are of course carefully disassociated by many believers from the "paranormal".

Lifestyle preferences and preoccupations: Choices in these cases are readily perceived as "incomprehensible" by others. Extreme examples include abandonment of world goods in intentional communities (monasteries, ashrams, etc), body piercing, cannibalism,
animal sacrifice, homelessness by choice.

Sexual preferences: The sexual preferences of others are readily declared to be incomprehensible, whether in preferences for sexual intercourse, sexual gameplaying (bondage, discipline, sado-masochism), homosexuality or transexualism. For example, most Czechs were found to consider homosexuality incomprehensible (Dominik Lukeš, Czech views on homosexuality, Boheminica.com, 21 December 2005). However the the language of homosexuals was itself considered to be 'incomprehensible to outsiders' (Don Kulick, Gay and Lesbian Language, Annual Review of Anthropology, 29, 2000, pp. 243-285).

UFOs and extraterrestrials: As with the paranormal, these are held to be otherwise inexplicable by those who experience them -- again, despite many reports on the misinterpretation of experiences of natural phenomena. The nature of any encounter may be inherently incomprehensible (Communicating with Aliens: the psychological dimension of dialogue, 2000; Self-reflective Embodiment of Transdisciplinary Integration (SETI): the universal criterion of species maturity? 2008). Other than the current challenges of "alien" immigration and problematic multiculturalism, "extraterrestrial" suggests valuable metaphors for the challenges of communication of those alienated within modern societies, especially across the generations.

Extremism: There are many examples of individual or collective extreme behaviour, considered incomprehensible within conventional frameworks, even if they only manifest occasionally (Norms in the Global Struggle against Extremism, 2005). Dramatically, as was so recently evident, this may include extreme risk-taking (Extreme Financial Risk-taking as Extremism, 2009).

Obsession: The pursuit of many individual interests, especially when obsessively pursued, may be considered incomprehensible by others who may well see them as trivial, if not deluded. Such interests can range from specialized collections, through cultivation of particular plants or animals, to interest in certain games or sexual proclivities. They may include a lifelong preoccupation with an extremely obscure field of study.

Scepticism: For all the above examples there are indeed conventional frameworks of explanation. The following exploration focuses on the sense of inadequacy and superficiality of those frameworks -- for those who are in some way directly engaged with these experiences, namely with "coming to terms" with them. Is condemnation and commitment to elimination an adequate response -- especially when "the other" may frame things in a similar manner with regard to one's own framework?

Curiously scepticism with regard to proposed explanations of the purportedly incomprehensible may itself be held to be incomprehensible. This is especially the case with those who subscribe to a belief system defined to be unquestionably coherent, as with many religions and science itself (as upheld by the Committee for Skeptical Inquiry). Any expression of doubt with regard to that coherence may even be subject to the severest sanction -- as in the treatment of heretics and unbelievers. This is a pattern not unknown amongst scientists as made so dramatically evident with respect to the "scientific consensus" regarding climate change.

Incomprehensibility and inexplicability in the wild

The time is long past when a high proportion of the population had an awareness of wild animals and the dangers potentially associated with them. Nature having been "subdued", "conquered" and "domesticated" -- possibly in the light of interpretation of religious injunctions -- any notions of "wild" are typically restricted to adventure movies. Pale samples may be offered on heavily chaperoned safari trips covered by appropriate insurance. Similarly engagement with "wild animals" may be offered in zoos and circuses -- with suitable protection. Exceptionally, media coverage may be given to extremists who engage with "the wild" in reality -- perhaps to survivalists and commandos.

Undomesticated animals are now readily framed either as to be legitimately exploited as food (fish, whales, etc), as pests (rats, snakes, etc), or as a potential danger to farmers (wolves, bears, etc). In the latter case, as a threat to livelihoods and lives, it is typically considered appropriate to exterminate them -- even framing them as "evil". Lions and tigers are readily seen in this light by villagers obliged to share their environment with such wildlife.

The "wilderness" itself may be framed as problematic -- awaiting development and domestication. The experiential challenge of the wilderness, appreciated in many accounts, is typically now considered an eccentric indulgence, irrelevant to the necessary progress of humanity. A key feature of that experience might be associated with its unpredictability, the need for vigilance, and the challenges of survival. Potentially dangerous encounters with wildlife, even life-threatening, held to be intrinsic to that experience are valued as such.

The challenges of wildlife and a wilderness environment involve an engagement with incomprehensibility and inexplicability -- at least in conventional terms. Another mode of cognitive and behavioural engagement is held to be appropriate by those more familiar with such situations. This contrasts with the attitude of those who seek such encounters heavily armed or otherwise protected -- then able to cultivate an unthreatened detachment, typically as tourists. It contrasts with policies of eliminating any "leadership" amongst herd or pack animals -- "taking them out" in order to ensure the pacification of the remainder. This policy is strangely echoed in modern policies of targeted assassination of the leadership of opposing political groups.

Who now has the capacity to engage with wild animals in the wild -- despite extolling the merits of that possibility in movies (Dances with Wolves, 1990)? What attitudes are people obliged to develop in responding to potentially dangerous snakes, scorpions, spiders and other animals, as in Australia? What attitudes are required in dealing with rats and cockroaches typical of the conditions of many urban environments -- especially when such pests cannot be eliminated?

Given the dependency of humanity on biodiversity, what is the nature of the existential challenge associated with acceptance of wild animals and their unpredictable behaviours in comparison with that associated with direct exploitation of domesticated species (cattle, sheep, etc)? Curiously huge efforts are made by biologists to explain species as though this would alleviate, if not eliminate, the incomprehensibility and inexplicability of their behaviour. Such explanations may be sufficient for academic papers, or for the museum collections of stuffed animals (or pinned insects) to which people are exposed in order to acquire the satisfaction of having "seen a
dodo”. But such accounts and encounters have little to do with the experience of animals in the wild, in their own environments -- and perhaps at night or under conditions in which they have a “competitive advantage”.

Is it any wonder that every effort is made to “tame” nature, effectively to “de-nature” it, to eliminate the instinctual sense of threat associated with the incomprehensibility and inexplicability of those conditions?

**Incomprehensibility and inexplicability in urban environments**

There is a supreme irony to the fact that, having supposedly tamed nature, many dwelling in urban environments now experience them as a "jungle" and so label them. They can be highly dangerous places with "no go" zones, even for the forces of law and order. The civilizational and developmental models have somehow engendered a regression both from the acclaimed models of industrial civilization to a "third world" social condition and, beyond that, to a form of "wilderness". It is of course from a wilderness that humanity is held to have emerged.

It is of course the case that many urban environments -- as identified by their architecture, traffic rules, administrative procedures, consumption patterns, and the like -- lend themselves readily to comprehension and explanation. They are in principle totally comprehensible and explicable -- and may so figure in educational programs and documentaries. The fact of the matter is that this comprehensibility is associated with an inexplicable degree of incomprehensibility and existential challenge. Many, especially the vulnerable, live in daily fear of exposure to some degree of violence -- possibly life-threatening. More ironic is the fact that fictional explorations of such violence are a preferred (if not the primary) content of entertainment -- whether or not the children have gone to bed.

It might be said that, as the wilderness has been progressively domesticated, humanity has engendered the existential challenge of nature within the supposedly safe urban environments that have been created. Whereas the skills of engaging with wild animals on their own terms have been effectively lost, survival skills in the urban jungle have been developed. They are a requirement for personal survival. It is no longer appropriate to assume that the clothing or behaviour of those encountered are a comprehensible indicator of their intentions. They may indeed switch into some incomprehensible alternative mode -- inexplicably. Much is made of various forms of "rage": road rage, air rage, wrap rage, and computer rage. Arising from stress, other manifestations are to be expected.

Even more ironical is the extent to which the behavioural patterns of animals in the wild -- as understood by humans -- are now projected onto humans and human groups. "Tigers", "wolves", "snakes", "worms", and the like, are all to be found -- whether admired, feared or deprecated. Urban environments are "conserving" the endangered behaviours of the endangered species of the wild -- as an unconscious response to the need for biodiversity?

**Challenging incomprehensibility of "terrorist violence"**

Much is made of the incomprehensibility of terrorist violence. How is it possible to explain or justify suicide bombing? How to recognize the space from which people make such radical decisions to annihilate themselves as a means of annihilating others? There is nothing comparable in conventional frameworks. These are typically challenged to recognize the capacity of the individual to act in such a radical manner -- possibly even calling into question that framework and its existential significance.

And yet the development and use of weapons of mass destruction is a priority concern for those who find such action by individuals inexplicable. The decision to use such weapons is considered to be a comprehensible and justifiable action, by whomever it is taken. Expressions of "regret" at such necessity are of course comprehensible. It does not constitute an existential challenge of the same order as suicide bombing -- however much praying for divine guidance may precede the decision. Individual heroism in the line of fire -- to the point of personal sacrifice -- is awarded the highest recognition by military and civilian authorities. Such heroism on the part of enemy forces is deprecated as despicable, misguided, and incomprehensible -- if not simply evil. The heroism of the "good guys" is extolled to higher degree according to the number of "bad guys" killed by the hero -- irrespective of the proportion that were only suspected to be "bad guys" and of the collateral damage associated with the actions framed as heroic. Curiously the number of supposedly "bad guys" killed by such heroes is never mentioned when it becomes necessary to honour their own deaths (Honour Essential to Psycho-social Integrity: challenge of dishonourable leadership to the nameless, 2005).

It remains ironic that many countries which are vigorous in the condemnation of "terrorism" were founded as the result of the actions of groups labelled within conventional frameworks as "terrorists". This notably includes the USA and Israel -- as well as many more recently independent countries. The leaders of terrorist groups have often morphed into leaders of the country on achieving its independence. Nelson Mandela offers a striking example, as does Robert Mugabe. When has a "freedom fighter", naturally comprehensible, avoided the label of "terrorist" and its inexplicability?

"Evil" as necessarily incomprehensible and inexplicable

Following the formal affirmation by Barack Obama as the most powerful man on the planet: *For make no mistake: Evil does exist in the world* (Nobel Peace Prize Acceptance speech, 10 December 2009) , recognition must necessarily be given to this phenomenon. Perhaps even more curious is the fact that increasing proportions of the voting population of the USA subscribe to claims that Obama himself is the Antichrist (Lisa Miller, *Is Obama the Antichrist?*, Newsweek, 15 November 2008; Allen, Nick, Quarter of Republicans think Barack Obama is 'the Antichrist'. Daily Telegraph, 25 March 2010).

Curiously the nature of evil has subsequently been highlighted by the *Financial Times* in an extensive review of four recent studies (*Julian Baggini, The Faces of Evil, FT, 5-6 June 2010*). As the reviewer notes: *Perhaps this resurgence of interest is inevitable, for even though evil as an idea may have been out of fashion, as a reality it has never gone away. Attempts to do without the word in the face of genocide, torture and flagrant disregard for life, collapse into euphemistic absurdity…. One lesson is that we should not be seduced by*
the illusion that we can eliminate evil. As is so often the case, Svenden [A Philosophy of Evil, 2010] and Todorov [Memory as a Remedy for Evil, 2010] are in wise agreement, cautioning that catastrophic results follow when people try to take on this purifying role. However, of relevance to the argument here is the questionable conclusion that the refusal to call terrorism evil makes sense, because the danger of labelling it as such is that it can make the comprehensible look incomprehensible [Terry Eagleton, On Evil, 2010].

It is noteworthy that, aside from religion, in court cases the accused may be formally declared to be "evil" when passing judgement. Such recognition is of course in accordance with the long tradition of conventional responses to witches, sorcery and black magic and the incomprehensible matters with which they deal, including "evil spirits". It is appropriate to note the formal preoccupation of various religions with exorcism -- however problematic the explanation in scientific terms.

Post 9/11, Wendell Bell (All about Evil, World Future Society, 2002) notes:

In all sincerity, we Americans view our own recent aggressions as justifiable, perfectly understandable, and rational acts designed to destroy evil. But in our efforts to destroy members of Al Qaeda and the Taliban regime in Afghanistan, we also killed and injured civilians, demolished homes and places of work and worship, and created still more innocent victims. "Regrettable collateral damage," we said.

And what of Osama bin Laden, his Al Qaeda followers, and other violence-prone Islamic fundamentalists? Do they see themselves, as we have defined them, as evil incarnate? If we would take the time to study and to listen, we would learn that no, they do not. They see themselves, just as we see ourselves, as righteous, moral, and sincere as they try to destroy what they regard as evil in the world. They claim to believe that they are following the bidding of their God, willing to become martyrs in the struggle against evil. Thus, their thinking, too, is held hostage by the rhetoric of evil. They are, if you can think an unthinkable thought, mirror images of us Americans as we react with violence to destroy evil in the world.

Re-cognizing the cognitive reality of otherness

It may be inherently incomprehensible, to some at least, why anyone would seek to be otherwise (Being Other Wise: clues to the dynamics of a meaningfully sustainable lifestyle, 1998).

Beyond legitimation: Missing from ready condemnation of the actions of the "other", as despicably incomprehensible, is any effort to understand the cognitive reality of that otherness (Existential challenge of "The Other", 2007; Us and Them: relating to challenging others, 2009). Such recognition does not imply, as is so readily assumed, a legitimation of that space and the actions that derive from it. There is a strange pervading assumption that all reasonable people should readily agree at some fundamental level on the nature of humanity and the actions it engenders. This assumption is clearly to be questioned when the co-existence of the above-mentioned varieties of incomprehensibility and inexplicability is so evident.

Memetic warfare: Use of weapons and mass destruction and suicide bombing exist in the world of today. It is naive to believe that use of one will eliminate the cognitive perspective of those using the other. Were "terrorists" to acquire such weapons, as is frequently cited as a possibility justifying more radical use of force, it would be naive to assume that their opponents would not use every means possible to counteract their initiatives -- perhaps qualifying for the label "terrorist" in turn. This might be considered the essence of memetic warfare (Cognitive Ballistics vs. Derivative Correlation in Memetic Warfare, 2009; Missiles, Missives, Missions and Memetic Warfare: navigation of strategic interfaces in multidimensional knowledge space, 2001).

Incomprehensibility of worldviews: The question then remains as to how it is possible for others to engage "otherwise" with the world and with "reality", however it is then defined. It is only too obvious that many groups operate out of a different sense of reality. It is typical that such groups will consider their own perspective as fundamentally "right" and that of others as misguided or fundamentally "wrong". Some believe that it has been enjoined upon them (even as a sacred duty) to persuade everyone of the rightness of their own views -- thereby eliminating "wrong thinking" or ignorance, or "evil" from the world. This is as true of religion as of political ideologies and of science.

"Talking to the enemy": For nearly a decade it has been insisted that all dialogue with the Taliban should be avoided. It is now being suggested as a possibility (Daniel Korski, Talking to the Taliban is key - but no magic formula, Spectator, 25 June 2010; We must talk to the Taliban and end this war, New Statesman, 1 July 2010). For example, Andrew Sparrow notes (Taliban talks in Afghanistan should start soon, says head of army, The Guardian, 27 June 2010):

Insisting that talking to the enemy was eventually inevitable in a conflict of this kind, General Sir David Richards also seemed to cast doubt on whether the coalition would be able to inflict "strategic defeat" on the Taliban. "If you look at any counter-insurgency campaign throughout history there's always been a point at which you start to negotiate, probably through proxies in the first instance," he said in an interview on Radio 4's the World this Weekend.

Although previously precluded, at the time of writing search engines indicate a surprising number of items containing "Talking to the Taliban" (Google 9.9 million; Bing 6.5 million), although it is unclear whether these include or exclude the potentially significant variant "Talking with the Taliban" (Google 2.5 million; Bing 6.8 million). But -- surprise, surprise, (how naive can one be after an historically unprecedented decade of warfare) -- it would seem that it is now alleged that, inexplicably, the Taliban refuse the generous offer to talk, unless certain conditions are met (John Simpson, Taliban rule out negotiations with Nato, BBC News, 1 July 2010).

Worldviews resistant to such possibilities inhibit any capacity to explore the ability and perceived legitimacy of thinking otherwise. Any such exploration is implicitly reframed as a means of "correcting" a misguided perspective. There is the further paradox that an argument
such as this one can be seen in the same light. What form of exploration would incorporate such paradox and lead to a healthier appreciation of the multiplicity of perspectives -- for some of which individuals may believe it is worth dying? The challenge of "uprightness", differently oriented, may however even lend itself to geometric modelling ("Uprightness" and global geometry) as discussed in relation to global governance (Geometry of Thinking for Sustainable Global Governance, 2009).

**Arrogant assumptions:** The cognitive challenge is evident in the assumption that any isolated "Stone Age" tribe can only benefit by the enlightenment of contact with religious, scientific, developmental, pharmaceutical and commercial expertise. This assumption may however be placed in perspective by the hypothesized contact with extraterrestrials operating out of a similar mindset (Writing Guidelines for Future Occupation of Earth by Extraterrestrials, 2010). With their own religion? Their own science? Their own developmental priorities and their own understanding of commerce and fair trade -- as with (the urban myth of) trading Manhattan for glass beads?

**Radical otherness:** The argument here is that there is a greater need to explore possibilities of engaging with the radical nature of existential otherness. Above all this does not mean "tolerance" of others, which only too evidently has its limitations -- as the debate on immigration policy and multiculturalism has revealed. The "spirit of peace" promoted by many religions has not curtailed the ability of their adherents to engage in violent conflict -- and to justify it.

**Challenge to comprehension of more integrative perspectives**

It is readily assumed that the nature of higher orders of integration is comprehensible, if only intuitively, rather than inherently incomprehensible and even inexplicable. This is evident in several domains.

**Theology and spirituality:** An extensive literature exists regarding the inadequacy of language in relation to the degree of integration imputed to divinity and to higher orders of consciousness. This is associated with the term apophasis, or the necessity of unsaying, rather than reliance on definitive statements (Michael A. Sells, Mystical Languages of Unsaying, 1994). This is captured in the vedic tradition by the phrase Neti Neti (Not this, Not that). In Taoism it is indicated by the extreme reservations about naming, such as: The Tao which can be expressed in words is not the eternal Tao; the name which can be uttered is not the eternal name and The Tao that is the subject of discussion is not the true Tao.

**Mathematics:** The point might be made through reference to the incompleteness theorems of Kurt Gödel which establish inherent limitations of all but the most trivial axiomatic systems for mathematics, effectively introducing a counterintuitive degree of uncertainty at the foundation of mathematical reasoning -- otherwise assumed to be inherently logical. This understanding is far from being intuitively meaningful. The challenge of understanding the richest forms of symmetry groups can also be appropriately noted (Dynamics of Symmetry Group Theorizing: comprehension of psycho-social implication, 2008).

**Nature:** The all-encompassing system constituted by the natural environment as a whole, of which humanity and human awareness are a part, is such that it is inherently challenging to any form of coherent comprehension. The point has been succinctly made on the cover of the Last Whole Earth Catalog to the effect that: We can't put it together. It is together. This is exemplified by the challenge of designing sustainable living systems.

**Identity:** Equivalent arguments to the above may be made with respect to the mystery of individual identity, made more evident by widespread explorations of collective identity (Being What You Want: problematic kataphatic identity vs. potential of apophatic identity? 2008).

**Education and experience-related challenges:** It is of course the case, where education or experience are inadequate, that many aspects of reality as experienced by others may be incomprehensible and inexplicable, especially in the absence of access to supporting information. Either education or experience, or both, may be essential to avoid the sense of incomprehensibility. The level required may constitute a form of "cognitive glass ceiling" inhibiting more integrative comprehension adequate to what is otherwise experienced as incoherent, even fragmentary. Of particular interest, with the rapid development of technologies, is the manner in which new devices may expose the user of their older equivalents to a sense of incomprehensibility. In this sense incomprehensibility may even be understood as engendered by progress. With the increase in the complexity of such devices, progress may also be understood as engendering inexplicability for those who do not have the time or inclination to acquire the capacity to comprehend.

**Age and health-related challenges:** Related to the previous point is the implication of age. Clearly for the very young, in the absence of education and life experience, many aspects of reality may be experienced as incomprehensible and inexplicable. However of great relevance is the capacity to impose a pattern of explanation enabling a form of comprehension. Explanations in terms of "fairies", "Father Christmas", etc may work quite adequately alleviating any need for a more integrative or more adequate explanation of otherwise incomprehensible experiences. Clearly the same can be true for the mentally challenged. Of course explanations by one school of thought, however seriously it is taken by some, may be rated as equivalent to belief in "Father Christmas" by others -- typically disposed to frame such beliefs as characteristic of the mentally challenged. This of course becomes of relevance to many with increasing age, memory challenges, and the comprehension-related challenges of senility -- notably Alzheimer's disease. Any integrative perspective acquired through life is then progressively lost. Many more features of reality become incomprehensible and inexplicable. Gullibility increases with uncertainty.

The latter points suggest the possibility of representing explicability/comprehensibility in relation to age over a lifespan. The challenge for the individual could then be contrasted with the challenge of comprehensibility for society as a whole -- a comparison between the relative and the absolute. Of particular interest in any such representation is the sense in which specialization is recognized as "knowing more and more about less and less". Even more interesting is the sense in which wisdom may be recognized as "knowing less and less about more and more".
Changing status of information and knowledge

Recent decades have seen a rapid, progressive erosion of the credibility of information and the bodies supplying and promoting it (Credibility Crunch engendered by Hope-mongering: "credit crunch" focus as symptom of a dangerous mindset, 2008). This may be recognized in many sectors, as previously detailed (Abuse of Faith in Governance, 2009). Examples include:

- Advertising, notably exemplified by greenwashing and complicity in the irresponsible marketing of questionab... (see International Symposium on Peer Reviewing, 2010)

A particular consequence, both for the individual and at the collective level, is an erosion of certainty in engaging with the future, as previously discussed (Unknown Undoing: challenge of incomprehensibility of systemic neglect, 2008). This is exacerbated by increasing recognition of the extent to which information is withheld, despite cultivation of the impression of its widespread availability in ever increasing reading quantities (Global Strategic Implications of the "Unsaid": from myth-making towards a "wisdom society", 2003).

Facts: The status of "facts" is ever more evanescent and questionable in practice -- in comparison with their previously acclaimed "solidity". The facts of science might even be said to be on a slippery slope recalling the changing status of the facts of religion -- whose solidarity was vigorously upheld prior to the advent of science, as highlighted by the Galileo Affair, for which the Pope John Paul II apologized in 2000.

Whereas religion upheld the factual significance of its sacred writings, science has upheld the unquestionable merit of its methodology in engendering facts. However the "meta-fact" is that through that methodological process, old scientific "facts" are now displaced by new scientific "facts" -- in whose emergence non-specialists are expected to believe (Craig Callander, Is Time an Illusion? Scientific American, June 2010). Furthermore the scientific process (and the framing of research) is now called into question by the manner in which both it, and its practitioners, are increasingly compromised by their institutional associations. Subsequent to Copenhagen, the status of facts has been explicitly reviewed by BBC Panorama (Tom Heap, After 'climate-gate': Dissecting the science, 28 June 2010):

Climate change is often presented in religious terms -- believers versus deniers disputing the fate of mankind. Those who never believed we were changing the weather shouted triumphantly, while many who did seemed confused. Friends asked: "What are the facts, where does the certainty lie?".... Much of the science about climate change and global warming has been taken on trust, a belief that so many senior scientists could not be wrong. The revelations of "climate-gate" fractured that trust and probably many in the environment movement felt the same way.

Attention span: Within this context there is ever increasing competition for the attention time of individuals -- ensuring adequate bandwidth (exploiting an appropriate metaphor). This is proving increasingly problematic in what was announced long ago as an emerging "blip culture" by Alvin Toffler (The Third Wave, 1980). There is increasing concern at the lack of knowledge of history and its lessons in an ever more intensive focus on the present. It could be argued that, as a species, humanity is evolving to a condition of ever shorter attention span and ever more limited memory (Societal Learning and the Erosion of Collective Memory, 1980). A fruitful comparison might even be made between the attention span of individuals and the lifespan of the spectrum of animal species. Is humanity regressing to a mayfly memory condition?

Society might well be said to be suffering increasingly from a form of Attention-Deficit Hyperactivity Disorder both through increasing short-termism and dependence on "busyness" as a fundamental to growth. (Nicholas Carr, The Shallows: how the internet is changing the way we think, read and remember, 2010)

Uncertainty: As noted by Ziauddin Sardar (Welcome to Postnormal Times, Futures, 2010, 3):

...It's a time when little out there can be trusted or gives us confidence. The espiritu del tiempo, the spirit of our age, is characterised by uncertainty, rapid change, realignment of power, upheaval and chaotic behaviour. We live in an in-between period where old orthodoxies are dying, new ones have yet to be born, and very few things seem to make sense. Ours is a transitional age, a time without confidence that we can return to any past we have known and with no confidence in any path to a desirable, attainable or sustainable future. It is a time when all choices seem perilous, likely to lead to ruin, if not entirely over the edge of the abyss. In our time it is possible to dream all dreams of visionary futures but almost impossible to believe we have the capability or commitment to make any of them a reality. We live in a state of flux beset by indecision: what is for the best, which is worse? We are disempowered by the risks, cowed into timidity by fear of the choices we might be inclined or persuaded to contemplate.

This rapidly emerging information context can be described, by comparison with the technological singularity, as leading to a "memetic singularity" (Emerging Memetic Singularity in the Global Knowledge Society, 2009, Entangled Tales of Memetic Disaster, 2009). There is the possibility that the assumed solidity of facts may be subject to considerations analogous to those envisaged by the Uncertainty
Principle of quantum mechanics. In this sense considerations of measureability and significance may not be simultaneously known as is conventionally assumed. Whilst a fact may be knowable and dependable in the moment, its significance in the dynamics of communication and knowledge processes may be undefinable -- with the reverse being equally valid. Related considerations have been tentatively explored by Garrison Sposito (Does a generalized Heisenberg Principle operate in the social sciences? Inquiry, 12, 1969, 3, pp. 356-361).

Every effort is made by desperate authorities to shore up definitive evidence-based worldviews in the face of such tendencies. These efforts avoid any consideration of the processes by which knowledge and worldviews evolve. They effectively endeavour to determine and colonize the cognitive future in ways which appear ridiculous and naive from the perspective of the present in viewing analogous efforts in the past.

Changing credibility of presentation: The erosion of credibility of presentations of information is increasingly evident in every sector, undermined as it is by abuse of faith in the institutions and practitioners responsible (Abuse of Faith in Governance, 2009; Credibility Crunch engendered by Hope-mongering: "credit crunch" focus as symptom of a dangerous mindset, 2008).

Misrepresentation is now intimately associated with marketing and advertising. News management and "spin" are essential to "talking up" political initiatives and reframing failure to fulfil commitments made. Frontline military personnel who do not make it back to their homeland are claimed to have "loved their job". Every industry makes excessive claims regarding its environmental and social responsibilities -- despite major disasters such as the Deepwater Horizon oil spill. Every foodstuff is the subject of exaggerated claims as to its value for health. Religions, cults and self-help programmes offer assurances as to their unique value, possibly as a means of ultimate salvation. Projects of every kind seek to ensure dissemination of their merits in the expectation that many will be persuaded of the merits of their initiative.

Re-cognizing information and communication

Much is made of the exploding world of information and communication facilities. The focus in what follows is on how each effectively dwells at a nexus of such flows, weaving them into a domain of coherence within which it is possible to live and move and have one's being -- perhaps to be understood as a form of cognitive cocooning. The challenge is the interface with the incomprehensible and the inexplicable whenever it emerges as a matter of concern -- possibly of tragic existential concern, but possibly as a marvellous encounter of the deepest significance.

Relevant processes include:

- the felt need to persuade others of the validity and coherence of one's own perspective, purportedly in their own interest.
- At the social level this is reflected in a sense of mission and commitment: "spreading democracy", religious proselytizing by proselytizing by religions (saving souls, the Great Commission, etc.), alleviating ignorance, developing economies, etc.
- the need to exclude as effectively irrelevant that which is not consistent with one's own perspective -- the constrained ability to hear what is not understood as formulated by Johann Wolfgang Von Goethe: A person hears only what they understand.
- At the social level this is reflected in boundary management, most obvious in the case of concerns relating to immigration but more generally in other forms of gatekeeping (Dynamically Gated Conceptual Communities emergent patterns of isolation within knowledge society, 2004)
- the need to act defensively, if not aggressively, against information which undermines one's sense of coherence. This may take the form of measures to ward off "evil spirits" and other influences, possibly to be understood as spiritual pollution.
- At the social level this is reflected in the perceived threat of any "alternatives" and the need to repress or suppress them with the aid of forces of law and order. The collective trauma regarding "terrorism", to whatever degree it has been deliberately constructed through a "politics of fear", is the primary collective manifestation of terrifying children with the possibility of "bogeymen under the bed" (Promoting a Singular Global Threat -- Terrorism Strategy of choice for world governance, 2002; Framing the Global Future by Ignoring Alternatives: unfreezing categories as a vital necessity ignoring alternatives, 2009)
- the need to exchange with others to cultivate a sense of self-worth and as a source of psychosocial nourishment. Information complementary to one's own understanding, felt as completing what is missing, is then a key to a more wholesome lifestyle.
- At the social level this is reflected in valued trade and cultural exchanges which are most notably the preoccupations of economics and business.

As discussed more extensively below, for the individual engaging in such processes, any explanations in the form of "explanatory models" might then be understood as "cognitive vehicles" enabling information space to be navigated and traversed on the journey of life. Such models may take many forms, narratives, epics, belief systems, theoretical disciplines, or behavioural practices (Metaphors as Transdisciplinary Vehicles of the Future, 1991).

Is the possibility of being "otherwise" to be excluded (Being Other Wise: dynamics of a meaningfully sustainable lifestyle, 1998; Varieties of Rebirth: distinguishing ways of being born again, 2004)?

Psychohazards?

The hazards of particular concern here are those associated with experiences immediately upheld as being incomprehensible and inexplicable -- and therefore a potential existential threat. The responses are instinctual and shared with the animal kingdom, even if possibilities of comprehension and explanation have evolved. The nature of the threat may be explored in various ways (Psychoactive Text Warning: enneagram of precautionary attitudes, 2007; Epistemological Panic in the face of Nonduality: does nothing matter? 2010). They may have immediately relevant collective implications (Overpopulation Debate as a Psychosocial Hazard: development of
Hazardous phenomena: The latter study notes the tremendous human capacity to deal with extremely hazardous material -- of which radioactive and biochemical hazards provide valuable examples. There is therefore a tremendous irony to humanity's much constrained capacity to engage with hazardous texts, beliefs and those who promote or use them. Conventional mindsets are much constrained in their ability to engage with "alternatives" of any kind. This has long been evident in relations between classes, castes and ethnic groups.

As advisor to Richard Nixon, Henry Kissinger is renowned for his remark to the effect: The absence of alternatives clears the mind marvelously. The Allende regime in Chile was considered by the Nixon administration as an intolerable alternative in the western hemisphere -- in comparison with the Pinochet regime by which it was replaced.

The difficulty in dealing with hazardous alternative perspectives is directly evident in any process of engaging with those held to be psychologically disturbed. The architecture of the buildings in which they are institutionalized might even be seen as evolving in ways analogous to that of the laboratories in which hazardous materials are handled, or the "dangerous" books in libraries. The glovebox offers a useful metaphor for the "arms-length" precautions considered necessary. The challenge is most evident in the lack of conventional ability to engage with community experiments, protectively labelled and proscribed as sects and dangerously problematic for that reason (Social Experiments and Sects: beyond category manipulation by advocates and opponents, 1997; Sustaining a pattern of alternative community initiatives: based on their differences from the conventional economic rationale, 1998).

Extremism: The challenge is most evident in any encounter with eccentricity or extremism in a community where conventional frameworks may be directly challenged and where, ironically, younger children may have more flexible responses. As noted above, the challenge of the encounter has been magnified many-fold by the nature of the current engagement with those framed as terrorists and demonised accordingly (forgetting the historical association with "terrorism" of the, now honourable, founding fathers of many countries). Any dialogue is then considered suspect, as with the motivations for those advocating it. The argument is that such dialogue then accords unwarranted legitimacy to "the other" -- a legitimacy which is fundamentally incompatible with the preferred conventional framework and therefore inherently incomprehensible.

Protective cognitive walls: The "other" is then suitably isolated behind a cognitive wall. The various security walls are appropriately symptomatic of the enclosed community (separating it from the excluded) and the symbolic inner wall to which the community attaches most significance (but from whose implication it is to a degree excluded). Possibilities for consideration include:

- the variously named "Temple Wall"
- the variously named Israel-West Bank barrier ("security fence", "Apartheid Wall", etc)
- cultural memories of any wall of traumatic significance to the community ("Ghetto Wall")
- wider cultural memories of other walls by which civilization has excluded the relatively barbaric:
  - as a whole (Great Wall of China, Hadrian's Wall)
  - with respect to a city of symbolic significance (Forbidden City, Vatican, etc)
- other walls of contemporary significance (the Berlin Wall, Mexico-United States barrier)
- walls currently constructed for the security of "gated" residential communities
- virtual variants of any of the above, characteristic of protective access to virtual communities (cf Dynamically Gated Conceptual Communities: emergent patterns of isolation within knowledge society, 2004)

Also relevant here is the $1 billion "security wall" constructed annually to protect the meetings of the G8/G20 from the arguments of the masses -- compounded by disguising security personnel as violent demonstrators in order to justify the expense (Terry Burrows, The Toronto G20 Riot Fraud: undercover police engaged in purposeful provocation at tax payers' expense, Global Research, 27 June 2010).

Dialogue between worldviews: These of course have their equivalent within any individual's personal psychic environment. Little thought has been given to the nature of dialogue between radically different worldviews -- beyond efforts by each to persuade "the other" of its legitimacy and preferential status and the error of the way of "the other". Envisaging the co-existence of worldviews is effectively anathema -- with advocacy of "tolerance" typically used to avoid any meaningful engagement with "the other" (Guidelines for Critical Dialogue between Worldviews, 2007). This is only too evident in interfaith dialogue or in the strained discourse between scientific disciplines in token efforts to engender a transdisciplinary framework. The mindset is echoed in the dysfunctional relation to other topics considered problematic ("Human Intercourse": "Intercourse with Nature" and "Intercourse with the Other", 2007; Snooping of The Other: a politically relevant psycho-spiritual metaphor? 2006)

Quest for common ground: Curiously the emphasis in any such effort is towards "reconciliation" and the discovery of "common ground" (In Quest of Uncommon Ground: beyond impoverished metaphor and the impotence of words of power, 1997). Much "feel good" enthusiasm is promoted as part of such processes -- allowing success to be claimed and hope to be mangled. Attributing success in this way can arguably be presented as completely obscuring the fundamental existential difference vital to the sense of identity of the opposing parties. One is not the Other -- at least within the language of such reconciliation discourse. Notions of "common ground" might better be understood as an obscenity in territorial disputes -- as in the discourse between Israelis and Palestinian, where each claims title to the same sacred ground. Little effort is made to explore the possibility that meaningful understanding of it might be as challenging as the subtleties in which fundamental physics is encouraged to indulge.

In the International Year of Biodiversity (2010) is there not a case for recognizing how different human individuals and groups may indeed feel themselves to be? Their fundamental sense of individual and cultural identity is not associated with their sameness. It is profoundly naive to expect the species of the natural environment -- of the wild -- to "get on" and "tolerate" one another. The "lion does not lie down with the lamb" -- any more than does the salesman with a gullible mark in an urban jungle (as so aptly illustrated by the subprime mortgage crisis). This is especially the case when human groups have a tendency to find each other inimical to the point of inhumanity. And yet nature has indeed developed a dynamic framework for an immense range of mutually dependent species -- many of which are threat to one another. Beyond the simplistic declaration of human rights -- so evidently irrelevant in bloody practice -- no such
Implication for personal engagement with a turbulent knowledge environment

As with survival in the wild or in an urban jungle, the individual is faced with the need to cultivate a set of appropriate attitudes -- an attitudinal toolkit -- in response to an immediately emergent future. These may be understood as indicative of a set of appropriate cognitive "stances" -- as might be considered vital in the spirit and practice of martial arts, metaphorically understood, where "stance" implies a mode of engagement. In some of the the philosophy underlying martial arts, these attitudes are intimately (and consciously related) to aesthetic considerations, as in the Japanese traditional training in the tea ceremony, ikebana (flower arrangement), fencing styles and poetry -- all considered vital to bushido, namely the training of a warrior.

The argument has been developed separately (Ensuring Strategic Resilience through Haiku Patterns: reframing the scope of the "martial arts" in response to strategic threats, 2006). Regrettably the subtler individual implications have long been obscured by appropriation of the term "information warrior" in relation to cyberwar attacks (Ben Venzke, Information Warrior, Wired 4.08, Aug 1996; Ronald Baklarz and Richard Forno Forno, The Art of the Information Warrior: insight into the knowledge warrior philosophy, 1999; Sonja Johns, Michael Shalak, et al. Knowledge Warrior for the 21st Century: catalysts for cultural change, US Army War College, 2000). Laura Miller and Sheldon Rampton (The Pentagon's Information Warrior: Rendon to the Rescue, PR Watch, 2001, 8, 4), cite Rendon to the effect that:

"I am a politician," Rendon said in a 1998 speech to the National Security Conference (NSC), "and a person who uses communication to meet public policy or corporate policy objectives. In fact, I am an information warrior, and a perception manager…." Through its network of international offices and strategic alliances, the Rendon Group website boasts, "the company has provided communications services to clients in more than 78 countries, and maintains contact with government officials, decision-makers, and news media around the globe."

Appropriation of the term "information warrior" and "knowledge warrior" by the Pentagon, and by others with security preoccupations, has indeed been partially inspired by Asian martial art philosophy (as in the Baklarz and Forno study). Missing to a high degree in such appropriation is the existential dimension, implicit to some degree in "perception management" and the widespread use of "spin". This is more explicitly associated with understandings of "memetic warfare", as previously argued (Missiles, Missives, Missions and Memetic Warfare: navigation of strategic interfaces in multidimensional knowledge space, 2001; Cognitive Ballistics vs. Derivative Correlation in Memetic Warfare: suicide bombing as a weapon of mass distraction? 2009). The term is clearly more relevant to any "battle for hearts and minds", whether in Afghanistan, by Christian and other religious efforts to spread their message, as well as to the insidious effort to promote problematic consumer product dependency (cigarettes, alcohol, fast food, etc.).

What education process enables individuals to "stave off" the barrage of attacks by the advertising industry? Would "information warrior" training capacity have enhanced resistance by those targetted with offers of subprime mortgages?

For individuals the challenge is how they position themselves in relation to all such information processes, most specifically how they engage with such information -- and on behalf of whom. There are fewer references to "memetic warrior", although arguably this is the goal and essence of critical thinking (Web resources: Critical thinking vs. Specious arguments, 2001). The existential dimension is even more evident in those responding to concerns about "spiritual pollution", including the Chinese Anti-Spiritual Pollution Campaign. Of course US understanding of "spreading democracy" might be experienced in such terms by other cultures -- most notably the Islamic cultures conflating such a strategy with the spread of hedonism. More generally any "change agent" is fruitfully to be defined as a "memetic warrior" struggling against stasis and the problematic challenges of the status quo.

Metaphorical patterns through which to engage with memetic challenges

Sets with psychologically implications: In Eastern traditions sets of such patterns are variously implied by the internal or psychological significance of:

- a set of katas, each understood as an appropriate "way of doing things", an appropriate pattern of initiative or response as in the martial arts.
- a set of asanas, namely yoga postures, of which some 64,000 are traditionally recognized, intended primarily to restore and maintain a practitioner's well-being. The set of asanas is itself understood as one of the eight limbs of Raja Yoga (the yamas (restrictions), niyamas (observances), asanas (postures), pranayama (breath work), pratyahara (sense withdrawal or non-attachment), dharana (concentration), dhyana (meditation), and samadhi (realization of the true Self)
- the set of moves or forms constituting the practice of Tai chi chuan, namely the internal Chinese martial art practiced for both its defense training and health benefits.
- a set of strategic principles applicable to one-on-one or collective combat, developed from kenjutsu swordsmanship by Miyamoto Musashi (The Book of Five Rings: Go Rin No Sho, 1660) with the "five rings" referring metaphorically to The Book of Earth, The Book of Water, The Book of Fire, The Book of Wind and The Book of Void. The text identifies five attitudes of swordsmanship, the areas for attack on the human body.
**Fencing**: In the tradition of western swordsmanship, the swordsman is understood to be able to adopt essentially 14 recognizable and effective fighting postures (guards/wards/stances) overall. Of these five are major universal ones that correspond to High, Middle, Low, Hanging, and Buck positions. Fencing theory specifies a set of these positions either on guard in preparation for defence against attack or in preparation for attack. Parries deflect the attack by simply moving in a variety of directions, from one position to another. These positions are distinguished as: Prime, Seconde, Tierce, Quarte, Quinte, Sixte, Septime and Octave [more]. Fencers thus have a set of moves that they can apply in different strategies, although the time between fencing moves or turns is measured in milliseconds (cf Nick Evangelista, *The Inner Game of Fencing: excellence in form, technique, strategy and spirit*, 2000; *The Art and Science of Fencing*, 1999). Such considerations contrast notably with widespread decision-making based on "bullet points", as separately discussed (*Interweaving Thematic Threads and Learning Pathways*, 2010).

Western fencing is indeed also recognized to be primarily a "mental discipline", calling for subtlety, in addition to physical speed and agility -- which by themselves may well be inadequate. Modern foil fencing is the direct descendant of dueling -- of combat likely to end in death. As such it retains a visceral "edginess" that is part of the mental discipline that is learnt. Fencing combines learned reflexive skills with considered responses to observation of an opponent, applied psychology and strategy. [more]

Appropriately, but perhaps curiously, use of some of the fencing terms is recognized in dialogue -- feint, thrust, block, parry? Arguments may be "staved off", recalling the methods of quarterstaff and kendo. More intriguing is the manner in which skills inspired by (Eastern) martial arts are used in strategic thinking and marketing, necessarily intimately related to skills with knowledge and information (Gao Yuan, *Lure the Tiger Out of the Mountains: the 36 stratagems of ancient China*, 1991; see adaptation *Table of Strategems* and *Table of Confidence Plays*). In this respect it should be remembered that two "metrics" of considerable recent strategic significance were elaborated out of the mindsets of those cultures (*Uncritical Strategic Dependence on Little-known Metrics: the Gaussian Copula, the Kaya Identity, and what else?*, 2009).

The question is the degree to which the set of skills to deal with incomprehensibility and surprise are implicit in the "inner" martial arts or, in the case of the East, in the BaGua pattern by which they are variously inspired (Lu Shengli and Zhang Yun, *Combat Techniques of Taiji, Xingyi, and Bagua: principles and practices of internal martial arts*, 2006; Bruce Frantzis, *The Power of Internal Martial Arts and Chi: combat and energy secrets of Ba Gua, Tai Chi and Hsing-I*, 2007; Jiwu Gao and Nigel Sutton, *The 64 Hands of Bagua Zhang: Fighting Techniques of Liu Dekuan*, 2007). Given the widely acknowledged recent success of both Japan and China, it could be a major error to assume that it is not possible for the individual to draw on such insights, as skillfully argued by Susantha Goonatilake (*Toward a Global Science: mining civilizational knowledge*, 1999).

There is a burgeoning Eastern literature on business, marketing and other forms of strategy, variously inspired by the martial arts (*Chin-Ning Chu, The Asian Mind Game: unlocking the hidden agenda of the Asian business culture*, 1991). In the wild this calls for attentive recognition of the possibility of camouflage, deception and the hunting styles of various predators -- some of which may be life threatening. On the other hand obsessive concern may be quite inappropriate. Similar vigilance may be appropriate for the streetwise in certain urban environments. Such precautions are evident in many commercial environments where the appropriate adage is *caveat emptor* (buyer beware). The case was well made by the exploitation of the gullible in connection with *sub-prime lending* in the USA -- the trigger for the financial crisis. In the case of health remedies, there are numerous modern equivalents of what were characterized as *snake oil remedies* and their promoters -- not least amongst on the part of those who purportedly know better.

**Knowledge management**: The question is how any exploration might be reframed to enable more strategic response to information, to enable people to be "media savvy", as with Western concerns with critical thinking (*Web resources: Critical thinking vs. Specious arguments*, 2001). Possibilities, inspired here by the BaGua pattern as previously explored (*Mapping the Global Underground*, 2010), might include:

- **Receptivity to information** (*Earth*) which may not be all that it seems, namely encompassing uncertainty through appropriate adaptation. This may be deprecated as passive "followership" where some would favour active "leadership" (for "pushing the river, rather than guiding the canoe"). It may also be deprecated as a characteristic institutional response anxious to contain the unusual within a pattern of normalcy and unexceptional.

- **Presentation of information** (*Heaven*) namely expansive reframing, creating new all-encompassing frameworks; offering a sense of potential and an associated sense of certainty through dissemination of new insight demonstrating unequivocally "having a matter covered". Countering tendencies to passive acceptance.

- **Engaging with danger** (*Water*) namely active risk-taking despite recognized perils and the possibility of unforeseen dangers.

- **Clinging** (*Fire*) namely strategic nimbleness in response to a rapidly evolving situation -- a capacity to "ride the tiger".

- **Wind** namely gentle penetration and flexibility, as with the penetrating inquiry characteristic of investigative journalism and research

- **Thunder** namely a resounding response, arousing attention and excitement, as characteristic of movements of protest in support of change

- **Mountain** namely identification with context, even embodying its qualities as stillness and immovability awaiting further development

- **Lake** namely a sense of appreciation and fulfilment
Whilst such references are indeed indicative and valuable, they themselves constitute a challenge as externalities -- variously presented and practiced by authorities and schools whose relationships have tended not to be harmonious. Each may well exemplify the quarrsome completable claims to exclusivity characteristic of the dynamics in many domains in society. However implicit in the value attributed to them by their practitioners is an appreciation of their contribution to health, psychological balance, and even their use in self-defence understood in its subtext sense. They are then indicative of an understanding of the set of patterns -- the set of dynamics -- appropriate to conserving the whole. Especially significant is the cultivation of the ability to shift smoothly between these patterns. The argument, with more detailed examples, has been presented elsewhere (Navigating Alternative Conceptual Realities: clues to the dynamics of enacting new paradigms through movement, 2002).

The emphasis here however is primarily on the handling of information -- for which physical movement may well offer a most appropriate metaphor, although it may also distract completely from the subtlety of more valuable attitudinal patterns. Martial arts philosophy may indeed allude to these as being fundamental and the ultimate objective of practice, although this perspective is easily ignored. Meditation may well be associated with some schools of practice -- in this sense implying the development of appropriate cognitive skills, although these are not readily apparent. The cognitive challenge may be usefully framed in terms of the embodiment of externalities which serve primarily to offer mnemonic triggers (Existential Embodiment of Externalities: radical cognitive engagement with environmental categories and disciplines, 2009).

Beyond conventional approaches to education, the question is then what is the nature of the cognitive-attitudinal "toolkit" which would be of most value to the survival of those buffed by the winds of change in a turbulent, unstable environment posing existential threats? What is the attitude that parents would most wish for their children -- the prelude to "education" and the metaphysics of both birth and survival.

**Metaphors enabling engagement with threatening incomprehensibility**

In exploring other useful metaphors, a case can be made for requiring that such metaphors be adequately "extraordinary" to avoid entrapment by assumptions of reasonableness on which explorations of "common ground" are typically grounded. It is likely that such metaphors would need to embody to a degree the very qualities of incomprehensibility and inexplicability in order to be of requisite variety to handle such experience -- as characterized by the healing arising from the traditional Doctrine of Signatures.

This might be expressed in terms of the Good Regulator theorem, due to Roger C. Conant and W. Ross Ashby, that is central to cybernetics: Every Good Regulator of a system must be a model of that system. As in the classic statement of physicist Niels Bohr: We are all agreed that your theory is crazy. The question that divides us is whether it is crazy enough to have a chance of being correct.

Are current explorations of the incomprehensible relations between worldviews "crazy enough" to be of any value? Are individuals empowered to use explanations that are "crazy enough" to deal fruitfully with the inexplicability of the behaviour of any challenging other -- and the implication that such might also be the challenge for that other?

**Martial arts:** References above to the pattern of stances and movements, variously associated with the martial arts, offer powerful metaphors for the cognitive challenge of engaging with the challenge of otherness. However as "martial arts" they may imply a commitment to characteristic efforts to neutralize the threat constituted by the other, avoiding the kind of engagement supposedly much valued in competitive games.

This metaphoric commitment, as with eliminating the other, may preclude the emergence of higher orders of insight, as previously discussed (Enhancing Sustainable Development Strategies through Avoidance of Military Metaphors, 1998). However those promoting the philosophy underlying the martial arts attach considerable significance to the existential encounter with the other, suggesting other ways of understanding such arts (Ensuring Strategic Resilience through Haiku Patterns reframing the scope of the "martial arts" in response to strategic threats, 2006; Strategic Jousting through Poetic Wrestling: aesthetic reframing of the clash of civilizations, 2009).

**Vehicles:** As mentioned above, for the individual engaging in such processes, any explanations in the form of "explanatory models" might then be understood as "cognitive vehicles" enabling information space to be navigated and traversed on the journey of life. Such models may take many forms, narratives, epics, belief systems, theoretical disciplines, or behavioural practices (Metaphors as Transdisciplinary Vehicles of the Future, 1991). Metaphorically such frameworks may be understood as "bubbles" of hope in a sea of chaos. They might also be explored as "balloons", especially in their collective variants (Strategic Inflation of Expectations and Inconsequential Drift -- globallooning, 2009). Existential difficulties of course arise when faced with the incomprehensibility and inexplicability of any "crash".

Of interest is then the possibility of all terrain vehicles capable of also travelling such alternative realms (Navigating Alternative Conceptual Realities: clues to the dynamics of enacting new paradigms through movement, 2002). Rather than the fragility of a bubble or a balloon, such vehicles may be understood, used and experienced as having the protective, all-terrain qualities of a cognitive tank for further exploiting a military metaphor. Ironically this offers a fruitful metaphor for consideration of the strategic role of "think tanks" in a knowledge society (Tank-thoughts from Think-tanks: constraining metaphors on developing global governance, 2003; Meta-challenges of the Future: for Networking through Think-tanks, 2005).

**Magical precautions:** Irrespective of how it may be perceived through modern conventional frameworks, the active tradition of magic and its associated rituals is extremely sensitive to the necessary precautions required for engaging with what is essentially incomprehensible and inexplicable. Whilst the elaborate systems of categories and rituals are readily condemned from conventional perspectives, they offer metaphors regarding the variety of ways in which the incomprehensible and its dangers may be to a degree contained -- enabling a degree of "communication" with what they are held to represent. Clearly such processes are valued where promotion of religious ritual, in response to what is framed as mystery, is held to have lost its credibility. The "mystery" of religion typically fails to constitute the existential challenge of the terrifyingly incomprehensible -- especially when the seeming inadequacy of the divine is itself inexplicable in the face of personal tragedy. (Thinking in Terror: refocusing the interreligious challenge from thinking
Not to be forgotten in considering the value of the metaphors of magic, and the attitudes they encourage, is the extent to which much of magic has in various ways been embodied in religious rituals and those of secret societies -- both valued to a degree by the influential (incomprehensibly?), as is so well illustrated in the case of freemasonry.

The argument has been developed separately in relation to magic as an interface between poetry and policy-making, notably with respect to how "magic" is to be understood, to transformation of worldviews, as well as the magical arts and their much-publicized perversions (Magic, Miracles and Image-building, 1993). Modern "image-building" (including "spin") may well be understood as inheriting aspects of the magical arts -- as their shared etymology would tend to confirm. Curiously, whilst poetry has itself long been understood as a form of magic, poetic discourse has long figured in dialogue with challenging others -- if only as the hexameter riddles of oracles such as those from Delphi. Hence the case for "poetic jousting" with the other, as proposed in the case of current conflicts (Poetic Engagement with Afghanistan, Caucasus and Iran: an unelexplored strategic opportunity? 2009). Might poetry be usefully upheld as "precautionary discourse"?

As a facet of the incomprehensible and the inexplicable, the capacity of poetry to articulate the unspeakable is addressed by Sophia A. McClennen (Poetry and Torture. World Literature Today, 01 Sept 2004):

Poetry attempts to evoke the unspoken, as does torture, and yet it is difficult to connect these two extremes as moments in the making of language. How have recent events forced us to reconsider universal questions about the relationship between language and violence, art and politics? While efforts to answer these questions may always fall short, a look at several writers' attempts to speak to these issues might inspire the ongoing quest.

Cognitive fusion: Whilst magical procedures are attentive to holding a space, and avoiding the dangers of what may happen in that space, technology offers a development of its most sophisticated possibilities where an especially dangerous phenomenon has to be held within a container by which it could be only too readily destroyed. This is the case with the containment of nuclear plasma within nuclear fusion reactors. As a special condition of matter at the highest temperature, its containment is only possible if the plasma is prevented from coming in contact with the walls of the container by skilled use of a configuration of electromagnetic fields.

The technical considerations and necessary processes offer a powerful set of metaphors regarding means of fruitfully containing "otherness", potentially as a vital source of energy for society (Enactivating a Cognitive Fusion Reactor: Imaginal Transformation of Energy Resourcing (ITER-8), 2006). Of particular interest are the design considerations which have given rise to the geometry of fusion reactors. Extensively explored are those of toroidal form ensuring both that the plasma is not in contact with the walls of the container as well as the dynamics of the movement of the plasma through the torus. The potential cognitive significance of the torus is discussed separately (Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics: transforming a matrix classification onto intertwined tori, 2006). As noted, the toroidal form also relates to the cross-cultural significance of the Ourobouros and its variants (Cognitive Fusion through Myth and Symbol Making: archetypal dimensions, 2006).

Paradoxical perspective of the other: Missing from this summary of various metaphors is any recognition that any "other" may be faced with a similar challenge in establishing a viable means of engagement with one's own framework. This may be experienced as highly problematic, "antithetical", and existentially threatening to the highest degree, to the point of being appropriately labelled as "anathema" and "evil". The relationship between matter and anti-matter offers another metaphor. Simplistic framing of anti-matter as necessarily evil is however not helpful.

As with the requirement for an approach that is "crazy enough", a fruitful metaphorical pointer is offered by the psychosocial implications of the Mobius strip and the Klein bottle. The first having only one side, despite the appearance of having two in confirmation of conventional thinking. More challenging is the second, which has neither (or both) inside and outside -- suggesting paradoxical cognitive possibilities in the relationship "between others" (Intercourse with Globality through Enacting a Klein bottle: cognitive implication in a polysensorial "lens", 2009). There is a commonly experienced phenomenon facilitating comprehension of such geometric subtleties (Snoring of The Other: a politically relevant psycho-spiritual metaphor? 2006).

The acid test, as suggested above, is however the possible future engagement with extraterrestrials -- well-anticipated by the degree to which humans variously experience each other as "alien" (Self-reflective Embodiment of Transdisciplinary Integration (SETI): the universal criterion of species maturity? 2008).

Damanhur: an imaginative experiment in communication

A valuable example of engaging with the inexplicable and the incomprehensible is offered by the Federation of Damanhur -- a complex of communities in Northern Italy (Renaissance Zones: experiment with the intentional significance of the Damanhur community, 2003). Not only are its organization and preoccupations highly unconventional, inviting every problematic projection by outsiders, but its commitment to research and exploration is itself an ongoing exercise in the exploration of what is otherwise held to be incomprehensible. Excavation and decoration of an immense underground complex of temples, a village of tree houses, and rotating dwellings, are but physical manifestations of an exploratory mindset, partially evident in its art work. The interface with local authorities and the Catholic Church is clearly a communication challenge for both sides -- and instructive in that respect.

Can any creative initiative do without its "enemies" in order to refine and temper its sense of identity? Can any commitment to the status quo do without "enemies" that threaten to undermine its values and sense of identity -- if it is to ensure its healthy viability? The point has been admirably stressed by governments of the USA: the "American way of life is non-negotiable". This is necessarily true of any belief system.
Time and sustainability: In a period in which global society is urgently challenged by time with respect to the sustainability of its own survival, the imaginative exploration by Damanhur of the nature of time merits consideration -- especially in a period when collective memory of history is widely recognized as being endangered (Societal Learning and the Erosion of Collective Memory, 1980; Engaging Macrohistory through the Present Moment, 2004; The Isdom of the Wisdom Society: embodying time as the heartland of humanity, 2003).

Given the global preoccupation with "space" and "spaceships" (and their orbital stability), there is therefore a case for exploring the complementary notion of "timeships", analogous to spaceships, by which "event space" may be sustainably navigated (Dynamic structure of events within event-space, 2010). Using the Damanhur federation as an example, this was done in a four-part commentary on the mindset potentially relevant to the governance of viable communities of the future (Renaissance Zones: experimenting with the intentional significance of the Damanhur community, 2003):

- Imaginal education: Game playing, science fiction, language, art and world-making
- Complementary patterns of meaningful truth and the interface between alternative variants
- Timeship: Conception, Technology, Design, Embodiment and Operation
- Embodying a Timeship vs. Empowering a Spaceship

Significance of otherness: With respect to the above-mentioned paradoxical communication with any "otherness" -- as represented by some alternative worldview -- a further question is the cognitive significance of any embodied other. This is clearly a major challenge for relationships between cultures, ideologies, policies and belief systems -- as well as between individuals and groups. This is also evident in the nature of "intercourse" with nature, notably explored by deep ecologists, as discussed previously (En-minding the Extended Body: enactive engagement in conceptual shapeshifting and deep ecology, 2003; Psychology of Sustainability: embodying cyclic environmental processes, 2002).

Nature of course offers a remarkable range of patterns of interaction between alternative modalities -- embodied in the behaviour of distinct species. In the current International Year of Biodiversity, how is the demonstrably problematic objectification of nature to be reconciled with insights from those who have lived sustainably with nature of thousands of years, as documented for UNEP by Darrell Posey (Cultural and Spiritual Values of Biodiversity, 1999).

Image, imagination and magic: There is no lack of references to the role of "image" in framing the way public initiatives are perceived. It is the focus of public relations skills, news management ("spin"), personal promotion, status and sense of personal self-esteem. Much is acclaimed regarding the importance of "imagination" in relation to creativity and the design of cogenial urban and home design -- to say nothing of individual clothing and the production of aesthetic products. The term "magic", etymologically associated with image and imagination, is frequently used as a qualifier in their description -- even the ultimate accolade. It is readily used as a description of the fruitful experience of serendipitous patterns of associations -- of cross-fertilization.

In the light of one of the three laws of Arthur C. Clarke -- Any sufficiently advanced technology is indistinguishable from magic -- the question might be asked as to how incomprehensible would be the experience of the requisite technology to meet the current challenges of global governance. To what extent is it fruitfully to be framed as "magic"? Again, are the current technologies envisaged "crazy enough"?

Engaging with the environment: plants, particles, poverty and potential

Plants: The above questions are a challenge for the future strategy of the International Union for Conservation of Nature (IUCN) -- a key agency with respect to biodiversity -- whose current president, Ashok Khosla, recently visited Damanhur to benefit from its insights. The question arising from one of the areas of research at Damanhur was the significance to be associated with the demonstrated capacity of plants and trees to "sing" (Il Canto degli Alberi, 2008, a CD appropriately recalling a book of the same title by the Nobel Laureate Hermann Hesse, subtitled La natura come fedele compagna).

How might such communication contribute to reflection on future public relations initiatives of IUCN -- in enabling a more fruitful interaction with nature worldwide? Could an ecosystem as a whole be experienced through such technology as "singing" -- beyond its more traditional expression through a pattern of poetic and musical associations?

As a brainstorming exercise, it might be argued that in promoting its concern for nature IUCN is constrained by mindsets governed by particular associations to its current name when others might (also) be of value as illustrated by the following table. This approach is suggested by an earlier exercise (Dynamic Reframing of "Union": implications for the coherence of knowledge, social organization and personal identity, 2007; Emergence of a Union of Imaginable Associations, 2007):

<table>
<thead>
<tr>
<th>Alternative interpretations of initials of IUCN acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
</tr>
<tr>
<td>Integrative</td>
</tr>
<tr>
<td>Intelligible</td>
</tr>
<tr>
<td>Interactive</td>
</tr>
<tr>
<td>Imaginative</td>
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<td></td>
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</table>

Correspondence
Communication
Nurture
Coexistence
Noosphere
Consummation
Network
Connectivity
Correspondence

Emergence of a Union of Imaginable Associations (2007)
Particles: In contrast with the unusual effort to render comprehensible the capacity of plants to "sing", is the effort made to render comprehensible phenomena signalling the existence of fundamental particles at the Large Hadron Collider (LHC) facility, a 27km circumference high-energy particle accelerator (Pallab Ghosh, *God particle signal is simulated as sound*, BBC News, 22 June 2010). Both initiatives are examples of sonification, namely the auditory display of data otherwise beyond the range of human senses or their capacity otherwise to resolve -- as explored by the International Community for Auditory Display on behalf of the US National Science Foundation (*Sonification Report*, 1997).

Poverty: Whilst plants and particles constitute particular extremes challenging enhanced environmental comprehension, "poverty" might be understood as another extreme for which the ability to "hear" coherently the "cries" of those affected is clearly as far beyond the current capacity of the international community. Given the demonstrated possibilities of sonification with respect to far less evident extremes, the question is whether there is scope for the use of such techniques in rendering poverty meaningful to policy-makers and those who support them. The issue is highlighted at the time of writing by the gathering of the G8/G20 (Toronto, 2010) and widespread recognition of their incapacity to fulfill solemn promises with regard to poverty made at their previous gatherings -- to make poverty history (*Framing the Global Future by Ignoring Alternatives: unfreezing categories as a vital necessity*, 2009). The pattern of behaviour, and the associated "hot air emissions", is not dissimilar to that of serial substance abusers. Possibilities include:

- efforts within the framework of the Union of International Association, funded by the European Commission, towards *Information Visualization and Sonification: displaying complexes of problems, strategies, values and organizations* (2001)
- conversion into memorable music of text and discourse emanating from meetings of the international community to enable enhanced detection of recurring leitmotifs (*Conversion of Global Hot Air Emissions to Music: aesthetic transformation and instrumentalization of vaporware*, 2009; *Structuring Mnemonic Encoding of Development Plans and Ethical Charters using Musical Leitmotivs*, 2001)

Potential: Given the degree to which the values and organization patterns of the future are now given credibility by music and song, rather than by the institutions which claim responsibility and competence in this regard, there is a case for rendering comprehensible emergent patterns -- more systematically through sonification than is currently "envisioned" (through the "vision" metaphor). One possibility is illustrated by use of the essentially aesthetic Fibonacci pattern, common in nature, to order interaction patterns characteristic of human intercourse, whether individual or collective (*Tao of Engagement -- Weaponised Interactions and Beyond: Fibonacci's magic carpet of games to be played for sustainable global governance*, 2010). The use of the Chinese binary coding system, indicated there, lends itself readily to sonification and comprehension of emergence. It is noteworthy that with respect to progressive emergence of understanding, the Fibonacci spiral pattern, in the form of the marine nautilus, has become the symbol of *The New Zealand Curriculum Framework.*

The possibility is given further significance by the discovery of Jay Kennedy (*Plato's Forms, Pythagorean Mathematics, and Stichometry*, *Apeiron: a journal for ancient philosophy and science*, 2010) of the use by Plato of a regular pattern of symbols to give his books a musical structure (*Manchester historian deciphers hidden 'Plato Code*', BBC News, 29 June 2010). This is consistent with the musical studies of Ernest G McClain (*The Myth of Invariance: the origins of the Gods, Mathematics and Music from the Rg Veda to Plato, 1976; *The Pythagorean Plato: prelude to the song itself, 1978)*.

Cognitive challenge

The fundamental issue is whether the current modes of thinking are adequate for appropriate engagement with the challenges seemingly faced by a planetary society. Many have argued for the need for "new thinking", in accordance with the case made by Edward de Bono in proposing a *World Centre for New Thinking*. The concern is how the emergence of any such new thinking is to be ensured within a context as essentially hostile to "otherness" as were the Cro-Magnons to the Neanderthals (*Authentic Grokking: Emergence of Homo conjugens, 2003*; *Beyond the Standard Model of Universal Awareness, 2010*).

Characteristics of such thinking are presumably to be found in the nature of the experience of incomprehensibility and inexplicability -- as with the experience of imagination and magic. They include the following complementary processes.

Enantiodromia, as a cyclic dance with opposites and outsiders, exemplified in the case of Damanhur by the necessary interaction with government authorities, the Catholic Church, and critical outsiders (*Psychosocial Energy from Polarization: within a cyclic pattern of enantiodromia, 2007*)

Alternation between the perspectives of the one and the other, presumably essential to healthy dynamics in any form of psychosocial organization (*Embodying Values Dynamically through Alternation: integrating sets of polarized static values through indicative metaphor, 2008*; *A musical key from a political philosopher, 1995*; *Alternation between complementary policy conditions, 1995*; *Embodiment in patterns of alternation, 1995*)

Mirroring of externalities -- of the other -- as celebrated in various traditions (*Stepping into, or through, the Mirror: embodying alternative scenario patterns, 2008; My Reflecting Mirror World, 2002*)

Cognitive intercourse with the other, exemplified by nature (*"Human Intercourse": "Intercourse with Nature" and "Intercourse with the Other", 2007*)

Embodiment of externalities, exemplified by the cognitive challenge of how to encompass the paradox of understanding one's part in
nature and nature's part in oneself (Existential Embodiment of Externalities: radical cognitive engagement, 2009). This goes beyond the traditional process of land nam, a term coined by Ananda Coomaraswamy (The Rg Veda as Land-Nama Book, 1935), to refer to claiming ownership of uninhabited spaces through weaving together a metaphor of geography of place into a unique mythic story. In the case of Damanhur, as a federation of communities, the challenge is how each cognitively embodies the other to a degree, and how the focal structures and their distinct functions are interiorized:

- the Temples of Humankind follow a tradition celebrated in sacred architecture over millennia, in which aesthetic decoration and art work has a mnemonic function -- effectively psychoactive systems diagrams, variously activated by ritual, dance and song (Magic Carpets as Psychoactive Systems Diagrams, 2010)
- the cycles of cultivation of farms and gardens, any their integrated ecosystems, including birds, bees and worms (Gardening Sustainable Psycommunities: recognizing the psycho-social integrities of the future, 1995)
- energy and water systems vital to sustainable community living in community buildings -- with which people have to develop a behavioural relationship with cognitive implications

The art is cultivating the resonance between "inside" and "outside" -- terms featuring in the name of a website deeply critical of Damanhur (as might be expected).

Cognitive geometry of principles, necessarily sufficiently rich to encompass complexity, paradox and surprise (Metaphorical Geometry in Quest of Globality, 2009). The challenge is to highlight the existence of surfaces which offer a higher order of connectivity as noted above (Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics, 2006). In the case of Damanhur, as a mnemonic, use is widely made of the octagon and the Mobius strip together -- at the entrance to many community buildings.

Global knowledge society vs Global imagination society?

Global imagination society? Whilst the Damanhur experiment offers a valuable case study, implicit in the argument above is the extent to which the much acclaimed global "knowledge" society -- seemingly so evidently based on "information" -- is in fact, to a high degree, based on "imagination", if only through its reliance on "image". This argument is developed by Jennifer Gidley (Global Knowledge Futures: interpreting the emergence of imaginaries that cohere, 2010). This is clearly evident in:

- the omnipresence of heavily researched advertising considered so vital to marketing, competition and economic growth
- the dependence on imaginative engagement regarding possibilities as an inspiration for risk-taking, whether with respect to travel, (extreme) sports, gambling, or investment
- the importance attached to images by political parties in the promotion of their identities and manifestos
- the extensive use of imagery by religions, even in the minimalistic form of sacred scripts (as in the case of Islam)
- the identification with imagery in decor and dress, so vital to fashion and designs
- the enthusiasm for fictional media representations, most recently Avatar, Lord of the Rings and Harry Potter

W. Lance Bennett and Murray Edelman (Toward a New Political Narrative, Journal of Communication, 35, 4, pp. 156 - 171) make the point that:

Stories are among the most universal means of representing human events. In addition to suggesting an interpretation for a social happening, a well-crafted narrative can motivate belief and action of outsiders toward the actors and events caught up in the plot. A key question about stories, as with other situation-defining symbolic forms like metaphors, theories, and ideologies, is whether they introduce new and constructive insights into social life. Recurring and stereotypical accounts in the mass media can elicit powerful responses of belief or disbelief in distant audiences without bringing those audiences any closer to to political solutions for the problems that occasioned the stories in the first place.

But given the explicit place given to the quest for wisdom in widely popular media epics, of relevance are the nature of the pathways by which a "global wisdom society" might be engendered

Story lines and vehicles: Much is made of the value of a coherent narrative, preferably with a degree of imaginative quality. A story "line" is a key to many forms of journalism and media representation -- following the universal pattern of storytelling and myth. Essentially it is "along" these lines that people travel cognitively, whether in the shorter or longer term. In doing so they may be understood as using metaphoric "vehicles", as noted above: narratives, epics, belief systems, theoretical disciplines, models, or behavioural practices.

The notion of a vehicle can be fruitfully extended to include other coherent frameworks and initiatives through which knowledge is ordered, most especially arts and crafts, including "making" variously understood (cooking, clothing, music, poetry, artwork, gardening, etc).

Any such framework may indeed be understood as a "bubble" of hope in a sea of chaos. There is however a useful cognitive contrast to be made between a belief "system" and a cognitive "vehicle" -- understood as container metaphors in their own right. The first implies a degree of embodiment into the system with the individual, ideally, becoming an expression of the system. But, in the case of religions, for example, an individual is discouraged from understanding the "system" as a "vehicle" that can be navigated -- rather than as one in which the individual is a passenger (with any navigator being necessarily a distant leader, possibly long passed on). This interpretation of Ken Wilber's use of the of the conveyor metaphor has been separately criticized (Potential Misuse of the Conveyor Metaphor: recognition of the circular dynamic essential to its appropriate operation, 2007).

Tunnelling: Such vehicles, whether for the individual or the collective, may be understood as tunnelling through a space of exported
externalities. The tunnel is the path of relevance defined -- by analogy with the burrowing behaviour of worms and moles -- by ejecting or compacting material considered to be irrelevant to the path being followed. Ironically the astrophysicists use of the "wormhole" metaphor implies some such disassociation from otherwise -- from the path not travelled. Hence the interest in the possibility of all terrain vehicles capable of also travelling such alternative realms (Navigating Alternative Conceptual Realities: clues to the dynamics of enacting new paradigms through movement, 2002). Exploiting the wormhole metaphor, and the worm’s ingestion of the soil by which it is confronted, there is then also the question of how (and why) such cognitive externalities might also be embodied (Existential Embodiment of Externalities: radical cognitive engagement, 2009).

Exploiting the familiar vehicle metaphor, of concern is of course the tendency of any vehicle to be accident prone, to become obsolete and inoperable, and to require repair -- in the light of appropriate testing. The metaphor also highlights the potential dangers of use of dysfunctional vehicles on the information highways (From Information Highways to Songlines of the Noosphere, 1996). There is of course the charm of antique models and the pleasure of driving them.

Of course individuals already have the possibility of switching metaphor -- donning and doffing cognitive habits -- to navigate the circumstances of daily life (Creative Cognitive Engagement: beyond the limitations of descriptive patterning, 2006).

**World lines and the navigation of imagination space**

**Technology as dream**: Humanity prides itself on the capacity to invent and develop new technologies -- most notably to control its relationship to the natural environment. Curiously this instrumental expertise is conventionally dissociated from its symbolic significance - especially curious in that such inventions often emerge from "dreams" and people "dream" of bringing them about. This argument has been developed by Robert D. Romanyshyn (Technology as Symptom and Dream, 1989). The sense in which technology is "the desire for presence", the "technologization of human virtuality" and the "fantasmatic relation to the real" has been explored by André Cornelis Nusselder (Interface Fantasy: a lacanian cyborg ontology, 2006).

A related argument might be made for theories and models as a form of "conceptual technology", also emerging from dreams and constituting vehicles with which cognitive space is navigated. Of interest is why humanity engenders particular conceptual frameworks over the course of its history and what "imagination space" such technologies enable it to navigate. Myths may of course be seen in this light.

**World lines of physics**: The question here is whether the familiarity of narratives and "story lines" might be fruitfully infused with some of the formal insights of "world lines" as understood in theoretical physics. Again, if the notion of "world lines" is of significance to the advancement of knowledge regarding humanity's place in the universe, is there some possibility that they might be of vital relevance to understanding of knowledge space and how it is to be navigated -- especially with the problematic challenges of communication between worldviews?

In physics, the world line of an object is the unique path of that object as it travels through 4-dimensional spacetime. It is a convenient way of drawing out the history of an entity through space as well as time. The idea was pioneered by Einstein and the term is now most often used in relativity theories (i.e., general relativity and special relativity). However, world lines are also a general way of representing the course of events. The term is not bound to any specific theory. Thus in general usage, a world line is the sequential path of personal human events (with time and place as dimensions) that marks the history of a person -- perhaps starting at the time and place of one's birth until their death.

"Cognitive world lines"? However physics is typically averse to the subjective dimension of relevance here. "Cognitive physics" has yet to emerge as a discipline. There is little trace of "cognitive world lines" in the literature, although recognition is given -- as a metaphor -- to "psychological world lines". Reflection on "subjective world lines" remains speculative, as in this example by James Messig (2010):

There seems to be a higher meaning to time, especially to the subjectively experienced form of time in each one of our personal here and nows that transcends general relativistic abrupt space time warp based, or wormhole, travel into the past or into the future and then back into the present or past. Perhaps there are multiple levels of time and the primary dimension of time is that which each and everyone of us experiences as we live out our world lines within the context of the continuity in our sense of personal identity.... The point I am trying to make is that we may never be able to predict our subjective world line temporal activity streams either because of human free will, or because of the unpredictable deterministic volitional activities we make as they arise in day to day life.

**Narrative lines of stories and myths**

Arguably those preoccupied by understandings of a "narrative line" in a story have found little of relevance in "world lines". The interplay between mental state and narrative line is however variously explored in literature (Canaan Perry, Mental States and Narrative Line in Brief Encounter and The Red Shoes, Space Zoetrope: Commentaire Filminque, Litteraire et Culturel, 2007). Erik Erickson (The Life Cycle Completed, 1982) refers to understanding the single narrative line of one's life and the maintenance of coherence. This is especially significant in a civilization traumatized by apocalypse, as argued by Matthew Wolf-Meyer (Apocalypse, Ideology, America: science fiction and the myth of the post-apocalyptic everyday, rhizomes. 08 spring 2004):

... the imaginary relationship that an individual has to the socio-cultural body that she or he is a part of is of critical importance to the way in which fictions are understood to work within culture. Ideology is at once prosthetic and medium: Placed outside of the self in order to construct a meaningful relationship between the individual and a superstructure that may otherwise be seen as uncaring or oblivious to the individual's presence, the prosthetic works to both legitimate the presence of the individual and help
In discussing the political unconscious, Fredric Jameson (The Political Unconscious: narrative as a socially symbolic act, 2002) argues, in words that might well be reframed in terms of the physics of world lines, that:

What is denounced is therefore a system of allegorical interpretation in which the data of one narrative line are radically impoverished by their rewriting according to the paradigm of another narrative, which is taken as the former's master code or Un-narrative and proposed as the ultimate or unconscious meaning of the first one. (p. 6)

"Narrative line" may itself be used metaphorically, in ways useful to the above argument, as in the concern of Juan-Carlos Letelier, et al. (Pitfalls, Risks and Challenges in Teaching Biology of Cognition, 1997):

But the undeniable success of the paradigmatic point of view also hides a collection of defeats and failures that impel us to rethink the apparent solidity of that point of view. Some problems like the self-organization of complex systems, or the landscape of the human mental spaces have been refractory to the mainstream epistemology. As these unsolved problems are part of an important kernel of interest for many people, it is not surprising that, throughout these centuries, another "narrative line" has survived in search of an alternative theory of cognition.

The challenge, and freedom, of multiple narrative lines is noted by Jaqui Ford (Communication and Digital Technology here we come..., 2006):

In Vision After Television - Technological Convergence, Hypermedia, and the New Media Arts Field [1996], Michael Nash argues that most crucial fact of life in the post-television generation is the eventual collapse of the networks into a single bitstream of information that will enter the home as user-determined programming and services (p. 390) Within this post-television context, Nash addressed the state of a narrative in a non-narrative environment and argued that the death of narrative is a hugely misunderstood notion in the new media discourse, claiming that jumping form one place in a text, film, or song to any other place in any other text, film or song doesn't actually constitute a "non-narrative experience". He asserted that the tyranny of the single narrative line though a data space authored by one person has already been overturned in literature (Umberto Eco), but it is being supplanted by the new narratives written, he says, by the course that consciousness takes through information fields. The impulse to 'narratize' experience is endemic to the structure of consciousness and takes root from our mortality. (p. 392)

Cocoons as vehicles: Much has been made of the trend towards psychosocial cocooning (as noted above). Advances in communication technology are understood as having led to e-cocooning.

However rather than understand the cocoon as a static protective space, it may be fruitfully understood as a cognitive vehicle through which communication space is navigated, appropriately protected from a potentially disruptive, threatening environment. This is especially the case when e-cocooning is enabled. This reinforces the understanding of being able to travel the web -- and knowledge space -- from within such a cognitive vehicle, as a form of "nooship". This understanding echoes dreams and aspirations of travelling the universe -- then to be reframed as travelling the knowledge universe (Towards an Astrophysics of the Knowledge Universe? from astromantics to noonautics, 2006).

The web has long offered an explicit sense of the possibility of navigating information highways. Of further interest is the sense in which such highways are indicative of narrative lines pursued by a pattern of searches. More implicit however are the "cognitive world lines" explored by an individual -- potentially to be inferred from such search patterns. This might be said to delineate for the individual the subtle realm of "hearts and minds".

Metaphorical geometry in quest of globality and meaning: The cognitive dependence on the "line" metaphor, whether in world lines or narrative lines, is most curious. As one of the most "primitive" geometric forms, by which others are engendered, its carrying capacity is echoed in lines of communication of every kind -- and in the hyperlinks so fundamental to the organization of knowledge on the web.

The question is how "lines" then enable the emergence of any integrative understanding of globality, when the preferred metaphor or symbol for the latter is typically the sphere. This clearly requires a shift in dimensionality discussed in detail elsewhere (Metaphorical Geometry in Quest of Globality, 2009). The discussion summarizes the cognitive challenges associated with progression from lines to the paradoxical surfaces potentially more appropriate to the issues raised above (Engaging with Globality: through cognitive lines, circles, crowns or holes, 2009; Geometry of Thinking for Sustainable Global Governance, 2009; Geometry, Topology and Dynamics of Identity, 2009; Intercourse with Globality through Enacting a Klein bottle: cognitive implication in a polysensorial "lens", 2009).

This metaphoric quest is curiously echoed in choice of the cocoon metaphor -- implying the weaving of an encompassing ("global") context, presumably with one or more relevant discussion "threads" as a further variant of the line metaphor. Use of this metaphor is however also constrained in practice in comparison with richer understandings of weaving (Interweaving Thematic Threads and Learning Pathways, 2010; Magic Carpets as Psychoactive Systems Diagrams, 2010). Curiously, as discussed with respect to "bullet points" as a precursor to discussion "threads", such "points" imply an even more primitive cognitive geometry through which globality is approached -- with all its implications as a military metaphor (Enhancing Sustainable Development Strategies through Avoidance of Military Metaphors, 1998).
The cocoon metaphor also has various implications for the cognitive challenge of the "holes" through which one might both get into it and get out of it -- especially if there is any sense in which the cocoon takes the form of a Klein bottle having a paradoxical relationship between "inside" and "outside". It is this paradox which is presumably fundamental to engagement with any "other" -- supposedly "outside" or an "outsider".

Cognitive wormholes and knots in imagination space

Science fiction: In the absence of more fruitful insights from physicists regarding cognitive implications, the human navigation of the "universe" has been widely explored in science fiction -- itself a stimulus to the creative imagination of physicists.

One such stimulus is provided by a science fiction scenario explored by a number of writers. It focuses on the challenge of comprehending high degrees of complexity calling for decision-making under operational conditions (as is the case in global management). The problem is that of piloting or navigating a vessel through "hyperspace" or "sub-space", as imagined in the light of recent advances in theoretical physics and mathematics. Because of the inherent complexity of such environments, writers have explored the possibility that pilots and navigators might choose appropriate metaphors through which to perceive and order their task in relation to qualitative features of that complexity -- for example, flying like a bird, windsurfing, swimming like a fish, tunneling like a mole, etc. The mass of data input derived from various arrays of sensors, and otherwise completely unmanageable, is then channelled to the pilot in the form of appropriate sensory inputs to the nerve synapses corresponding to s/his "wings" or s/his "fins". Perception through the chosen metaphor is assisted by artificial intelligence software and appropriate graphic displays. The pilot switches between metaphors according to the nature of the hyperspace terrain. Such speculations do at least stimulate imagination concerning a possible marriage between metaphor and artificial intelligence in relation to governance.

Wormholes: As a futurist, Alan N. Shapiro (The Physics of Wormholes, 14 April 2010) offers a useful summary of the appeal of wormholes in relation to time travel in numerous functional media representations. Some reference is made to "psychological wormholes", most notably by literary and theatre critics -- a recognition of the cognitive challenges with which people are faced in real life. As noted by Richard F. Holman (What exactly is a 'wormhole'? Scientific American, 15 September 1997):

Wormholes are solutions to the Einstein field equations for gravity that act as "tunnels," connecting points in space-time in such a way that the trip between the points through the wormhole could take much less time than the trip through normal space.

The concept clearly has widespread intuitive appeal, suggesting an association with psychological experiences. The metaphor is used for a literary perspective on time by Linda Charnes (Reading for the Wormholes: micro-periods from the future, 2007) arguing:

The difficulty, of course, is that we cannot, nor would we want to, abandon the important project of understanding how people lived in times before ours -- what they experienced in their own cultural present. The texts we work on as "early modernists" require us to have this understanding. The challenge arises, in my view, when we believe that we can frame vast syntagmatic signifying networks within boxes of time that have beginning and end points -- no matter how flexibly we may articulate those limits. At this stage, however, we do not yet know what a different epistemology might look like, or how we might create stories of history that do not involve standardized chronological frames. And even if we did, how would we teach such an approach? Without strictly limited temporal boundaries to guide us, how would we identify the paradigms that do seem to arise out of particular eras in the past? How are we to find ways to detect the strangely recursive trends that "bend" history and interfere with our efforts to narrate progressive linear "periods"? Is it possible to create a transmissible methodology out of reading for temporal "wormholes"?

Charnes usefully introduces the psychoanalytic perspective of Jacques Lacan:

For the sake of speculation, let us imagine a textual circumstance or event that we'll call a "wormhole," in which we can detect an idea whose time arrives in advance of its historical "context." Lacan, and Zizek after him, have argued that for the individual subject, the truth of the past always arrives from the future, that history is always constructed retroactively. I would extend this logic further and say that the collective future always arrives in advance of its "past" -- that is to say, the future "show ups" up in bursts, fits and starts, ahead of our ability to recognize it as "the future." To put it still differently, future ideas must in some way be "embedded" in the texts of the past in order for us to discern their emergence from the position of hindsight. Such ideas might appear inexplicably as odd blips on the textual radar only to recede without further ado. Or they might crash onto a textual scene, sending up clouds of smoke that demand that attention be paid. The way to read for them is by looking for what seem to be mysterious crash sites: anachronistic ideas and depictions the causality of which remain indeterminate. Temporal anomalies from the future can be detected, but we need to find ways to decode their black boxes.

Sokal Affair: It is of course Lacan who extensively explored the topology of knots in psychoanalysis, as summatized by Alexandre Leupin (Voix and knots in knowledge and truth. In: Lacan and the Human Sciences, 1991). His arguments were a notable focus of the widely-commented, notorious hoax (usefully) perpetrated by the physicist Alan Sokal -- effectively exemplifying challenges of comprehensibility and explicability (Transgressing the Boundaries: toward a transformative hermeneutics of quantum gravity, 1996). One might ask whether insights of greater relevance to the challenge of global social insight might be offered by physicists. Sokal has himself reviewed the implication of his hoax (Beyond the Hoax: science, philosophy, and culture, 2008).
Conclusion: communication for meaningful change

Whilst appreciation of bullfighting may itself be considered incomprehensible, the skills of the matador in responding to the unexpected behaviour of the bull -- as with martial arts expertise -- offer a valuable metaphor for the information challenges of a turbulent world, as separately argued (Viable Global Governance through Bullfighting: challenge of transcendence, 2009). The extreme art for any change agent -- as matador -- is then the capacity to engage with this bull, especially given the mortal danger it represents, to life and livelihood, in endeavouring to do so.

Of course, the bull may metamorphose into other forms as implied by the perceptive insight of the premier management cybernetician, Stafford Beer in his adaptation of Le Chatelier's Principle (even prior to his dramatic experience in the Chile of Allende) -- relevant to any discussion of complex adaptive systems:

Reformers, critics of institutions, consultants in innovation, people in short who "want to get something done", often fail to see this point. They cannot understand why their strictures, advice or demands do not result in effective change. They expect either to achieve a measure of success in their own terms or to be flung off the premises. But an ultra-stable system (like a social institution) has no need to react in either of these ways. It specializes in equilibrum readjustment, which is to the observer a secret form of change requiring no actual alteration in the macro-systemic characteristics that he is trying to do something about. (Stafford Beer on Le Chatelier's Principle as applied to social systems: The Cybernetic Cytoblast - management itself. Chairman's Address to the International Cybernetic Congress, September 1969)

Given Beer's expertise, this early insight points onwards to the possibilities of other insights, regarding meaningful communication in a turbulent society, to be derived from subsequent development of cybernetics (Consciously Self-reflective Global Initiatives: Renaissance zones, complex adaptive systems, and third order organisations, 2007). Noteworthy is the recent development of cybersemiotics and knowledge cybernetics (Soren Brier, Cybersemiotics: why information is not enough, 2008; Maurice Yolles, Knowledge Cybernetics: a new metaphor for social collectives, Organisational Transformation and Social Change, 2006). The latter draws fruitfully on traditional Chinese insights. It is especially interesting how either cybernetics or semiotics can deal fruitfully with incomprehensibility and inexplicability -- notably with enthusiastic predictions by the artificial intelligence community that computers will soon exhibit greater intelligence than humans (12 Events That Will Change Everything, Scientific American, June 2010).

In a spirit of self-reflexivity, there are four curious phenomena which raise fundamental issues regarding the capacity to make effective use of the most advanced human insights in response to the unexpected and the incomprehensible. All relate to the processing of collective intelligence and the priority given to:

- safeguarding institutional turfdom over any capacity to elicit and give focus to emergent insight, as separately argued (Enabling Collective Intelligence in Response to Emergencies: Illustrated by the case of deep oil spill containment, 2010)
- safeguarding intellectual property, especially in the case of insights emerging from the academic world, where publication in a peer-reviewed journal (whatever the delays in relation to a current emergency) is a pre-requisite of personal career advancement. Understood in terms of the shifting relationship between frames of cognitive reference, this has been separately explored (Einstein's Implicit Theory of Relativity -- of Cognitive Property? Unexamined influence of patenting procedures, 2007)
- preferences for the latest insight when there may be active political preferences for insights variously framed as obsolete, despite appearing viable to those invested in them, as separately discussed (Considering All the Strategic Options -- whilst ignoring alternatives and disclosing cognitive protectionism, 2009). This phenomenon may be appropriately illustrated by the continuing viability of a coelacanth, one of the oldest order of fish, previously considered to be a "missing link" in the evolutionary record towards more viable species. This consideration shifts the concern from assumptions of "best practice" to a recognition of a system of insights whose viability is determined by circumstance.
- assumptions of ever-increasing collective human capacity to manage information and knowledge in response to global challenges when there are ever more evident indications of the possibility of a memetic singularity, as variously argued (Emerging Memetic Singularity in the Global Knowledge Society, 2009; Hyperaction through Hypercomprehension and Hyperdrive: necessary complement to proliferation of hypermedia in hypersociety, 2006)

Stafford Beer's insight clearly highlights personal challenges for any change agent operating in the context outlined above. These have been variously discussed (Post-crisis Opportunities: in quest of radical coherence, 1995; Why and Wherefore of Communication, 1997; Declaration of Universal Independence, 2009).

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