



laetus in praesens

Alternative view of segmented documents via Kairos

30 April 2014 | Draft

Engendering Viable Global Futures through Hemispheric Integration a radical challenge to individual imagination

-- / --

Introduction

Global knowledge-management "technology"?

Reframing whingeing and blame-gaming through meta-discourse?

Antipodean mindsets strangely relevant to the future

Moving radically otherwise in troubled conventional times

Change what, where, when, how, for whom, by whom?

Reframing experiential reality rather than changing it

Recognizing degrees of radical reframing of reality

Enabling individual re-imagination of a future-engendering present

Embracing error and the netherworld

Encycling, enwholing and wholth

References

Paper originally commissioned for a proposed book on the *History of Australian Futures*

Introduction

The interesting challenge in writing about the future at this time can be summarized in terms of "for whom", "how succinct", and how "radically imaginative" -- in the light of learnings from the past and frustrations with the present course of events. It can be framed by studies by which one would have liked to have been influenced early on, in this case that of Susantha Goonatilake (*Toward a Global Science: mining civilizational knowledge*, 1999).

With a view to being succinct, it is then useful to frame the argument which follows by the experiences which engendered it. These most notably included the privilege of designing the profiling for online access to thousands of interrelated: international nonprofit organizations, their preoccupations, their strategies, the values underlying their initiatives, and the associated understandings of human development, and the integrative organization of knowledge.

This initiative took the form of multiple editions of the *Yearbook of International Organizations*, and of the complementary *Encyclopedia of World Problems and Human Potential*. The latter arose specifically as a consequence of the initiative of *Mankind 2000* -- instrumental in the creation of the *World Futures Studies Federation* (WFSF). The evolution of the Encyclopedia initiative benefitted significantly from the environmental perspectives of another Australian, Nadia McLaren. Efforts were made to continue the process through the Australia-based *Nautilus Institute for Security and Sustainability*, directed by *Peter Hayes*.

Perhaps especially curious is the manner in which these information initiatives were undertaken within an unusual institutional complex, engendered and sustained over a century, namely the *Mundaneum*, the *International Federation for Documentation*, and the *Union of International Associations*. A key figure in that complex, *Paul Otlet*, has been named by historians as the "Father of the Internet". Strangely it has been another Australian, who has done much to increase recognition of that innovative period (*W. Boyd Rayward, The Universe of Information: the work of Paul Otlet for documentation and international organization*, 1975).

Rayward has successfully mediated the extraordinary current interest of Google in digitising the resources of the Mundaneum from that period (Google Cultural Institute, *The Origins of the Internet in Europe: collecting, indexing and sharing knowledge*). As he makes clear, Otlet can also be seen as one of the early futurists with a global knowledge-based preoccupation -- evident from his writings and his final visionary opus (*Monde: essai d'universalisme -- connaissance du monde; sentiment du monde; action organisée et plan du monde*, 1935).

Otlet's initiative may be appreciated as a challenging conundrum (*Union of International Associations -- Virtual Organization: Paul Otlet's 100-year Hypertext Conundrum?* 2001). This frames the challenge variously articulated otherwise (*Eliciting a Universe of*

Meaning -- within a global information society of fragmenting knowledge and relationships, 2013; *Self-reflexive Challenges of Integrative Futures*, 2008).

The title encourages a variety of interpretations of relevance to the argument, especially with respect to "hemisphere". Clearly Australasia offers perspectives from a different hemisphere -- potentially challenging the tendency to any Flat Earth sense of globalization (*Irresponsible Dependence on a Flat Earth Mentality -- in response to global governance challenges*, 2008). Such perspectives clearly frame the need to recognize the challenge of blind spots. The deceptive cultural contrasts are a reminder of the contrasting functionality variously attributed to the hemispheres of the brain -- with the implication here of the need to integrate disparate modes of thinking.

It is appropriate to ask whether the current challenges to global governance, and any requisite integration of the [global brain](#), could not be fruitfully explored with respect to [split-brain](#) pathology, any form of split consciousness, [hemispheric specialization](#), or bipolar disorder. "Hemisphere" is also a reminder of its metaphorical appropriation from the potentially complex patterns of geometry -- rarely explored in relation to globality (*Metaphorical Geometry in Quest of Globality -- in response to global governance challenges*, 2009).

With respect to strategic vision, the requirement for separate hemispheres to achieve stereoscopic depth could also be understood as a challenge to implicit assumptions regarding any "cyclopean" form of globality (*Cyclopean Vision versus Poly-sensual Engagement*, 2006). Such integrative implications are also evoked with respect to political economy (Diego Sánchez-Ancochea and Kenneth C. Shadlen, *The Political Economy of Hemispheric Integration: responding to globalization in the Americas*, 2008; Maxwell Cameron, *The Future of Hemispheric Integration*, *The Mark*, 7 March 2012). These currently play out with respect to the [Trans-Pacific Partnership](#) (TPP).

Given these various uses of "hemisphere", there is the most considerable irony to the design of nuclear weapons based on ensuring the "integration" of two hemispheres of sub-critical uranium such as to constitute the critical mass engendering the explosion. This is seen variously as either heralding the end of global civilization or ensuring its survival. With the other associations, it is useful to explore the potential implications of a cognitive analogue

Global knowledge-management "technology"?

The technical development of the online Encyclopedia, as an exercise in knowledge management, specifically resulted in the quest for software enabling visualization (and sonification) of the complex networks it included -- as a means of enhancing ever more integrative comprehension. It is somewhat extraordinary that it was primarily Australian initiatives who were significant to these explorations, namely [Netmap Analytics](#) ([John Galloway](#)), [Leximancer](#) (QUT) and the [Stella Polyhedron Navigator](#) ([Robert Webb](#)).

These preoccupations were paralleled by the increasing recognition that the condition of the world, from many "technical" perspectives, was held to be getting worse. Part of the challenge appeared to lie in the desperate effort to reframe conditions "positively" ([Barbara Ehrenreich](#), *Bright-sided: how the relentless promotion of positive thinking has undermined America*, 2009). This avoids engaging with problematic "negative" indications -- so variously evident to many, and so significant to any cybernetic systems perspective as feedback loops.

The issue is usefully clarified by one Australian futurist, [Peter Ellyard](#) (*Designing 2050: pathways to sustainable prosperity on spaceship earth*, 2008). He explicitly distinguishes between the optimistic "future makers" and the others -- the "future takers" -- about whom he despairs. The difficulty is that the future that some may so enthusiastically endeavour to "make" (according to their own image) may well deprive others of the future they desire. The makers (perceiving themselves to be the "good guys") then also need to be recognized as takers. Any challenge to such deprivation sustains a problematic dynamic -- one with which society is already overly familiar through the slogan of binary policy-making: *you're either with us, or against us*.

The challenge is to reframe such binary thinking, since each party is confronted with what to do with the other, when it has the power to do so -- whether to "shoot them" or to "re-educate them" (*Transcending Simplistic Binary Contractual Relationships*, 2012). For those opting for a "positive" framing of current conditions, the favoured question, as presented by Ellyard, relates to the choice to be made between *Is the glass half empty or half full?* Those opting for the pessimistic option can then be readily framed as unquestionably cynical -- effectively draining the context of "positive" energy -- placing the burden on the other to prove the contrary.

Given the theme of hemispheric integration explored here, this deliberate disassociation from the "negative" merits consideration in the light of the high voltages obtained from "integrating" oppositely charged hemispheres in a [Van de Graaff electrostatic generator](#) -- as commonly demonstrated in schools. This is of particular relevance in a global civilization in which any other hemisphere is considered to be "negatively" charged from the more "positive" perspective. Completion of a circuit between positive and negative offers access to forms of energy which tend to manifest disastrously otherwise.

The emphasis on being "with us" underlies aspirations to a world which is unified, globalized and planetized -- as advocated by Ellyard. The challenge here is the simplistic understanding of those terms in practice -- without questioning whether any such whole, as a system, would embody requisite variety in cybernetic terms.

Musical harmony offers a useful metaphor. What music would be adequate to represent a viable synthesis? Is there really an expectation that everyone should "sing from the same hymn sheet" -- especially given the variety of musical preferences and tuning systems? As with the glass being half-full or half-empty, this suggests that there is an unresolved challenge of taste preferences -- one person's "meat" being the other person's "poison".

The challenge of any simpler "global action plan" -- irrespective of that of engendering consensus -- is deliverability. The track record in this respect is deplorable -- in striking contrast to the ease with which missiles can be "delivered" to a selected target. Assumptions regarding the deliverability of knowledge are totally distorted by the seeming ease of global telecommunications. These take very little account of [throughput](#) as this relates to the limited uptake of knowledge disseminated in this way to any "target". The competitive

preoccupations of media advertisers -- regarding attention time -- are indicative in this respect. [Information overload](#) is now a universal problem.

As argued by media scholar and activist [Ethan Zuckerman](#) (*Rewire: Digital Cosmopolitans in the Age of Connection*, 2013), the technological ability to communicate with someone does not inevitably lead to increased human connection. At the most basic level, the human tendency to "flock together" means that most interactions, online or off, are with a small set of people who have much in common. Zuckerman highlights technology's unsuspected role in disconnecting ourselves from the rest of the world. The point can be made otherwise (*Dynamically Gated Conceptual Communities: emergent patterns of isolation within knowledge society*, 2004)

Opportunistic manipulation of the half-full/half-empty framing is ironically illustrated by the case of WHO, as reported by [Fred Pearce](#) (*UN's safe drinking water target was never really met*, *New Scientist*, 3 April 2014):

In 2012, the World Health Organization (WHO) declared that a UN Millennium Development Goal - to "halve the proportion of people without access to safe drinking water" between 1990 and 2015 -- had been met. UN secretary-general Ban Ki-Moon hailed "a great achievement for the people of the world". But now the WHO's official journal has admitted that the claim does not stand up.

The problem is that we don't have global data on the cleanliness of drinking water.... So the WHO redefined the health goal as an engineering goal: to halve those without access to "improved" water supplies. **In practice, that encouraged governments to meet the targets by delivering the same dirty water in new pipes.** [*emphasis added*]

In terms of deliverability, such a process may well prove to be the case with respect to other [Millennium Development Goals](#). The difficulty is that any political initiative needs to promote itself through a "half-full" perspective, using a "half-empty" perspective by which to frame the failure of predecessors -- blithely leaving it to successors to whinge about inadequacies in optimistic claims currently made. In this context authoritative declarations and presentations of evidence have become decreasingly credible -- almost by the month.

This is indicative of the increasing tendency for those associated with collective (global) initiatives to believe uncritically in the information they themselves produce for public consumption to promote their initiative. This is further reinforced by the developing tendency whereby scientists are required to have statements to the public approved in advance by a [press officer](#)". This is remarkably reminiscent of the requirements of Communist regimes for approval by a [political commissar](#)" -- preceded by the earlier requirements for an [imprimatur](#), and ironically similar to the peer review process (as it is now called into question). In the emerging process in which much value is purportedly attached by institutions and the media to solicited feedback, solicitation has itself become a marketing device to create a semblance of openness.

Ellyard subtitles his study, using the "spaceship" metaphor, advocating the need for people to recognize themselves as "cosmonauts". The difficulty is that the metaphor leaves unexamined the constraints on travel in "space". More fruitful might be recognition of "noonauts" and their challenge in navigating knowledge space -- the [noosphere](#) (*Towards an Astrophysics of the Knowledge Universe: from astronautics to noonautics?* 2006).

Such concerns render meaningful and relevant various paradoxical insights such as: *We are our own metaphor* ([Gregory Bateson](#), 1991); *A trap is a function of the nature of the trapped* ([Geoffrey Vickers](#), 1970); *Those who cannot remember the past are condemned to repeat it* ([George Santayana](#), 1905); and *On the requirement to embrace error* ([Donald Michael](#), 1973).

Reframing whingeing and blame-gaming through meta-discourse?

The tragedy of the times might be said to be the highly limited ability to transcend such constraints and engage in any form of meta-dialogue through which engagement with a problematic future could be reframed. Society has been unable to create viable spaces for any form of ["meta-discourse"](#). Universities and think tanks offer a prime example. Those promoting variants of it, or of any integrative perspective, are typically perceived (most notably by their peers) to be as much part of the problem as of any means of resolving it -- as with those advocating strategic solutions of any kind (*Epistemological Challenge of Cognitive Body Odour*, 2006). This dynamic does not figure in any systems diagram, as might emerge from use of mapping techniques by other Australians ([Argument Mapping](#) by [Tim van Gelder](#); wisdom mapping by J. Martin Hays, *Mapping wisdom as a complex adaptive system*, *Management and Marketing*, 2010).

Framed in this way, the times might be characterized (using a much favoured Australian term) by a vast pattern of ["whingeing"](#) in which all engage -- most notably those claiming to be progressive. There is always an "other" who is at fault in a vast blame game (*Reframing finger-pointing, the blame-game and demonization*, 2009; James Harvey, *Getting Beyond the Blame Game*, *Educational Leadership*, February 2014) . This statement is an example.

The process is the essence of the relationship between political parties in practice -- and may be said to characterize democracy. Advocacy of "positive" initiatives naturally evokes a whingeing "negative" response -- thereby segmenting society into quarrelling constituencies. It is noteworthy that "solutions databases" are rare, specialized (namely uncoordinated), and seldom sustainable in the longer term -- despite the "patience" of the problems to which they claim to be relevant. It is such unacknowledged dynamics which prevent inhibit recognition of remedial capacity in response to problems (*Recognizing the Psychosocial Boundaries of Remedial Action: constraints on ensuring a safe operating space for humanity*, 2009).

It is one thing to profile and to interrelate entities, seemingly of significance to the future, it is another to recognize the challenging dynamics between them -- whether evidently conflictual or, more frequently, unmentionable and even denied. There is a dysfunctional ease to the pretence that such dynamics are not a fundamental constraint on the emergence of a desirable future. It is only very recently that the incidence of corruption has been formally recognized as a major constraining factor. Most remarkable, rather than the level of

corruption costing the EU economy some 120 billion euros per year (*EU Anti-Corruption Report*, 2014), is the fact that so little effort has previously been made to acknowledge that corruption. More extraordinary, over the years of its own existence, is how little effort is made to acknowledge the level of corruption within EU decision-making processes themselves (*Scientific Gerrymandering of Boundaries of Overpopulation Debate*, 2012).

This argument is tragically appropriate to the various key reports by the wise on the drama of the times, whether those of UN bodies, the Club of Rome, the Royal Society, or others. The reports might themselves be said to be carefully designed to avoid taking systemic account of each others framing, as vast exercises in skilled "conceptual gerrymandering" to reinforce their distinctive identity and authority.

This recognition resulted in multiple experiments over the years in enhancing dialogue in larger groups typical of international events, especially through the efforts of Nadia McLaren. These notably took the form of implementing communications systems between participants, rather than as typically mediated by organizers (*History of Participant Interaction Messaging 1979 to 1995*, 2007). One such experiment was at a conference of the WFSF. A more radical approach was the organization of multiple sessions of an [International School of Ignorance](#) -- as a complement to the many initiatives promoting particular forms of wisdom (typically to the exclusion of others). In the light of the lack of any uptake, such experiments could be judged a failure -- although texting technology could be seen as a proven substitute in some respects.

Antipodean mindsets strangely relevant to the future

Aside from those Australians cited above, the region has engendered a curious nexus of people active in reframing future thinking. This has been most evident in the formal responsibilities taken by individuals sustaining the WFSF initiative. It could be considered improbable that the *Knowledge Base for Futures Studies* should have emerged from Australia under the guidance of [Richard Slaughter](#). Equally improbable is the key comparative text on integrative frameworks prepared by [Jennifer Gidley](#), currently president of WFSF. Of continuing significance has been the editorial role of [Sohail Inayatullah](#) with respect to the *Journal of Futures Studies* -- notably sensitive to the contrasting perspectives of the wider Asian region -- as recommended by Goonatilake (1999).

Could it be said that the Australian mindset is some way more sensitive to longer time spans? Why was it that Australians provided a unique overview of the impact of the Club of Rome initiatives (*Club of Rome Reports and Bifurcations: a 40-year overview*, 2012; [Graham Turner](#), *A Comparison of the Limits to Growth with Thirty Years of Reality*, 2007)?

Beyond conventional understandings of "futures" are of course: the underlying framework of the Aboriginal *Dreaming*, so ably made relevant to the Western mindset by [David Tacy](#) (*Edge of the Sacred: transformation in Australia*, 1995), the modern myth-making of *Lord of the Rings* (filmed so appropriately in New Zealand), recognition of the relevance of flowers to warfare by [Ann Elias](#) (*War and the Visual Language of Flowers: an antipodean perspective*, 2008), and the radical challenge to conventional complacency (as represented by the WikiLeaks initiative of [Julian Assange](#)).

In an effort to challenge the limitations of conventional framings, the possibility of developing a [University of Earth](#) has been explored in relation to the work of [Diana James](#) with the Aboriginal people of the Pitjantjatjara in instigating the Angatja Bush College. This notably influenced a recognition that their traditional [songlines](#) could be seen as indicative of the possibility of "songlines of the noosphere" -- as a development of web links within a global knowledge-based society (*From Information Highways to Songlines of the Noosphere*, 1996)..

Being at the "arse end of the world", as so notoriously articulated by an Australian Prime Minister, is indicative of a contrasting mode of thinking about a supposedly "global" world which many continue to inhabit as though it were flat. This sensitivity, both from the Southern Hemisphere and in the Far East, makes evident to a higher degree the role of the "shadow" (in Jungian terms), most obviously through time zone challenges to communication with other parts of the globe. Consequently "thinking globally" acquires an extra dimension -- enhanced by the vast empty spaces to which few are accustomed elsewhere. The suppressed "Black History" of "White Australia" implies an additional dimension, as is evident from the controversies of the so-called [history wars](#) and the range of associated "stories" (*Where There is No Time and Nothing Matters: cognitive challenges at the Edge of the World*, 2008; Nicholas Clements, *Tasmania's Black War: a tragic case of lest we remember? The Conversation*, 24 April 2014).

The point might be made otherwise through recognition of the obsession worldwide with Twitter and Facebook-style communication. There is a case for acknowledging the perspective of the "arse end" -- as is provocatively made in proposals for an Arsebook, as a seldom-cited complement, and potentially a powerful metaphor of "hemispheric integration". Such metaphors (including ["front ends"](#) and ["back ends"](#)) have acquired dramatic global implications following controversial claims regarding the role of social media as "front ends" for invasive data gathering, and the secretive placement of ["backdoors"](#) in computer operating systems -- at the "back end".

The PM's surprising declaration was subsequently embodied as a theme in a comedy musical production (*Keating!* 2005) -- in true Aussie style. In related style, New Zealand farmers have been vociferous in their opposition to a ["fart tax"](#). A review in *The Guardian* helpfully framed the contents of the above-mentioned Encyclopedia as "flatulence" (*Flatulence is a Problem Aired: resmelling the stench of past undertakings*, 2013). Could more then be creatively made of a generic understanding of humanity's "emissions problem" (*Sins of Hot Air Emission, Omission, Commission and Promission: the political challenge of responding to global crises*, 2009)? Is containing offensive "hot air" a means of exploring political discourse (*Conversion of Global Hot Air Emissions to Music*, 2009)?

Together these factors create a realm of paradox -- even an unusual relationship to time. This is exemplified by a bluntly frank attitude to "bull" and the necessity of fighting it in its various forms, as separately explored (*Viable Global Governance through Bullfighting: challenge of transcendence*, 2009). At a different extreme this is indicated by placing monumental art of a relatively high order of abstraction (the [Möbius strip](#) and the [Szilassi polyhedron](#)) in [Reconciliation Place](#) in Canberra -- emblematic of a potentially more fruitful relationship to the challenging dimensions of society, whether within Australasia or worldwide.

Moving radically otherwise in troubled conventional times

The brief framing offered above, argued in detail in other writings, suggests that governance of the world is not about to change in any reasonable self-reflexive way -- as might be assumed from articulations of optimistic future-oriented possibilities for doing so. There is a sense of awaiting catastrophe, as being the primary trigger for effective change -- however problematic that change may itself be for many.

Those focusing on the "positive" as a framing belief will be continue to travel forward within their respective belief systems and comfort zones -- however much these will themselves contribute to catastrophic social breakdown. The classic image of the Easter Island statues comes to mind -- entombed imagination, blindly awaiting appropriate global governance. The challenge for the collective relevance of any futures studies, as exemplified by the recent (and ongoing) financial crisis, might best be framed by the classic outburst of Jack Nicholson in *As Good as It Gets* (1997): *I am drowning here, and you're describing the water.*

The possibility explored in the following argument is the opportunity for quite radical cognitive reframing -- by the individual, rather than by the collective (challenged by meta-discourse of any significance). This contrasts with the conventional posture of patiently working for change, which may well be of a token nature at best. Many vested interests have a deep commitment to putting a positive spin on events in support of the possibility of change -- "sometime maybe", since "change takes time". The concern here is how a creative individual might choose to respond to such a viscous context -- in the present.

One obvious strategy is to engage politically, as exemplified by political activists of every persuasion. This may extend to legitimated violence as with Islamic jihadists, Christian militants, and their Jewish counterparts. It is unfortunate that those Abrahamic religions have been unable to reframe the challenge more adequately -- even with respect to their own internal conflicts. Each presents claims to being "chosen" as representative of a belief system of unique "supremacy". Little has been learned from fundamental physics regarding more imaginative and integrative understanding reconciling "universal" with "singularity" -- as might be made in explorations of mathematical theology (*Mathematical Theology: Future Science of Confidence in Belief*, 2011). More problematic (as noted above) is that the capacity to deliver integrative insights worldwide is demonstrably inadequate -- whether or not they can be embodied by more appropriate leadership, as anticipated by some.

It is curious to note that members of financial, technological and power elites are increasingly sensitive to the possibility of "moving elsewhere" -- echoing the sentiments of the popular musical: *Stop the World, I Want to Get Off*. More conventionally this takes the form of private islands, remote estates and gated communities -- reminiscent of the fortresses of yore. More curious is the enthusiasm for technologies which may make "moving off-planet" feasible, whether to space habits, opportunities in the solar system (Moon, asteroids, planets), or on the exoplanets (of other star systems). Virtual analogues may be cultivated, together with the possibility of [mind uploading](#) -- with gaming offering a sense of the possibility. Some may frame the challenge as one of "moving elsewhere" through cryogenics and related techniques of immortality.

The possibility that a major section of society might effectively travel "one way", whilst others travel "another way", is already highlighted by religion and other ideologies. More intriguing are the arguments by anthropologists that this may have already happened in the past (Paul Rincon, *Human line 'nearly split in two'*, *BBC News*, 24 April 2008). More controversially a "genetic upper class" and a "dim-witted underclass" may in future emerge, according to evolutionary theorist [Oliver Curry](#) (*Human species 'may split in two'*, *BBC News*, 17 October 2006). Setting aside such options, the issue for the ordinary mortal is then how to move on with more limited conventional resources.

More intriguing however is the sense in which the disparate cognitive preferences by which people are nourished may take the form of a radical "splintering" -- already partially recognized in the fragmentation of the disciplines. Each may then tend to frame themselves as part of a "memetic upper class" and others as "dim-witted" -- as is already evident to a degree in attitudes between generations and in cultural snobbery.

Change what, where, when, how, for whom, by whom?

Much is made of the need for change -- whether framed as "change the world", "change society", "change the economic system", or other variants. Religions have a strong commitment to changing the unfortunate belief systems of "unbelievers" -- most notably those who uphold some alternative belief. Political ideologies echo this pattern.

The problem for individuals is the manner in which they are the target of change initiatives -- themselves totally incapable of reconciling their differences or addressing them creatively. Why should an individual engage receptively with such initiatives -- especially when promoted with characteristic arrogance? By whom is the right to change "my world" determined?

The many features of society about which one may "whinge", suggest that one could respond to the siren call of the activists and go out and do (political) battle with those engendering those conditions. Clearly these battles are indeed worthy for some, just as they are so framed by those with whom one is then in conflict. The "us and them" game even encourages the others to be framed as "evil", with the refreshing implication of one's own special "goodness" -- despite any reciprocated framing as "evil" by others.

What might "moving on" from this dynamic then imply? Rather than "whingeing" and engaging combatively within a seemingly outdated mindset, is there a case for abandoning boring and unfruitful interactions to those who remain enthused by their game-playing potential? What might this mean in practice?

An interesting example is provided from the perspective of evolutionary biology, namely the [coelacanth](#). This is one of the oldest fish -- a living fossil -- which continues to be viable to a degree. Is it useful to seek to enable it to develop beyond the evolutionary trap in which it might be framed as finding itself?

The same might be asked of the Beefeaters of the Tower of London. Why should they be encouraged from some other perspective to "get a life", when the role is felt to be satisfactory by those who embody it? Far more controversially, to what extent does such an argument apply to many groups and institutions -- potentially including the United Nations itself?

Reframing experiential reality rather than changing it

Will tourists of future centuries be interested to visit the United Nations headquarters (as they now visit the Tower of London) to be witness to characteristic processes, such as the passing of Resolutions? Should Resolutions themselves be better understood as exercises in reframing reality irrespective of any implication that they might be intended to change it?

This is not an argument for challenging the role of the United Nations, as but one example. It is an argument for allowing such bodies -- within one's own thinking -- to continue to function as they will, as in the decades-long processes of "reform of the United Nations". The argument is to seek ways of investing one's energies otherwise and more fruitfully, rather than in what might be termed the Project Logik characteristic of the sense of *Realpolitik* associated with such processes. This Project Logik can be recognized as a feature of Max Weber's "iron cage" of rationalization. It can be seen in the extent to which daily life is increasingly an exercise in accountancy and legislation, as argued separately (*Cyborgs, Legaborgs, Finaborgs, Mediborgs*, 2013). A shift is now seen to *Noopolitik*.

The seeming complacency of this attitude can of course be challenged in terms of the many forms of civilizational collapse currently envisaged. However, rather than frame collapse as a condition of unquestionable gloom, there may be ways of framing it more creatively -- especially if it is as inevitable as some predict -- strangely analogous to personal death. How to thrive through it, rather than simply to survive? What does it imply in terms of the *adaptive cycle* articulated by the Resilience Alliance and argued by Thomas Homer-Dixon (*The Upside of Down: catastrophe, creativity, and the renewal of civilization*, 2006.)?

Especially challenging are the expected levels of suffering -- in the light of the manner in which society is being systematically inured to it (*Indifference to the Suffering of Others*, 2013). There is a case for exploring more creatively the metaphors through which individuals and societies engage in living and dying, as separately argued (*Metaphors To Die By: correspondences between a collapsing civilization and a dying person*, 2013).

Conventional understandings of the sustainability, to which governance aspires, imply a pattern of "business as usual" -- typically continuing growth (as in any *Ponzi scheme*). It is possible that sustainability could be more fruitfully understood through the seasonal life cycle of any crop -- implying a more dramatic process of living and dying. This implies a cognitive challenge regarding the nature of death, and the extent to which many may already be understood as the "living dead", as discussed separately (*Being neither Dead nor Alive*, 2014).

Given the aspirations to "rebirth" of many religions, how might the nature of cognitive rebirth be imagined otherwise, as explored, for example, by Steven M. Rosen (*Dreams, Death, Rebirth: a multimedia topological odyssey into alchemy's hidden dimensions*, 2013)?

Recognizing degrees of radical reframing of reality

The incommensurable models of reality, as variously promoted and simulated, make no provision for the future emergence of contrary perspectives. This suggests that individuals have the freedom to "seize the day" (*carpe diem*) and experiment with any possibilities that seem viable -- taking account of the learnings of the past. This has been argued separately (*From Changing the Strategic Game to Changing the Strategic Frame: missing cognitive possibility in changing the system not the planet*, 2010). The point might be made otherwise by asking how the future will frame the manner in which conventions of the present frame thinking about the future.

Characteristic of futures studies, there have been numerous suggestions and processes for (re-)imagining the future and re-enchanting it. These include: Joshua Landy and Michael Saler (*The Re-Enchantment of the World*, 2009); Kathleen Lennon (*Re-enchanting the World: the role of imagination in perception*, 2010); Isabel Ramos and João Alvaro Carvalho (*Reinventing the Future: a study of the organizational mind*, 2006); Bernard Stiegler (*The Re-Enchantment of the World: the value of the human spirit vs industrial populism*, 2013); David Suzuki (*Reinventing the Future: protecting the Earth from ourselves*, 2005); Center for Public Justice (*Re-Imagining the World*, 1994); and O. R. Dathorne (*Imagining the World: mythical belief versus reality in global encounters*, 1994).

The implication is frequently that this is preferably a collective endeavour -- collectively re-imagining a collective future. As the process of reframing the achievement of desirable goals, despite evidence to the contrary, it might even be seen as the essence of religion, politics and advertising.

In an institutional environment, with multiple vested interests in what one should believe, any "do it yourself" (DIY) approach is typically deprecated as the height of un wisdom -- even severely sanctioned. Yet it is only too evident that institutions are not "delivering" as advertised, and seem incapable of addressing creatively their own inadequacies and collaborative failings.

A range of possibilities for the individual might therefore include the following:

- adopt an extant ("off-the-shelf") belief system, typically considered extraordinary by some -- perhaps framed by a particular spiritual revelation, insight or tradition
- creatively elaborate an extraordinary belief system or coherent world view -- through imaginative world-making
- reframe creatively the experience of psychosocial dynamics aesthetically -- as a dance, as theatre, as an art form, as an epic, etc - - to be appreciated aesthetically, whether this implies participation rather than simple observation alone
- reframe psychosocial dynamics through abstract models characteristic of preferred disciplines -- politics, economics, environment, theology, etc
- cultivate a lifestyle or practice which effectively reframes engagement with reality -- irrespective of how it might be described
- cultivate a self-reflexive cognitive or existential style -- dissociated from any particular formalization, articulation or pattern of

closure

The last might be seen as consistent with the arguments of [Paul Feyerabend](#) (*Against Method: outline of an anarchistic theory of knowledge*, 1975; *Conquest of Abundance: a tale of abstraction versus the richness of being*, 1999). Any such listing is however also characteristic of but one of a range of mindscapes, as argued by [Magoroh Maruyama](#) (*Mindscapes, social patterns and future development of scientific theory types*. *Cybernetica*, 1980).

More fundamentally, "radical reframing" may be understood as a style challenging fixity and permanence -- perhaps to be associated with [flow psychology](#) or in the spirit of Buddhism (Joan Stambaugh, *Impermanence is Buddha-Nature*, 1990; Ajahn Chah and Paul Breiter, *Everything Arises, Everything Falls Away: teachings on impermanence and the end of suffering*, 2005). However, the subtitle of the last -- as an authoritative "teaching" -- is indicative of the paradoxical challenge.

Enabling individual re-imagination of a future-engendering present

The argument to be developed follows from Ellyard's distinction between makers and takers. The question is how individuals can "make" a future for themselves without "taking" from others. Similarly, how can the "takers" take, without depriving others?

One response lies in the realm of imagination and reframing. However, as a process, this suggests that creative imagination could well be applied to imagination and reframing -- rather than necessarily accepting how convention defines them to be. There is a sense in which the self-reflexive process is dealing with cognitive "stuff" in the moment. Curiously the *New Scientist* devoted a recent special report to [The Meaning of Stuff: our strange relationship with the things we own](#) (29 March 2014). Clearly much of this stuff takes the form of concepts about reality which we individually loan -- or lease, or variously appropriate -- echoing the problematic conventional implications of property ownership. Squatting comes to mind. The framings of the Aboriginal peoples clearly then merit consideration. Is there effectively a cognitive *Terra Nullius* open to all?

The stuff of reality, in the light of current understandings of physics, necessarily merits consideration as a complex of matter, energy and information -- however we may choose to dream about it, as suggested by [Stephen Hawking](#) (*The Dreams That Stuff Is Made Of: the most astounding papers of quantum physics -- and how they shook the scientific world*, 2011). Physicists have acquired an unchallenged licence to dream -- funded by tax-payers -- suggesting a mode from which others could benefit.

A fundamental challenge to conventional society is indeed framed in terms of "energy" -- with potentially catastrophic outcomes, as remarkably analyzed with respect to the Roman Empire by Thomas Homer-Dixon (*The Upside of Down: catastrophe, creativity, and the renewal of civilization*, 2006).

A key initiative on which conventional hopes for energy are currently built is the tokamak design of the toroidal nuclear fusion reactor: *ITER: the world's largest Tokamak*. There is a case for "re-cognizing" its design principles as a key to processing imagination by which personal futures can be engendered and nourished, as separately argued (*Enactivating a Cognitive Fusion Reactor: Imaginal Transformation of Energy Resourcing*, 2006; *Massive Elicitation of Psychosocial Energy: requisite technology for collective enlightenment*, 2011).

The remarkable preoccupation regarding the viability of a fusion reactor is to ensure that the spinning plasma does not come in contact with the walls of its toroidal container. Is this suggestive of a key design requirement in imaginatively engendering the future?

In a conventional world in which reality is increasingly framed by "spin", such a reactor design suggests that more may be made of insights into oral traditions through which tales are "spun". The coherence of reality, and the attractive power of any tale, might be fruitfully married with the insights of physics. A case can be made that the mnemonic associations, so valuable to that coherence, can benefit from more radical cognitive appreciation of music, song and poetry -- so valued otherwise (*Being a Poem in the Making: engendering a multiverse through musing*, 2012).

This suggests that the problematic socio-political implications of Ellyard's binary framing of takers and makers might be reframed through the design of some form of cognitive "take-and-make" -- perhaps a "mokatak" -- echoing the design challenges of the tokamak.

In cognitive terms, all are potentially free to "take" insights from the reality to which they expose themselves -- and to "make" of them whatever appears fruitful. Curiously this freedom echoes the choice -- or obligation -- of many to recover discarded objects through which they can construct what they need. The point is succinctly made by an Australian journalist:

I'm an incorrigible scavenger. I've been known to climb into dump trucks because I've seen an interesting table leg sticking out of the rubbish. I've furnished whole apartments from things I've found on the street. ([Lee Tulloch](#), *My Souvenirs Are Not Snow Globes*, *The Canberra Times*, 22 February 2014).

More to the point however is the possibility of "re-cognizing" that there are cognitive analogues to the "dump trucks" and to the "table legs" to be found there. This can be argued more generally (*Reintegration of a Remaindered World: cognitive recycling of objects of systemic neglect*, 2011).

More curiously, whilst any such freedom may be constrained by property rights, the capacity is constrained to an even greater degree by the deprecation and prohibition of such taking-and-making with regard to cognitive stuff. This may be specifically condemned as [syncretism](#). -- in a period in which the producers of that conventional stuff, and those claiming ownership of it, have proven to be more than incapable of addressing the problems to which their possessiveness gives rise.

The argument here is that individuals are free to "mix-and-match" as they will -- irrespective of intellectual copyright restrictions and dubious claims in that regard. The proviso is however that they avoid efforts to claim exclusive possession within the world of

conventions, or to expect others to "buy" their creative production -- unless that exclusivity can itself be spun into a more attractive "tale".

Some arguments of political economy promote an understanding that it is up to individuals to "make their own future". This might be described as basic to the mythology of the American Dream. Rather than framing this advice within the conventions of political economy -- so evidently failing in their global delivery capacity -- the question here is how indeed individuals can "make their own future" from a more radically creative cognitive perspective. The possibility has been argued separately (*Engendering 2052 through Re-imagining the Present*, 2012) in a critical review of a recent report to the Club of Rome by Jørgen Randers (*2052: a Global Forecast for the Next Forty Years*, 2012). As a radical engagement with the meaning of the present moment for the individual, the case can also be made otherwise (*Presenting the Future*, 2001; *Now as the Ultimate Cognitive Strange Attractor: a continuing invitation "down the rabbit hole"?* 2014).

The question to be explored, in a reality framed by the rigid conventional definitions of joblessness and other problems, is whether there are possibilities of reframing them which are open to the individual, irrespective of social conventions (*12 Mindsets Ensuring Disappearance of Employment Opportunities: towards a systemic reframing of the job culture*, 2012; *Psychosocial Implication of Without Within: enjoying going solar for oneself*, 2013).

There are of course numerous sources of metaphor to enable creative imagination. Returning to the comment on Ellyard's preference for "cosmonaut", metaphors are effectively a vessel through which to travel the pathways of connectivity -- the songlines of the noosphere (*Metaphors as Transdisciplinary Vehicles of the Future*, 1991).

Various "metaphor projects" have been initiated following the influential work of George Lakoff and Mark Johnson (*Metaphors We Live By*, 1980). Current possibilities can be discussed in terms of *Psychosocial potential of analogy detection* (2013), notably in the light of the Metaphor Program initiated by the US Intelligence Advanced Research Projects Activity (IARPA) to build a world repository of metaphors enabling a computer system capable of understanding metaphors used in a variety of languages.

Subsequent to the Metaphor Project within the above-mentioned *Encyclopedia*, metaphors explored of relevance to governance have included: polyhedra, diamond, traffic, marine nautilus, sexual intercourse, music, multi-part singing, quantum mechanics, ballooning, game-playing, extraterrestrials, death, flowering and deflowering, nothingness, cyborgs, stellar evolution, astronautics, questions, marriage, ignorance, being stoned, pointlessness, biomimicry and technomimicry, financial management, invagination, weaving, change of climate, carpets, underworld, disease, burkha, bullfighting, ballistics, crop rotation, and walking. Each could be considered an insightful lens between which attention could shift for a deeper stereoscopic perspective -- to employ the much-favoured vision metaphor in exploring the future (*Metaphor and the Language of Futures*, 1992).

The ubiquity of metaphor is illustrated by the account by Mark Forsyth (*Poetic pageantry in the metaphors of money managers*, International New York Times, 14 April 2014). He is the author of *The Etymologicon: a circular stroll through the hidden connections of the English language* (2013)

Embracing error and the netherworld

The preoccupation with conventions is intimately related to the sense of their various supporters that this protects against the dangerous tendency to be wrong -- with the strong implication that the supporters are necessarily right, possibly with every reason to feel righteous. This is especially curious in that the upholders of various conventions can be highly critical of those who uphold alternatives -- as is most evident between religions and political ideologies, and in the bloody conflicts to which these tend to lead. It is well exemplified by the TINA declaration of Margaret Thatcher: *There Is No Alternative*. Unfortunately there is no evidence whatsoever that "being right" offers a viable remedy to the challenges of global governance. Those who disagree are simply to be framed as "wrong", possibly with fatal implications.

Curiously there is an unchallenged acceptance of being "wrong" in the case of marketing. Every product and service is allowed the privilege of being promoted through superlatives as "the best", irrespective of any evidence advanced to the contrary. There is a zone of tolerance between puffery and any condemnation of misleading advertising. If it is the courts which determine "justice", is it similarly misleading to imply that this is ensured by any Ministry of Justice -- having a mandate limited to administering the law?

As discussed separately, science has a poorly analyzed pattern of relationships to what may be framed as "wrong", especially by the future (*Knowledge Processes Neglected by Science: insights from the crisis of science and belief*, 2012). Many exemplars of its disciplines are declared to be wrong in some way. Physics is known for its condemnation of insights that are "not even wrong". However a *New Scientist* editorial has been unblushingly headed "First, get it wrong" (later titled: *Neuroscience wrongs will make a right*, 18 October 2013).

In relation to this argument, claims by James Lovelock (*A Rough Ride to the Future*, 2014) are challenged by George Monbiot (*James Lovelock's book shows genius is no defence against being wrong*, *The Guardian*, 24 April 2014). Lovelock is the promoter of the much-valued myth of Gaia -- variously challenged by science (*The Revenge of Gaia: why the Earth is fighting back - and how we can still save humanity*, 2006). Monbiot focuses on issues which he claims are unsupported by evidence, or for which there is evidence to the contrary -- namely that Lovelock is wrong and has failed to respect the evidence published by other scientists.

This frames the concerns voiced with respect to syncretism: individuals should be protected from exposure to what is wrong. The difficulty is that so much of what is variously appreciated can be so framed. A famed author of science fiction once declared that the reason 90% of science fiction is rubbish is that 90% of everything is rubbish -- a statement made prior to current enthusiasm for the questionable reality of the preponderance of "dark matter" in the universe. Other criteria are applied with respect to those producing "bullshit" -- namely whether it is "good bullshit", as is a primary characteristic of humour. This is more elegantly framed by an Italian proverb: *Si non è vero, è ben trovato* (even if it is not true, it is well conceived).

Science is also very preoccupied with whether insights are original. As expressed by Monbiot:

For every lone genius, there are 1,000 people who believe themselves to be one, but who either unwittingly repeat other people's work or who, without a sufficient grounding in science, begin with a wildly mistaken premise and go downhill from there. If I had a pound for every email I've received claiming to have discovered new forms of energy or propulsion, I could have bought myself a warp drive.

The question is to whom does this matter -- in a context in which the exemplars of science, religion and statesmanship are categorical in their framing of each other as dangerously wrong? Is one better nourished by the illusion of having "invented the wheel" as a "lone genius" than by buying a patented wheel from the local supermarket -- a patent which deprives "1,000 people" of engaging in such a creative process? The creativity of the underprivileged in slums in this respect has been widely remarked -- irrespective of any deprecation in terms of health and safety regulations upheld elsewhere.

Ironically, and coincidentally, with regard to Monbiot's warp drive example, the *Scientific American* notes the current work of [Harold White](#), head of the NASA Johnson Space Center's advanced propulsion program, who has assembled a "tabletop experiment" designed to create tiny distortions in spacetime, the malleable fabric of the universe. (Mark Alpert, *Warp Drive Research Key to Interstellar Travel*, 23 April 2014). As the report notes:

For readers and writers of science fiction, this is extraordinary news. It doesn't really matter that other physicists scoff at White's idea, arguing that it's impossible to alter spacetime in this way... A surprising number of scientists, engineers and amateur space enthusiasts fervently believe in this dream.

More relevant to this argument is the justification it offers to everyone to engage in cognitive "tabletop experiments". The much-publicized kitchen tabletop creativity of jobless [J. K. Rowling](#), in imagining the widely appreciated *Harry Potter* fantasy series, frames the opportunities far better than those arguing in favour endless years of sterile training on how to think -- by authorities in uncreative conflict with each other. Are there cognitive analogues to the warp drive which some might discover for themselves -- to their personal delight?

The argument has been powerfully framed in terms of the learning process by [Donald N. Michael](#) as: *On the requirement for embracing error*:

Changing towards long-range social planning requires that, instead of avoiding, exposure to and acknowledgement of error, it is necessary to expect it, to seek out its manifestation, and to use information derived from the failure as the basis for learning through future societal experiment. More bluntly, future-responsibility societal learning makes it necessary for individuals and organization to embrace error. It is the only way to ensure a shared self-consciousness about limited theory as to the nature of social dynamics, about limited data for testing theory, and hence about our limited ability to control our situation well enough to expect to be successful more often than not. (*On Learning to Plan and Planning to Learn*. 1973, p. 131)

In a global society which has been slow to acknowledge that there is a powerful "underworld", and that corruption is rife at all levels of society, the nature of this "unconsciousness" merits recognition, as variously argued ([John Ralston Saul](#), *The Unconscious Civilization*, 1995; [Vasily Nalimov](#), *Realms of the Unconscious: the enchanted frontier*, 1982). Are there more creative ways of "embracing" the unconscious -- as suggested by legendary tales (*Poetry-making and Policy-making: arranging a marriage between Beauty and the Beast*, 1993). It is especially appropriate that Australasia should also be known by the colloquialism "down under" -- with the latter being a recognized euphemism for genitalia.

With comparisons now made between the potential collapse of the current civilization and that of Imperial Rome, there is then a case for learning from the imaginative ways in which that culture endeavoured to engage with the netherworld (*Designing Global Self-governance for the Future: patterns of dynamic integration of the netherworld*, 2010; *Engaging with the Future with Insights of the Past: consulting the dead, sacrifice, bone-cracking and divination*, 2010).

Encycling, enwholing and wholth

As indicated with respect to the pattern of whingeing -- especially by the most progressive -- the argument here is that issues of hemispheric integration and globality are as much a creative challenge for the individual as for a severely handicapped collective. The individual has numerous possibilities for fruitfully "seeing things whole" in the present -- irrespective of arguments by others to the contrary, whatever future they anticipate. This can be imaginatively framed as akin to "healing" the fragmentation currently undermining viable global civilization -- perhaps to be better framed in cognitive terms as a process of "enwholing" in which all are free to engage (*Imagining Attractive Global Governance*, 2013).

The individual can be empowered in this respect by "re-cognizing" patterns of connectivity. Rather than as static patterns, these can be understood in dynamic terms, especially as cycles -- much as the seasons may be variously appreciated (*Psychology of Sustainability: embodying cyclic environmental processes*, 2002). The challenge can then be seen as one of "encycling", as separately argued (*Encycling Problematic Wickedness for Potential Humanity*, 2014) in making a case for imagining a future *Encyclopedia of World Problems and Human Potential*.

As to whether the imagined integrity is fundamentally flawed from other perspectives, this may be essentially irrelevant to those attracted

by any particular belief. The point is usefully made by the arguments of conspiracy theorists regarding suppression of information on extraterrestrial contact -- seen to be an effort by secretive elites to prevent access to galactic knowledge of free energy resources -- as documented in a widely disseminated movie (*Thrive: an unconventional documentary*, 2011). The case appears to be made that free energy, as a panacea for human ills, will enable all to consume and reproduce without cybernetic constraint or any need for self-reflexivity (*Consciously Self-reflexive Global Initiatives: Renaissance zones, complex adaptive systems, and third order organizations*, 2007).

Curiously, given the merits of toroidal cycles in engendering "energy" (as indicated above), the argument is made that this secret knowledge is based on essentially toroidal principles. The coherence of the tale is however consistent with a familiar dramatic plot, and can be appreciated as such: good guys, bad guys, community exploitation. More whingeing? Could more powerful stories be imagined -- featuring extraterrestrials -- to empower the individual beyond the sterility of blame games?

The argument can be developed further through imagining the nature of "wholth" (*Wholth as Sustaining Dynamic of Health and Wealth: cognitive dynamics sustaining the meta-pattern that connects*, 2013). As suggested above with respect to embodying externality, any tale involving extraterrestrials is as likely to imply an unconventional dramatic twist with radical cognitive implications for humanity (*Sensing Epiterrestrial Intelligence (SETI): embedding of "extraterrestrials" in episystemic dynamics?* 2013).

An indication of such a twist is offered by the classic metaphor of Buddhism and Hinduism, known as Indra's Pearls or *Indra's Net*. This continues to be an inspiration to mathematicians (David Mumford, et al, *Indra's Pearls: the vision of Felix Klein*, 2002). Essentially it argues that everything is reflected in everything else -- effectively an ultimate Theory of Everything. This could be understood in metaphorical terms, as separately argued (*Everything as a Metaphorical Theory of Everything: not excluding nonsense, nothingness, the inexplicable, the irrelevant and their rejection*, 2012). Part of the charm of Indra's Pearls is that they figure significantly in tales for children.

Beyond the above-mentioned proposals for a University of Earth, might Australasia distinguish itself through creating an imaginative environment to enable the "new thinking" for which so many call? Given the questionable track record of "think tanks", how might such a context be imagined as an attractor for the young -- irrespective of whether it is implemented in any way? Who can dream the dream? Perhaps, provocatively, as a University of Ignorance exploring "meta-education" (*University of Ignorance: engaging with nothing, the unknown, the incomprehensible, and the unsaid*, 2013; ¿ *Higher Education 8 Meta-education ? Transforming cognitive enabling processes increasingly unfit for purpose*, 2011).

References

Thomas A. Bass. *Reinventing the Future: conversations with the world's leading scientists*. Addison-Wesley, 1994

Mary Catherine Bateson. *Our Own Metaphor*. Hampton Press, 1991

Ajahn Chah and Paul Breiter. *Everything Arises, Everything Falls Away: teachings on impermanence and the end of suffering*. Shambhala, 2005

O. R. Dathorne. *Imagining the World: mythical belief versus reality in global encounters*. Greenwood, 1994

Diego Sánchez-Ancochea and Kenneth C. Shadlen. *The Political Economy of Hemispheric Integration: responding to globalization in the Americas*. Palgrave Macmillan, 2008

Barbara Ehrenreich:

- *Bright-sided: how the relentless promotion of positive thinking has undermined America*. Picador, 2009
- *Smile Or Die: how positive thinking fooled America and the world*. Granta, 2010 [[review](#)]

Ann Elias:

- *War and the Visual Language of Flowers: an antipodean perspective*. *War, Literature and the Arts*, 20, 2008, 1-2, pp. 234-250 [[text](#)]
- *Exquisite Corpse: Flowers and the First World War*. *International Journal of the Humanities*, 5, 2007, 3, pp. 31-36 [[abstract](#)].

Normandi Ellis. *Imagining the World into Existence*. Bear, 2012

Peter Ellyard. *Designing 2050: pathways to sustainable prosperity on spaceship earth*. Lulu Enterprises, 2008

European Commission. *Report from the Commission to the Council and the European Parliament: EU Anti-Corruption Report*. 2014 [[text](#)]

Paul Feyerabend:

- *Against Method: outline of an anarchistic theory of knowledge*. Verso, 1975
- *Conquest of Abundance: a tale of abstraction versus the richness of being*. University Of Chicago Press, 1999

Mark Forsyth. *The Etymologicon: a circular stroll through the hidden connections of the English language*. Icon Books, 2013)

Nelson Goodman. *Ways of Worldmaking*. Hackett, 1978

Susantha Goonatilake. *Toward a Global Science: mining civilizational knowledge*. Indiana University Press, 1999

Stephen Hawking. *The Dreams That Stuff Is Made Of: the most astounding papers of quantum physics -- and how they shook the scientific world*. Running Press, 2011

J. Martin Hays:

- Mapping wisdom as a complex adaptive system. *Management and Marketing*, 5, 2010, 2, 2. [[text](#)]
- The Ecology of Wisdom. *Management and Marketing*, 5, 2010, 1, 5. [[text](#)]
- Dynamics of organisational wisdom. *The Business Renaissance Quarterly*, 2, 2007, 1, 4, pp. 77-122 [[text](#)]

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

N. Jackson. *Imagining a Different World*. In: N. Jackson, M. Oliver, M. Shaw and J. Wisdom (Eds.). *Developing Creativity in Higher Education: an imaginative curriculum*. Routledge, 2006, pp. 1-11.

Robert Jungk and Johan Galtung. *Mankind 2000*. Allen and Unwin, 1969

Rushworth Kidder. *Reinventing the Future: global goals for the 21st Century*. MIT Press, 1989

Alexander King and Bertrand Schneider (Eds.). *The First Global Revolution: a report by the Council of the Club of Rome*. Simon and Schuster, 1992

George Lakoff and Mark Johnson. *Metaphors We Live By*. University of Chicago Press, 1980)

Joshua Landy and Michael Saler (Eds.). *The Re-Enchantment of the World: secular magic in a rational age*. Stanford University Press, 2009 [[summary](#)]

Kathleen Lennon. *Re-enchanting the World: the role of imagination in perception*. *Philosophy*, 2010 [[abstract](#)]

B. H. Lipton and S. Bhaerman. *Spontaneous Evolution: Our Positive Future and a Way to Get There from Here*. Hay House, 2011

James Lovelock:

- *The Revenge of Gaia: why the Earth is fighting back - and how we can still save humanity*. Penguin, 2007 [[summary](#)]
- *A Rough Ride to the Future*. Allen Lane, 2014

Magoroh Maruyama:

- Polyocular vision or subunderstanding? *Organization Studies*, 25, 2004, pp. 467-480. [[abstract](#)]
- Mindscapes, social patterns and future development of scientific theory types. *Cybernetica*, 1980, 23, 1, pp. 5-25 [[text](#)]

Donald N. Michael:

- *In Search of the Missing Elephant*. TriarchyPress, 2010
- *On Learning to Plan and Planning to Learn*. Jossey-Bass, 1973

David Mumford, Caroline Series and David Wright. *Indra's Pearls: The Vision of Felix Klein*. Cambridge University Press, 2002 [[summary](#)]

Vasily Nalimov. *Realms of the Unconscious: the enchanted frontier*. ISI Press, 1982

Robert Ornstein. *The Right Mind: making sense of the hemispheres*. Harcourt Brace International, 1998.

Paul Otlet. *Monde: essai d'universalisme -- connaissance du monde; sentiment du monde; action organisée et plan du monde*. Editions du Mundaneum, 1935

Aurelio Peccei. *The Chasm Ahead*. Macmillan, 1969

Isabel Ramos and João Alvaro Carvalho. *Reinventing the Future: a study of the organizational mind*. 19th IFIP World Computer Congress, 2006 [[text](#)]

Jorgen Randers. *2052: A Global Forecast for the Next Forty Years*. Chelsea Green, 2012

W. Boyd Rayward:

- *Information Beyond Borders: international cultural and intellectual exchange in the Belle époque*. Ashgate, 2014
- *The Universe of Information: the work of Paul Otlet for documentation and international organization*. VINITI, 1975

Royal Society. *People and the Planet*. The Royal Society Science Policy Centre, 2012 [[text](#)]

George Santayana. *Reason in Common Sense*. 1905

John Ralston Saul. *The Unconscious Civilization*. Anansi, 1995

Donald Schon:

- *Beyond the Stable State*. Harmondsworth. Norton, 1973
- *Frame Reflection: toward the resolution of intractable policy controversies*. Basic Books, 1994

Richard A. Slaughter. *New Thinking for a New Millennium: the Knowledge Base of Futures Studies*. Routledge, 1996

Joan Stambaugh. *Impermanence is Buddha-Nature*. University of Hawaii Press, 1990

Bernard Stiegler. *The Re-Enchantment of the World: the value of the human spirit vs industrial populism*. Continuum, 2013 [[summary](#)]

David Suzuki. *Reinventing the Future: protecting the Earth from ourselves*. *Impact*, February/March 2005 [[text](#)]

David Tacey:

- Edge of the Sacred: Transformation in Australia. Harper Collins, 1995
- Edge of the Sacred: Jung, Psyche, Earth. Daimon Publishers, 2009

Graham Turner. A Comparison of the Limits to Growth with Thirty Years of Reality. CSIRO, 2007). [[text](#)]

Geoffrey Vickers. Freedom in a Rocking Boat: changing values in an unstable society. Allen Lane, 1970

Alex Wright. Cataloging the World: Paul Otlet and the birth of the Information Age. Oxford University Press, 2014

Ethan Zuckerman. Rewire: Digital Cosmopolitans in the Age of Connection. W. W. Norton, 2013



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#).

For further updates on this site, [subscribe here](#)