



laetus in praesens

Alternative view of segmented documents via Kairos

26 June 2010 | Draft

Enacting Transformative Integral Thinking through Playful Elegance A Symposium at the End of the Universe?

-- / --

Introduction

Conventional academic discourse

Reframing the transformative integrative quest

Aesthetic play

Patterns of alternation and resonance

Art of integrative cognition

Paradoxical challenges of aperspectival complexity

Transformative existential encounter

Ambiance and transformative spaces

An integrative symposium: a research project in its own right

Global configuration of an integrative symposium

Reflexivity as a paradoxical requisite of integrative comprehension

Transformative embodiment of the extraordinary

Neglected integrative insights

Questionable answers

In quest of facilitation -- beyond the facile ([Appendix](#))

References

Introduction

The challenge of integrative, transdisciplinary thinking and meta-theory elaboration has a long tradition. It was provided with a notably international focus through the 1st World Congress on Transdisciplinarity (1994) whose processes were the theme of an experimental presentation (*Transdisciplinarity through Structured Dialogue: beyond sterile dualities in meetings to the challenge of participant impotence*, 1994).

A further development of the associated challenges has now been provided by the [International Symposium "Research across Boundaries"](#) (Luxembourg, 2010). The following account is again an experiment in eliciting insights from that occasion -- insights which may however be considered as merely a pattern of leitmotifs, implicit in personal experience of the formal process (projections onto it) rather than explicit in any way in its programme. On the other hand possible implications of integrative cognition call into question conventional non-self-reflexive understandings of "participation" in an event from "inside" as distinct from "outside" (*Intercourse with Globality through Enacting a Klein bottle*, 2009). The account reflects plenary events but only one of the four thematic streams, that on *Reflections on Integrative Frameworks*.

As was expressed by an Indian scholar at the Luxembourg event, there is a need for an "art of integration" to complement the conventional scientific approach to the possibility (Ananta Kumar Giri, *Towards A New Art of Integration*, 2010). This might be considered consistent with arguments for an aesthetics of governance (*Aesthetics of Governance in the Year 2490*, 1990; *Aesthetics and Informatics: Art of Information for Policy-making and Community-building*, 1999). The challenge of interdisciplinary dialogue might also be understood in terms of challenges of interfaith dialogue (*Aesthetic Challenge of Interfaith Dialogue as Exemplified by Meditation*, 1997). A related contextual concern, as previously discussed, is the role of the imagination in framing the complexity for which integrative processes are urgently required (*Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation*, 2007). This may be framed through fruitful metaphors (*In Quest of Mnemonic Catalysts -- for comprehension of complex psychosocial dynamics*, 2007).

In the quest for such an "art of integration", the following account uses the event as "material" -- as in the plastic arts -- to be moulded and shaped into a form inviting imaginative projections and offering a degree of coherence to them. Can an integrative symposium be transformed into a work of art, an opus, or an opera -- in the spirit of *The Glass Bead Game* (1943) of Nobel Laureate [Hermann Hesse](#)? If only for one's own inspiration -- a form of Rosetta Stone by which one's disparate connotations can be associated? To what extent

can such a symposium then be understood as a "cognitive installation" -- perhaps a form of [installation art](#)?

The concern here follows from earlier explorations of the fundamental relevance of both humour and play in providing an integrative dimension in a global society fragmented by formal structures and processes variously experienced as alien and inhibiting a transformative dimension (*Humour and Play-Fullness: Essential integrative processes in governance, religion and transdisciplinarity*, 2005). The current concern with climate change can even be given a fruitful playful twist (*Playfully Changing the Prevailing Climate of Opinion: Climate change as focal metaphor of effective global governance*, 2005). In this sense both humour and play offer a means of transforming the approach to coherence evident to a degree in climate, notably as a metaphor (*Climate Change as a Metaphor of Social Change*, 2008; *Climate of Change Misrepresented as Climate Change*, 2008).

The argument in what follows is that desirable integrative resonances are catalyzed and facilitated by processes which might be variously described as aesthetic and playful. However, if considered, these are treated as incidental to formal events -- as "add-ons" in public relations and image building efforts dissociated from serious discourse.

Conventional academic discourse

The pattern of such discourse is extremely well-known -- characterized as it is by presentations, commentary and discussions within formal sessions, with various possible reporting and synthesizing procedures. It remains unclear whether this process is in its own right incompatible with the emergence of any meaningful transformative synthesis -- whatever the assumptions, claims and skills of organizers and facilitators.

Of particular concern is the questionable track record of facilitation in enabling the emergence of transformative insight, most often relying on essentially mechanistic procedures. Whole meetings are typically structured with the aid of such patterns. Paradoxically it is also widely acknowledged that meetings tend to be most valued by their participants for the "networking" and interaction outside, or between, such formal sessions.

The challenge of participating in such events is in transforming the interaction between formal presentations and commentary in order to elicit and configure patterns of association transversally across the knowledge space of the event as a whole. The individual formal presentations effectively constitute the embodiment of the intellectual trajectories of individuals that traverse that space, however they may interact with it or evoke interactions within it.

Reframing the transformative integrative quest

In the metaphoric spirit of this account, conventional academic discourse in quest of integrative meta-theory might be compared and contrasted with bird song echoing through a forest -- and the sense of volume and depth that these resonances may then evoke.

In a conference context, with respect to the grail-like quest for transformative, integrative insight, this metaphor may be fruitfully enriched by the symbolism of the traditional Sufi tale of *The Conference of the Birds*. In their collective pursuit of that transformative understanding -- a transcendent theory of everything -- each of the 30 birds in that tale has a special significance, and a corresponding didactic fault. In reaching the expected goal -- the land of the mythical *Simurgh* -- all they see there are each other and their collective reflection in a lake. "*Simurgh*" actually means "30 birds" in Persian. There were some 28 contributors to the Luxembourg Symposium.

This insight of Islamic inspiration may be compared with an analogous insight of Taoist inspiration: *Thirty spokes share the wheel's hub. It is the centre hole that makes it useful... Therefore profit comes from what is there; Usefulness from what is not there* (Lao Tzu). The value of such poetic exposition has been given relevant focus by the biologist/anthropologist [Gregory Bateson](#), in explaining why "**we are our own metaphor**", to a conference on the effects of conscious purpose on human adaptation:

One reason why poetry is important for finding out about the world is because in poetry a set of relationships get mapped onto a level of diversity in us that we don't ordinarily have access to. We bring it out in poetry. We can give to each other in poetry the access to a set of relationships in the other person and in the world that we are not usually conscious of in ourselves. So we need poetry as knowledge about the world and about ourselves, because of this mapping from complexity to complexity. (Cited by Mary Catherine Bateson, *Our Own Metaphor: a personal account of a conference on the effects of conscious purpose on human adaptation*, 1972)

Both poetic accounts may be compared with the 30-fold configurative challenge of integrative discourse, as articulated by [Stafford Beer](#) from a cybernetic perspective using the [icosahedron](#) -- again 30-fold (*Beyond Dispute: the invention of team synteegrity*, 1994). This has subsequently been developed into a licensed "[synteegration](#)" process (Martin Piffner, *From workshop to Synteegration: the genetic code of effective communication*, Team Synteegrity International, 2004).

The question might be asked as to how many cognitive or epistemological species of "bird" were represented amongst the participants in the boundary-crossing Symposium in Luxembourg. Requisite "biodiversity"? Given a degree of shared interest in cognitive typing, one might ask why such information was not more explicit -- especially given its determining consequences for the nature of possible dialogue (*Systems of Categories Distinguishing Cultural Biases: with notes on facilitation in a multicultural environment*, 1993).

Aesthetic play

Whatever form such communication takes, its significant use in bridging across boundaries depends on a playful art -- or artful playfulness -- expressed through an elegant sense of place, timing and appropriateness.

Verbal interaction: In the typical symposium gathering, this is the primary mode acknowledged. Typically it takes the form of

discursive, often lengthy statements on which others may be asked to comment, possibly under very particular constraints. These may even be considered as boundaries -- or bounds -- beyond which it is considered inappropriate to step. These processes may offer the occasion for humour. However more typically the dynamics of repartee and humour emerge outside formal sessions. Boundaries are then set otherwise, are readily challenged and often crossed in a creative variety of ways: more extensive use of anecdote, humour, aphorisms, and the like (Victor S.M. de Guinzbourg, *Wit and Wisdom of the United Nations: proverbs and apothegms on diplomacy*, 1961)

Arguably the rapid dynamics of **repartee**, artfully undertaken with discipline, offer a route to higher orders of interactivity -- countering the problematic features of interventions boring their way across communication space and marked by a degree of aridity when lacking any challenge calling for a degree of self-questioning (Edward Sullivan, *The Artless Art of Repartee*, 1922). This boundary testing style of discourse is characterized by humour and provocative exaggeration. It is notable in the case of flirtation -- when this is culturally acceptable. An adequate distinction is not however made between its use for witty **gamesmanship** (one-upmanship) in contrast with enhancing the integrative quality of the pattern of discourse as a whole.

Of particular interest is the capacity to reframe boundaries and preoccupations through metaphor. The question is whether metaphor may be effectively used to reframe highly problematic boundaries, as in the case of challenging interfaith discourse, intercultural discourse or exchanges between different ethnic groups -- all charged in various ways. Is such a modality also of great potential relevance in bridging discourse across disciplinary boundaries, as previously argued (*Metaphors as Transdisciplinary Vehicles of the Future*, 1991)? In a remarkable study, Susantha Goonatilake has argued that a truly global science will result from integrating perspectives associated with non-Western cultures (*Toward a Global Science: mining civilizational knowledge*, 1999). The implications of his argument have been separately explored (*Enhancing the Quality of Knowing through Integration of East-West metaphors*, 2000).

Any such capacity may be extended by embedding metaphors in poetic expression -- when this is acceptable, which may be a question of boundary crossing in its own right. A notable practitioner of this art, in otherwise formal disciplinary meetings, was **Kenneth Boulding**. He was wont to use the format to summarize complex debates.

Donald Rumsfeld, as US Secretary of Defense, was renowned for the use of **haiku** in formal press conferences. A case has been made for the use of poetry to bridge the mental and other boundaries in arenas which are currently the focus of problematic military activity (*Poetic Engagement with Afghanistan, Caucasus and Iran*, 2009; *Ensuring Strategic Resilience through Haiku Patterns: reframing the scope of the "martial arts" in response to strategic threats*, 2006). There is a degree of irony that there is a long traditional use of poetic expression in the boundary crossing associated with affairs of the heart and "winning" the heart of another -- although this precedent has not suggested the use of such expression in the "battle for hearts and minds" in those arenas.

Following the pattern of repartee, there is a further possibility in "poetic wrestling" and jousting. As with the spontaneous emergence of humour in repartee, this calls for skills in poetic improvisation in response to the poetic statements of the other (*Strategic Jousting through Poetic Wrestling*, 2009).

Body language: There is a degree of recognition of the role of body language in "getting a message across" some communication boundary. There is a degree of sensitivity to the nature of the game-playing in "entering" the body space of another, whether this is experienced as invasive or as establishing some form of bond. Politicians typically seek professional advice in this regard. This is not apparently the case with respect to formal communication across other boundaries. However the signals of body language are widely interpreted, if only unconsciously, in conference settings -- whether in formal sessions or in the associated informal dynamics. Sensitivity to the space of another may be specially important in cross-cultural communication, in respect for protocol, and in creatively breaking the formality of such constraints.

Such language may take the form of posture, gesture, pace and manner of movement -- as well as through any capacity to dramatize these together in theatrical vignettes. They may then be understood as indicative of passionate engagement rather than arid detachment. As such they may figure notably in encounters.

Whether accompanied by verbal statements, body language may be a primary mode of expression of the role of the "fool" when this is permitted in formal gatherings, as it was in some royal courts in centuries past. A notable example of this is the documented role in an international gathering of Harvard-educated **Brother Blue**, otherwise a street theatre artist (*A Congress that Dared the Unthinkable: report on the First New Age Congress*, Florence, 1978; *Emergence of Integrative Processes in a Self-reflective Assembly*, 1978) His ability to use body language to reframe and transform arid debate proved significant there.

Of potential relevance is the application of **frame analysis** (possibly by **Erving Goffman**) which in one case made evident the manner in which the movements of an otherwise unremarkable child in a playground was effectively setting the rhythm for the interactions of others there. In that respect to the questions raised below for cross-fertilization of ideas, by the endangered "waggle dance" of bees, merits reflection.

Dress: Much is made of appropriate dress, most notably for international gatherings -- necessarily bringing together people with a variety of dress codes in both formal and informal situations. The potential variety is most striking where dress codes associated with particular cultures are interwoven with those of particular ethnic groups or belief systems -- as at the World Parliament of Religions. Academic disciplines may have distinctive formal dress codes, as in the most traditional colleges. It is of course the case that disciplines might be interpreted as a form of cognitive dress code as is, at least metaphorically, implicit in the argument of Antonio de Nicolas (*Habits of Mind: an introduction to clinical philosophy*, 2000). The many "models" produced, through which thinkers "get their act together", could be so construed -- even to the point of describing any such collection as a "wardrobe".

Dress is well-recognized as a non-verbal "statement" in its own right, and as such potentially a provocation, challenging convention, offering alternative perspectives, and calling for a larger contextual framework -- whilst at the same time effectively embodying an

argument. The "visibility" of such statements guarantees a high degree of communication across boundaries where verbal statements may be far less effective or ignored.

The success of dress codes in communicating in this way is of course integral to the commitment to fashion and the driving force of the fashion industry. The nature of the statement may be of primary political concern, as with the attention to this matter by the President of France (*Burkha as Metaphorical Mirror for Imperious Culture?* 2009). This preoccupation is associated with wider concern regarding visible religious symbols worn as dress accessories (*Politicization of Evidence in the Plastic Turkey Era: al-Qaida, Saddam, Assassination and the Hijab*, 2003). Also of relevance is the metaphoric use of "hats", "shoes" and "medals" by Edward de Bono, as discussed below.

For any of Pythagorean persuasion, it is a delight to note that the originator of world modelling, the futurist [Herman Kahn](#) (*Thinking About the Unthinkable*, 1962), was based at the Hudson Institute at Croton-on-Hudson -- then the headquarters of the World Modelling Association, grouping the models of the fashion world.

Art as metaphor: It is of course the case, as many have explored, that any form of artful expression is necessarily a metaphor and vehicle for other forms of significance. There is therefore an irony that perhaps the only art on which participants at the Symposium were formally offered any choice was one of taste, and then only in the form of a choice between "meat" and "vegetarian" food. What form of cognitive nourishment might participants variously seek at a symposium?

As noted below, the implication that individuals might have quite different aesthetic preferences was not addressed -- despite its potential cognitive implications for any "art of integration". In that sense there was an implicit commitment to uniformity -- exemplifying an unconscious approach to a particular understanding of integral thinking. This is curious given the recognition shared by many participants (even as advocates) of the contrasting cognitive implications of personality typing (the AQAL of [Ken Wilber](#), MBTI, enneagram. etc).

Elegance in science: The importance of aesthetic dimensions to scientists, and as a guiding consideration in scientific research, is widely documented. It has been said to be essential to adequate theory formulation. Various major initiatives have been undertaken to explore the relevance of aesthetics to science (MIT Center for Advanced Visual Studies, AlloSphere, Bridges Organization: art and mathematics). This is necessarily fundamental to any integrative outcome of such research -- especially across boundaries. Many theories and models are readily described as "beautiful", even the essence of beauty as it is open to human cognition. Of notably interest in this respect are the tantalizing implications of correspondences, emerging from both a scientific perspective and from the symbolist tradition (*Theories of Correspondences -- and potential equivalences between them in correlative thinking*, 2007).

The significance of this consideration for integrative understanding became dramatically evident in the exploration by mathematicians of [symmetry groups](#), notably the most complex -- such as that nicknamed the [Monster Group](#) -- and their [beautiful renderings](#). The correspondences which provided the bridging connectivity to its recognition were so subtle and unexpected as to be nicknamed "[Moonshine theory](#)" in the mathematical literature ([Marcus du Sautoy](#), *Finding Moonshine: a mathematician's journey through symmetry*, 2008).

Polysensorial cognitive challenge: Arguments regarding the limitations of the vision metaphor and its implications for policy-making and policy communication have been previously made (*Metaphor and the Language of Futures*, 1992). The question is in what way other senses may offer metaphorical insights vital to sustainable navigation of the future -- otherwise potentially fragmented cognitively by reliance on singular senses. (*Strategic Challenge of Polysensorial Knowledge*, 2008; *Cyclopean Vision vs Poly-sensual Engagement*, 2006). How might aesthetics then come into play as offering a degree of cognitive integration amongst the senses, as suggested by research on [synaesthesia](#)?

Patterns of alternation and resonance

Dynamics of movement: If the art of integration calls for a degree of alternation between contrasting styles, this introduces the dynamics of movement into understandings of integration which are primarily inspired by stasis. In this sense engagement with "integration" calls for a form of "liberation" as previously argued with reference to the insights of musical harmony (*Liberation of Integration through pattern, oscillation, harmony and embodiment*, 1980; *Fugitive Integration: a musical addendum*, 1982).

As illustrated by the essentially static explanatory assumptions and expectations of the Human Genome Project, mappings have proven to be only too inadequate to a cognitive challenge now recognized as requiring a dynamic perspective (Johnjo McFadden, *Genes? Its complicated*, *The Guardian*, 24 June 2010). Might the same be expected of integrative cognition?

Contemporary music is, for example, also recognized as offering dynamic insights ([John Kao](#), *Jamming: the art and discipline of business creativity*, 1996). This is explicitly evident in the highly disciplined spontaneity of jazz improvisation. One articulation is that of [Vinko Globokar](#) with respect to avant garde music, commenting on a recording to the effect that correspondences are based on the principle of mutual psychological reactions and attempt to 'join' the four participants with each other and to make them increasingly dependent on each other. He distinguishes four levels:

- the musical material is entirely fixed, but the choice of instruments is left open.
- each musician possesses only incomplete instructions. In order to be able to play, each musician must search for missing material in the performance of the neighbour (pitches from the first, length from the second, etc.) and react to it in different ways: imitate, adapt himself to it (if need be further develop), do the opposite, become disinterested or something else (something 'unheard of').
- the composed material is completely substituted by the description of the possibility arising from the reactions of the performers to their neighbours.
- on the last level, it is left up to the performers whether to cease playing or to continue; for not even the selection of reactions is

now necessary (*Drama and Correspondences*, Harmonia Mundi, 20 21803-1)

Metaphors of alternation: With respect to the dynamics of the art of integration, there are then many metaphors to be explored (*Metaphors of Alternation: their significance for development policy-making*, 1984). Of particular interest is use of the thread metaphor in distinguishing dialogue themes and the possibilities of "braided discourse", especially on the web (*Interweaving Thematic Threads and Learning Pathways: noonautics, magic carpets and widdomes*, 2010).

In contrast with the challenge of **braided discourse** and the more complex weavings discussed there, the thematic organization of symposia on integrative thinking and boundary crossing are typically characterized by the most rudimentary features of the weaving metaphor, namely **bullet points** and **parallel thematic threads**. It is from these that it is vainly hoped to engender transformative "magic carpets" to traverse integrative knowledge space. Curiously it is the skills associated with women which are traditionally most intimately associated with braiding and weaving. The nets, with whose weaving and use men are more often associated, exemplify a uniformity now echoed in integrative thinking and model building.

Epistemological multilingualism: As noted below, one of the unusual features of the Luxembourg event was the degree to which support logistics were provided by graduates of the **Learning and Development in Multilingual and Multicultural Contexts** of the University of Luxembourg. As mentioned below, although the conference was monolingual, this raises the question as to the extent to which the epistemological implications of multilingualism were addressed within a context from which integral insight was sought. What is the relevance of epistemological multilingualism in relation to the art of integration -- especially given the art intrinsic to the use of every language?

Code switching: There is therefore a certain irony to the research preoccupation of one of the graduates present, focused as it was on code switching in the language used in the course of interactive gaming. This exemplifies the challenge of switching between aesthetic styles of communication. More generally this raises the question of the patterning of such switches between styles to ensure the requisite variety to engender/encompass the whole. This relates to the arguments made by **Edward de Bono** for the need to switch between cognitive styles in meeting any decision-making challenge (*Six Thinking Hats*, 1985; *Six Action Shoes*, 1991; *Six Frames For Thinking About Information*, 2008).

The fundamental issue is however the mysterious trigger encouraging such a switch in style during any discourse that permits it. With respect to most aesthetic appreciation, unduly prolonged use of any one style is typically qualified as "boring" -- and a challenge to some understandings of sustainability. This applies as much to a mode of verbal discourse, music, dress, food, or otherwise. Ironically, and appropriately, the researcher on code switching exemplified the capacity to shift between the most highly contrasting styles of dress and hair braidings over the period of the Luxembourg event.

An endangered "waggle dance" vital to integrative cross-fertilization of ideas? a tragically relevant metaphor: disruption of cognitive and communication skills of bees
It is recognized that a cocktail of chemicals from pesticides could be damaging the brains of bees -- whose populations are in dangerous decline worldwide. It is hypothesized that the chemicals may be hindering their ability to find food or communicate within colonies using the "waggle dance". (Alok Jha, <i>Bee decline could be down to chemical cocktail interfering with brains</i> , <i>The Guardian</i> , 22 June 2010)
Is there a form of "waggle dance" vital to research communication across boundaries? Might this be fundamental to any art of integration? What indications are there of a "waggle dance" performed at integrative symposia? Is there a dangerous cocktail of "cognitive pesticides" inhibiting that dance?
Furthermore, fruitful pollination is dependent on there being more than just one pollinator. The number of seeds produced may be dependent on the number of different species pollinating the plants. Diversity is vital in a pollinating population.
Is fruitful cross-fertilization of ideas dependent on an analogous degree of diversity?

Art of integrative cognition

Varieties of integration: One keynote speech reviewed the varieties of boundaries implying a need for integrative understanding (**Varadaraja V. Raman**, *Variety of Boundary Crossings*, 2010). Of relevance to the male-female complementarity, a notable insight introduced into discussion of meta-theoretical frameworks at the Symposium was the value of exploring "**weak integration**" and the paradoxical strengths associated with it -- and necessarily the paradoxical weaknesses associated with the "**strong integration**" so typically sought (**Ananta Kumar Giri**, *Towards A New Art of Integration*, 2010). This is exemplified as a modality of action by the arguments of **F. David Peat** (*Gentle Action: bringing creative change to a turbulent world*, 2008). As a case for "cognitive healing", it is also reflected in the conventionally problematic complementarity between allopathic and homeopathic healing (*Remedies to Global Crisis: "Allopathic" or "Homeopathic"?* 2009). But, as stated by Giri:

This new art of integration which invites us now is different from the earlier discourses and practices of integration which were imprisoned in a logic and machinery of strong integration. It is an art of weak and gentle integration compared to the telos of strong integration in modern self, society and polity.

The merit of doing so was further associated by him with the need for "**mothering spaces**" within which such integration could be engendered and cultivated. As noted in the discussion of that contribution, the significance of such polar complementarity is admirably

encoded by the Chinese *yin-yang* pattern, with the added merit of being further articulated into a 4-fold, 8-fold, 16-fold, etc. This was recognized by [Gottfried Leibniz](#) to be precisely equivalent to his own binary coding system -- now the basis for computer organization.

The Chinese encoding is distinguished by the metaphoric enrichment of the pattern of associations it represents and their relevance to psychosocial change (*Transformation Metaphors -- derived experimentally from the Chinese Book of Changes (I Ching) for sustainable dialogue, vision, conferencing, policy, network, community and lifestyle*, 1997). But at the 2-fold level, the metaphoric distinction is indeed between **strong and weak**, and between **fathering and mothering**. Might forms of transdisciplinary integration be fruitfully distinguished in this way? (A. C. Graham, *Yin-Yang and the Nature of Correlative Thinking*. The Institute of East Asian Philosophies, 1986).

Ironically in the 4-fold distinction made by physics between the **fundamental interactions** (or interactive forces) strong interactions and weak interactions are distinguished from electromagnetism and gravitation. Any art of integrative cognition might then require insight into 4-fold and higher modes of interaction, as envisaged by the Chinese coding system. This is further explored with respect to the "cognitive games" associated with each pattern of distinction and the possibility that these might themselves be ordered into an aesthetic taxonomy based on the Fibonacci spiral (*Tao of Engagement -- Weaponised Interactions and Beyond: Fibonacci's magic carpet of games to be played for sustainable global governance*, 2010).

Readily to be framed as being "not serious" (as "weak integration"), is the aesthetic art of play to be embedded into such a pattern as the polarity of **serious vs not-serious**? Or should such an aesthetic be characteristic of the whole -- the gods at play -- in the vedic spirit of *Neti Neti* and **non-duality**? More prosaically, if it is only through the playful dynamic amongst participants at an integrative event that a transcendental meta-perspective can emerge, how best to look at more creative understandings of "games that participants play" -- following the inspiration of **transactional analysis**, as separately explored (*Cardioid Attractor Fundamental to Sustainability: 8 transactional games forming the heart of sustainable relationship*, 2005). A strong case, relevant to integrative discourse, has been made by (James P. Carse (*Finite and Infinite Games: a vision of life as play and possibility*, 1994).

Integrative attractors in the light of romantic divergences: Pre-dating the emergence of currently favoured personality typing (MBTI, AQAL, etc), the philosopher W. T. Jones sought to explain the divergences in the academic debate regarding definition of the "**romantic period**" (*The Romantic Syndrome; toward a new methodology in cultural anthropology and the history of ideas*, 1961). He identified a set of seven pre-logical "**axes of bias**" in terms of which any academic perspective could be defined, thereby determining the nature of the debate between any two participants regarding the nature of "romantic". He proposed the generalization of this method to other disciplines and debates. It readily lends itself to such adaptation (*Axes of Bias in Inter-Cultural Dialogue*, 1993; *Axes of Bias in Inter-Sectoral Dialogue*, 1992).

The approach could be adapted to distinguishing the variety of biases in the quest for integrative understanding -- the didactic, perspectival flaws of the conference "birds" -- and the consequent thematic organization and dynamics of any such event. The axes identified by Jones, as detailed in those examples, are preferences for:

1. order vs disorder
2. static vs dynamic
3. discrete vs continuous
4. external vs identification
5. sharply vs implicitly defined
6. comprehensible vs incomprehensible
7. due vs spontaneous process

As noted by Chris Lucas, bridging the gap in understanding which lies behind these distinctions is rather like getting people to understand **fuzzy logic** as a valid alternative to binary logics. Lucas (*Integral Intersubjectivity*, 2006) skillfully relates the AQAL framework to the *The Fourteen Precepts from Interbeing* (2003) of [Thich Nhat Hanh](#).

The art of integration might then lie in the challenge of interweaving discourse associated with all such preferences -- although paradoxically that itself constitutes a bias of the kind explored by Magoroh Maruyama (*Mindscapes, social patterns and future development of scientific theory types*. *Cybernetica*, 1980, 23, 1, pp. 5-25). He distinguishes four epistemological mindscapes:

1. *H-mindscope*: homogenistic, hierarchical, classificational
2. *I-mindscope*: heterogenistic, individualistic, random
3. *S-mindscope*: heterogenistic, interactive, homeostatic
4. *G-mindscope*: heterogenistic, interactive, morphogenetic

These are explained elsewhere in more detail and compared with other schemas (*Systems of Categories Distinguishing Cultural Biases*, 1993). It could be argued that any such preferences effectively define **aesthetically preferred attractors**. In this sense, and in terms of chaos theory, variously preferred human values might then be understood as themselves constituting "**strange attractors**" (*Human Values as Strange Attractors*, 1993).

Maruyama's 4-fold pattern could well be clustered into a 2-fold pattern consistent with a distinction between "strong" and "weak" integration. However that pattern could also be fruitfully related to that of another Japanese scholar, namely Kinhide Mushakoji (*Global Issues and Interparadigmatic Dialogue: essays on multipolar politics*, 1988). He discusses the importance of a quadrilemma: A, not-A, A-and-not-A, neither-A-nor-not-A (summarized in *Epistemological challenges: Interparadigmatic dialogue*).

Integrative understanding from cultures and languages: Cross-fertilization across boundaries, notably inspired by metaphor, may be closely related to an aesthetic sense. Use of the fertilization metaphor is ironically associated with the aesthetic efforts of plants and animals to render themselves aesthetically attractive in a competitive environment as a means of ensuring the pollination essential to their

own survival. There is of course the charming sense in which academics must render their discourse "attractive" to ensure their own professional survival.

Are there indicators in other "languages" regarding modes and understandings of integration to which the dominant ("English", "Western") languages are insensitive? Is there a language of integrative thinking with the sensitivity attributed by urban myth to the *Esquimo capacity to distinguish varieties of snow*? The *Integrative Knowledge and Transdisciplinarity Project* profiled 633 variants, mainly in English.

- integrative concepts from other languages: Howard Rheingold, *They Have a Word for It*, 2000; Adam Jacot de Boinod, *The Meaning of Tingo -- and other extraordinary words from around the world*, 2005; C. J. Moore, *In Other Words*, 2004). Examples are provided by the qualitative descriptors in German, with the suffix *-heit* (*Gemutlichkeit*, *Ganzheit*, etc) and their comparison with analogous terms in English having the suffix *-ness* (*togetherness*, etc)
- expectancy and anticipation
- moments: dramatic moment, pregnant moment, kairotic moment, transformative moment and magical moment
- imagination (*Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation*, 2007; *Imagination, Resolution, Emergence, Realization and Embodiment*, 2005; *Imaginal Education: game playing, science fiction, language, art and world-making*, 2003)

The argument might be further reinforced by the nature of the integrative cognition, variously characterized by so-called indigenous cultures, and its intimate engagement with the environment and understandings of time. A comprehensive compilation resulted from the work of Darrell Posey (*Cultural and Spiritual Values of Biodiversity*, 1999). Significantly it was a contribution to the Global Biodiversity Assessment of the United Nations Environmental Programme.

Design and discourse: If the challenges of the future are to be understood as challenges of (aesthetic?) design, as previously discussed (*Designing Global Self-governance for the Future*, 2010) are the corresponding challenges of cognitive integration also to be understood as a matter of design? This possibility follows from the innovative exploration of design by Christopher Alexander (*Notes on the Synthesis of Form*, 1964, *A Pattern Language*, 1977, and *The Nature of Order*, 2003-4), especially his current research emerging from that context (*Harmony-Seeking Computations: a science of non-classical dynamics based on the progressive evolution of the larger whole*, *International Journal for Unconventional Computing (IJUC)*, 2009; *New Concepts in Complexity Theory: an overview of the four books of the Nature of Order with emphasis on the scientific problems which are raised*. 2003).

The possibility has been separately explored in relation to the latter work (*Harmony-Comprehension and Wholeness-Extending*, 2010).

Paradoxical challenges of aperspectival complexity

The argument here derives primarily from contributions and discussions in relation to the thematic thread on *Reflections on Integrative Frameworks* at the Symposium. Whether intentionally, by coincidence, or reflecting a particular cognitive bias, contributors to that theme were predominantly from Australia, or from "other" hemispheres (India and South Africa). The lead facilitator (from Europe) himself had a specifically "aperspectival" bias (Alec A. Schaerer, *Systematic Integrality: a methodological arbitration between perspectivity and universality*, 2010).

Transforming the dialogue between "Bore-dom" and "Wis-dom": As might be expected, any complementarity between psychosocial design and integrative cognitive design would be reflected in the complementarity between the varieties of dialogue and the varieties of transdisciplinarity.

In a global knowledge society giving primacy to linearity and developing a "line of argument", each is necessarily condemned to boring through knowledge space on some trajectory reflected in communications readily to be perceived as boring -- until constrained in some way by the geometry of that space. The associated *emui* is perhaps usefully captured by the poem of John Masefield:

Dirty British Coaster with a salt-caked smoke stack
Butting through the Channel in the mad March days,
With a cargo of Tyne coal, road-rail, pig-lead,
Firewood, iron-ware, and cheap tin trays.

The linearity implied by boring is curiously reflected in widespread use of "stake" -- as in stakeholder. Whether an adequately fortified cognitive domain can be constructed by assembling them -- offering integrative security and integrity -- surely merits reflection. Perhaps more problematic is the implication that for some the stake is a sword (of truth) -- or even a spear (of destiny) by which a future pathway is delineated (*Engaging with Globality through Cognitive Realignment: making points and aligning a target*, 2009).

What then is the art that engenders a transcendent wisdom purportedly associated with integrative cognition (*Development beyond Science to Wisdom*, 1979)? How does it relate to the not-said, ignored and denied (*Global Strategic Implications of the Unsaid: from myth-making towards a wisdom society*, 2003)? What is the attractor of wisdom and its cognitive condition, as may be speculatively explored (*The Isdom of the Wisdom Society: embodying time as the heartland of humanity*, 2003)? How is the paradoxical quality of any temporal trajectory across knowledge space to be embodied in an "aperspectival" perspective usefully exemplified by the much cited-verse of T. S. Eliot's *Little Gidding* (the last of the *Four Quartets*):

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.
Through the unknown, remembered gate
When the last of earth left to discover

Is that which was in the beginning

How are insights of [enactivism](#) (as used by Bateson, Maturana, Rosch, Thomson, and Varela to label their theories) to be embodied in such knowing? There is an increasing sense of urgency to the challenge of integrative understanding, especially with the imminent prospect of "singularities" variously understood (*Emerging Memetic Singularity in the Global Knowledge Society*, 2009; *Spontaneous Initiation of Armageddon -- a heartfelt response to systemic negligence*, 2004). Concerns are expressed at the damage to long-term memory and creativity, with the increasing reliance on hyperlinks, overstimulation and group approval (Nicholas Carr, *The Shallows: how the internet is changing the way we think, read and remember*, 2010). This suggests a fruitful confrontation between the implications of the Sufi bird tale and those of Twitter as an exemplification of global bird song -- with its memetic challenges in a period of information overload and information underuse. How might local tweets be fruitfully configured globally, as partially explored (*Global Street Twinning in Polyhedral Configurations*, 2009)?

Given the dangers foreseen, and inspired by the famous account by [Douglas Adams](#) of *The Restaurant at the End of the Universe* (1980), there is therefore a case for titling the account of any integrative symposium as the *Symposium at the End of the Universe* (as above).

In a global knowledge society, in which every hyperlink "bores" its way across cyberspace along information highways, how might these be configured as a "**mothering space**" to give birth to a sustainable dynamic (*From Information Highways to Songlines of the Noosphere: global configuration of hypertext pathways as a prerequisite for meaningful collective transformation*, 1996; *Sacralization of Hyperlink Geometry*, 1997)? As "pathways", such highways may be reframed through mythical allusion cultivated in imaginative media blockbusters (*Walking Elven Pathways: enactivating the pattern that connects*, 2006). The latter suggests that:

The challenge is how to move (or dance) along the elven pathways -- across the evanescent bridges between particular ways of knowing and their communities. This dynamic may be the essence of "quality of life" without which development is essentially meaningless -- to all but the "gnomes" [of Zurich]. It might even be said that to "de-fine" such pathways within conventional modes of thought is to remove from them all that is "fine" in the quality of life that people seek.

The technology engendered by humanity in its struggles may be interpreted as a form of anticipative or implicit dreaming of the future, as argued by Robert D. Romanyshyn (*Technology as Symptom and Dream*, 1989). The latest advances in technology can then be usefully explored for relevant insights (*Enactivating a Cognitive Fusion Reactor: Imaginal Transformation of Energy Resourcing (ITER-8)*, 2006). Cognitive cocoons within which people are able to bore across knowledge space might even be transformed into "wizdomes" (*Transforming Static Websites into Mobile "Wizdomes": enabling change through intertwining dynamic and configurative metaphors*, 2007).

Implications of globality for integrative reflection: What contrasting perspectives do those from "other" hemispheres bring to integrative discourse? Why the preoccupation with an "art of integration" from an Indian perspective? Writing as an Australian in Europe, it might be argued that this implies an existential experience of the challenges of globality. This contrasts with curious suggestions that the integration associated with globalization implies a flattening of the Earth ([Thomas Friedman](#), *The World Is Flat: a brief history of the Twenty-first Century*, 2005), as deprecated previously (*Irresponsible Dependence on a Flat Earth Mentality -- in response to global governance challenges*, 2008).

As argued elsewhere such "superficiality", reflected in current "facist" [sic] European preoccupation with the *burkha*, fails to acknowledge a major cognitive challenge -- the existence of an "underside". Ironically this might be reflected in the contrast between the widely known *Facebook* facility and -- at the other end of the cognitive universe -- the almost unknown, but predictable, *Arsebook* facility (offering to place people in touch with those they dislike). Australia is the country whose prime minister notoriously declared his country to be the "**the arse end of the world**". Such a radically alternative perspective is consistent with a concern with cognitive body odour and pheromones subconsciously alienating and attracting participants in any integrative endeavour (*Epistemological Challenge of Cognitive Body Odour: exploring the underside of dialogue*, 2006). Does this imply a special sense of urgency to the quest for an overarching integrative framework -- as sensed "from the other end"?

Mathematicians have long explored -- with speculative humour -- the cognitive challenges of insights richer than those of any "flatland" (Edwin Abbott Abbot, *Flatland: a romance of many dimensions*, 1884; Dionys Burger, *Sphereland: a fantasy about curved spaces and an expanding universe*, 1965; Ian Stewart, *Flatterland*, 2001). These notably highlight the experience in 3D of four fingers of a 4-dimensional hand and have been the basis for movie adaptations. Given the emphasis in integrative symposia on making points and developing lines of argument (in two dimensions), a case might be made for reflection on the animated tale of Norton Juster (*The Dot and the Line: a romance in lower mathematics*, 1965) or that of A. K. Dewdney (*A Symposium on Two-Dimensional Science and Technology*, 1981). In relation to comprehension, a most insightful case has been made by mathematician Ron Atkin, notably in the light of communication patterns within a university (*Multidimensional Man: can man live in 3-dimensional space?*, 1981). Implications of his argument have been separately summarized (*Social organization determined by incommunicability of insights*, 1995; *Beyond Edge-bound Comprehension and Modal Impotence: combining q-holes through a pattern language*, 1981). A relevant exploration of "space perception", in the light of understandings of perspective, notably developed by artists, is the theme of a study by [Patrick Heelan](#) (*Space-Perception and the Philosophy of Science*, 1989), integrating earlier concerns with quantum relativity.

Contributions from "other" hemispheres necessarily introduce a form of paradox to the requisite complexity of any integrative "framework" -- as is evident from the above-mentioned insights of the Japanese scholars Magoroh Maruyama and Kinhide Mushakoji. This requires integration of the "hidden" and the "unsaid" from a "netherworld", as previously argued (*Engaging with the Future with Insights of the Past*, 2010). As with its historical function in integrating behaviours judged unacceptable by conventional frameworks, Australia (and most notably Tasmania) is an historical vehicle for problematic perspectives (now associated with the supposedly evil-

intentioned of Guantanamo Bay) -- whilst being a continent with two thirds of its area necessarily reserved for spiritual experience with a contrasting sense of time and the role of imagination (*Interweaving Demonic and Daimonic Associations in Collective Memory*, 2008).

In a first session the Australian contributors variously enabled a context for a richer sense of integrative frameworks (Gary Hampson, *Toward a genealogy and topology of Western Integrative Thinking*, 2010; Jennifer Gidley, *Global Knowledge Futures: interpreting the emergence of imaginaries that cohere*, 2010; Mark Edwards, *Towards an Integral Meta-Studies: describing and transcending boundaries in a global holarchy of sense-making*, 2010). The latter introduced the paradoxical cognitive challenge of self-reflexivity in relation to enactivism. It could even be argued that that preoccupation is echoed in an iconic symbol of Australia, namely the boomerang.

In addition to the previously mentioned contribution by Ananta Kumar Giri (*Towards A New Art of Integration*, 2010), the second session included that of John van Breda (*The Implications of a New Social Ontology of Irreduction for Transcending the Disciplinary Divide*, 2010) understood as a precondition for responding to the current planetary challenges, and that of the only "European", appropriately addressing the challenge of an "outsider" perspective (Mike King, *Outsider Scholarship and the Isthmus Theory of Knowledge Domains*, 2010). Given the term "reflections" in the title of the session, and use of iconic photos of the Earth from the Moon, seen as a trigger for an emergent sense of globality, consideration could also be given to the symbolic role of the Moon, notably as associated with a **mothering context**.

These considerations emphasize the challenge of the vision metaphor, of the consequent cognitive blindspots implied by any "other" perspective (as stressed by Alec Schaerer), notably that framed as an "underside". More generally it relates to how to work with cognitive illusions, a theme raised in a plenary keynote presentation by Roy Bhaskar in the quest for non-duality (*Unity of Theory and Practice, Interdisciplinarity, and Non-duality*, 2010). Consistent with the introductory Sufi tale, the argument has been succinctly formulated by Reshad Feild (*The Last Barrier: a journey into the essence of Sufi teachings*, 2002) as one of "removing the point from which we view".

- hold to a higher standard of of qualitative integration

Challenge to integrative comprehension of ignorance and uncertainty: The paradox and the necessarily hidden nature of any underside highlights the current policy challenge of responding to uncertainty and ignorance despite the surfeit of information. This has been succinctly, and notoriously, expressed by Donald Rumsfeld in poetic terms.

<p><i>The Unknown</i> by Donald Rumsfeld, as US Secretary of Defense, presented during a news briefing on 12 February 2002. [italicized amendments added]</p>
<p>As we know, There are known knowns...<i>regarding an integrative worldview.</i> There are things we know we know. There are known unknowns...<i>about such a worldview.</i> That is to say We know there are some things We do not know...<i>about an integrative perspective.</i> But there are also unknown unknowns, The ones we don't know We don't know...<i>about such an integrative worldview.</i></p>
<p>Discussed in <i>Unknown Undoing:</i> <i>challenge of incomprehensibility of systemic neglect</i> (2008)</p>

Many have acknowledged the significance to Rumsfeld's poem. As described by Errol Morris (*The Anosognosic's Dilemma: Something's Wrong but You'll Never Know What It Is* *New York Times*, 20 June 2010), it is related to the **Dunning-Kruger Effect**: how incompetence masks the ability to recognize one's own incompetence (David Dunning and Justin Kruger, *Unskilled and Unaware of It: how difficulties of recognizing one's own incompetence lead to inflated self-assessments*, *Journal of Personality and Social Psychology*, 1999, vol. 77, no. 6, pp. 1121-1134).

The unknown was acknowledged in the first keynote speech to the Symposium, by Ruben Nelson, focusing appropriately on *Surprises Ahead: what will be special about the 21st Century and why we need boundary-crossing research* (2010). This reflects the views of other authors (Karen A. Cerulo, *Never Saw It Coming: cultural challenges to envisioning the worst*, 2006; Joshua Cooper Ramo, *The Age of the Unthinkable: why the new world disorder constantly surprises us and what we can do about it*, 2009; Nassim Nicholas Taleb, *The Black Swan: the impact of the highly improbable*, 2007). At the time of writing the major "surprise" has been the catastrophic Deepwater Horizon oil spill in the Gulf of Mexico with all the challenges it implies for collective intelligence gathering (*Enabling Collective Intelligence in Response to Emergencies: illustrated by the case of deep oil spill containment*, 2010).

Transformative existential encounter

Meaningful encounter: There is a curious characteristic in the quest for integrative insight in a world marked by a multiplicity of fragmented frameworks. That is the undeclared importance attached to meaningful existential encounter. This may be implicit in ensuring the presence of a charismatic keynote speaker, skilled in the capacity to manifest presence -- although only the privileged few in the audience may then have the possibility of interacting directly with such a person. This pattern is echoed in the cultivated relationship to a "guru -- whether the "guru" is spiritual or otherwise. Mediators and facilitators may aspire to this capacity.

The pattern may emerge quite differently in an encounter between two people, where its significance is experienced as extraordinary in

some way, irrespective of the relative status or reputation of either.

Integration through the other: In both cases it would appear that a degree of integration is felt to be implicit through the other -- through the whole body presence of the other, or through projections onto the other. In the more symmetrical case the transformative nature of the experience has been celebrated in the writing of [Martin Buber](#) (*I and Thou*, 1923).

Whilst the other may well be experienced as multifaceted, there is a sense in which the other provides a form of integration to these facets -- a degree of integration that is otherwise inaccessible. The other provides an embodiment of integration, integral connectivity, acting as a form of Rosetta Stone between different languages -- otherwise mutually incomprehensible. Such encounters give focus in the present to emergence of the potential of the future. (*Presenting the Future*, 2001).

Potential conversation: Participants in an integrative symposium may acknowledge such experiences to a degree, representing potential conversations across the space of discourse and the universe of knowledge. However this may be accompanied by a sense of existential tragedy through the intuited potential of the multiplicity of conversations which will never happen -- "paths not followed" in the terms of [Scott Peck](#). The experience may be more characteristic of interfaith dialogue but may be more dramatically independent of any particular cognitive framework.

Psychopomp and muse: Within a psychoanalytical framework, when associated with an engagement with myth, an "other" encountered in this mode may be recognized as a [psychopomp](#), namely a mediator between the unconscious and conscious realms. It may be symbolically personified in dreams as a wise man (or woman), or sometimes as a helpful animal. In many cultures, the shaman also fulfills the role of the psychopomp -- as leader of souls to the Underworld. To the "underside"? The role may also be catalytic of the emergence of the new. More prosaically, but potentially experienced as deeply significant, is the role in the creative arts of a [muse](#). This may be variously related to that of the [daimon](#) -- to be distinguished from the demonic -- as previously discussed (*Interweaving Demonic and Daimonic Associations in Collective Memory*, 2008). Its transformative potential is powerfully acknowledged in the experience in Iberian cultures of *duende*, most notably associated with flamenco (as discussed below). The role of the muse may be effectively embodied in the facilitation traditionally offered by the *geisha*.

Mirroring: The integrative function of the "other" emerged variously in relation to boundary crossing. One concern was how the human-animal relationship could be reframed with respect to sustainable development (John van Breda, *The Implications of a New Social Ontology of Irreduction for Transcending the Disciplinary Divide*, 2010). This was discussed in relation to mirroring, notably the implications of the mirror test as a human evaluation of the capacity of integrative self-consciousness -- whose significance may yet be challenged by the application of a test of the capacity of the human species to recognize how it is itself mirrored in the environment (*Self-reflective Embodiment of Transdisciplinary Integration (SETI): the universal criteria of species maturity?* 2008; *** specification). Might there be an appropriate test of participants in an integrative symposium to determine the degree to which they could perceive themselves in each other -- the above-mentioned theme of *The Conference of the Birds*? A 30-fold mirroring? Why integrative "optical" system is required to enable such complex mirroring?

Provocatively it was recognized that the integrative operation of a human body, or finger, was beyond the current comprehension of specialized knowledge, whatever the integrative framework. It was in that sense that integrative theory needed to be challenged by the statement figuring on the back of *The Last Whole Earth Catalog: We can't put it together. It is together.*

An important degree of mirroring can then be variously understood in relation to the global environment (*My Reflecting Mirror World: making Joburg worthwhile*, 2002; *En-minding the Extended Body: enactive engagement in conceptual shapeshifting and deep ecology*, 2003; *Human Intercourse: Intercourse with Nature and Intercourse with the Other*, 2007; *Stepping into, or through, the Mirror: embodying alternative scenario patterns*, 2008; *Existential Embodiment of Externalities: radical cognitive engagement with environmental categories and disciplines*, 2009). These papers refer to various authors emphasizing a degree of cognitive participation in the environment, such as ([Henryk Skolimowski](#) (*The Participatory Mind: a new theory of knowledge and of the universe*, 1995). The mirror metaphor has been widely used, notably by F. David Peat (*Looking Glass Universe: the emerging science of wholeness*, 1986; *Turbulent Mirror: an illustrated guide to chaos theory and the science of wholeness*, 1989).

Ambiance and transformative spaces

The requirements for a "**mothering space**", held to be essential to the art of integration, might be explored in the light of the following.

Incubators: This is a concern with respect to business "[incubators](#)" of innovation -- a metaphor central to the design of research complexes and technopoles. No equivalent appears to exist for the social sciences however -- nor have calls been made for such.

Universities: Consideration of the possibility of "integrative" universities tend to focus more on the conventional thematic, administrative and architectural considerations. Possible exceptions include efforts by intentional communities and movements to make use of the "university" metaphor: ***

Transformative events: Organizers of events consciously intended to be transformative give much creative attention to dimensions held to be conducive to such processes. These may range from a focus on personal development to particular forms of entertainment. The transformative achievement of *duende* is a particular focus for performances involving flamenco dancing.

Natural magic: There is a tradition of comprehensive attention to creating an aesthetic framework for encounters -- dating from the Renaissance and before (****). This may include recognition of the role of "magicians" in such environments or focus primarily on the role of "magicians" in creating transformative experiences -- a higher order of facilitation. Explicit mention was made of the latter role during the Luxembourg event by Gaudenz Assenza, a professor of political science responsible for a new European programme entitled "The School for Transformative Leadership". The role of magic behind science is nicely explored by Jonathan Hayward (*AI as an Arena for Magical Thinking Among Skeptics: artificial intelligence, cognitive science, and Eastern Orthodox views on personhood*, 2004).

Aesthetic principles and practices: Some cultures have inherently integrative, aesthetically grounded insights, suggesting the value of eliciting equivalents (or additional insights) in other cultures:

- **Feng shui:** As a traditional Chinese discipline, *feng shui* continues to be valued in designing spaces conducive to a fruitful flow of energy supportive of the activity of those using them.
- **Vastu shastra:** The equivalent discipline of *vastu shastra* is valued in Hindu cultures for similar reasons.
- **Japanese aesthetics:** The outcome of appropriate design is notably recognized through the conceptual framework and sensitivities associated with the terms *wabi-sabi* and *mono no aware*

Sacred geometry: This is a widely documented approach to articulation of integrative insight, variously recognized in many cultures. An analogous possibility exists in cyberspace (*Sacralization of Hyperlink Geometry*, 1997)

Memory theatres and palaces: The challenge to comprehension of the richer and more complex forms of integrative insight resulted in the development of memory palaces and mnemotechnics, culminating in the Renaissance period. Their existence in the past highlights the mnemonic challenge for the future of enabling and sustaining integrative insight.

Ritual practices: Some spiritual disciplines have practices which focus on elaboration of integrative configurations in ritual, including dance. Of particular interest is the Tibetan practice of constructing an extremely complex mandala -- and then destroying it to exemplify an overriding integrative insight of impermanence (*Tibetan Mandala: Closing Ceremony*, 2007).

- svg ****

An integrative symposium: a research project in its own right

Reflexivity: In the spirit of reflexivity which was a preoccupation of some contributors, a strong case could have been made for treating the Symposium event as a research project. This is especially the case given the manner in which its logistic support was provided by graduates of the programme on [Learning and Development in Multilingual and Multicultural Contexts](#) of the University of Luxembourg. In effect, in addition to the theme "Research across Boundaries", a complementary focus could have been activated in the form of "Researching across Boundaries" **within the event**. Many of the skills developed and explored by that programme could then have been usefully applied to the challenges of an event understood as implying:

- a conventional **linguistic challenge**, given the obligation to use English as the language of the event, with the consequence that the expression and (integrative) insights of other languages were constrained and repressed
- an **epistemological challenge**, given the variety of disciplines and worldviews represented, and the challenges of communication between them across "epistemological boundaries", in the absence of any equivalent to "interpretation" and its skills
- the conventional **challenge of a multicultural context** with its implicit and widely researched implications, if only as considered in multinational corporations
- the **challenge of the diversity of participant preferences** with respect to organization of time, styles of presentation, structural constraints, relationship to authority structures, critical modalities, etc. Recognition of this variety was of course inherent in the personality typing methodologies with which many participants were familiar in terms of their relationship to the development of integrative theory

Monitoring psychosocial dynamics: Of related interest would have been research during the event on the psychosocial dynamics undermining or reinforcing boundaries. It is noteworthy that it is rare for international events, especially those with integrative intentions, to monitor their own processes in order to derive learnings from them for future reference. Significant examples of avoidance of such monitoring are the World Social Forum, the World Parliament of Religions, or the ISSS. The challenging nature of such monitoring is evident when it is used (exceptionally) in multinational corporate environments or intergovernmental organizations. Nevertheless it is in such environments that unusual, and problematic, psychosocial behaviour is readily noted.

Potentially more interesting is the integrative role performed by leaders and focal personalities -- including symbolic roles and those appealing to the unconscious. Of related interest is the manner in which an event engenders roles to correct tendencies for which no provision was originally made in the formal organization. Such dynamics are then characteristic of the capacity of the event to self-organize in a timely manner in response to learnings during the course of the event -- processes for which any monitoring function could have provided feedback.

Dramatic analysis: Given the organizational and sponsorship involvement on the part of the University of Luxembourg of the [Faculty of Language and Literature, Humanities, Arts and Educational Science \(FLSHASE\)](#) and the [Research Unit for Sociocultural Research on Learning and Development \(LCMI\)](#), a case could also have been made for exploring such an event critically as drama, if not as psychodrama (*Participative Democracy vs. Participative Drama: lessons on social transformation for international organizations from Gorbachev*, 1991). It is too readily assumed that little can be learnt from the insights of drama and identification of plots and roles and their functions with respect to any such event as a whole, as discussed separately (*Taxonomies of Dramatic Situations*, 2009) with respect to the essence of boundary crossing (*Us and Them: Relating to Challenging Others*, 2009).

The fruitful interweaving of narrative lines could well highlight dimensions of the emergence of integrative understanding. As a pioneer in the organization of such events, in his case the Alpbach Forum series, [Arthur Koestler](#) articulated, in a fictional form, his learnings from the drama of integrative encounters -- in which many participants were only too able to identify themselves (*The Call Girls: a tragic-comedy*, 1972). The "call girls" were the eminent participants happy to accept invitations to attend -- for the price of a first class ticket. As an investigator of creativity, Koestler (*The Act of Creation*, 1964), was subsequently a contributor to the entry on *Humour and Wit* (*Encyclopædia Britannica*, 15th ed. vol. 9, 1983)

Global configuration of an integrative symposium

As a corrective to linear thinking and alignment, efforts might now be made to emulate the archetypal symposium by configuring participants in a circle. Some of the thematic sessions were so configured in Luxembourg. A case can be made for attention to the cognitive geometry implied by such configuration, recognizing that it is a step beyond the linearity of conventional presentations to an aligned audience -- a progression from *Engaging with Globality through Cognitive Realignment: making points and aligning a target* (2009) to *Engaging with Globality through Cognitive Circlets: learning/action cycles* (2009). However, as a geometric progression, more is possible as has been separately summarized (*Metaphorical Geometry in Quest of Globality*, 2009). Whilst it may not be feasible to configure participants in a sphere, this may indeed be envisaged for their contributions from the field they represent, as separately envisaged (*Engaging with Globality through Cognitive Crowns: all-encompassing, well-rounded experience*, 2009). The technology of the *AlloSphere* research facility is a major step in that direction.

Mapping: Given the major challenge for participants of interrelating the integrative content of the contributions available as text, some attention could have been fruitfully given to using various software packages to generate rapidly an overall map with interactive facilities to allow identification of points of mutual interest. As noted above, one such application is *Leximancer* (see illustrative [gallery](#)), also developed in Australia. It is appropriate to note that at an early conference of the Society for General Systems Research (London, 1979) on *Improving the Human Condition: Quality and Stability in Social Systems*, several key figures of cybernetics themselves applied a simple technique to map participants at the event, and their preoccupations, in an iterative manner as separately documented (*Metaconferencing*, 1980; *Metaconferencing possibilities*, 1981). The mapping approach was explored, using the *Leximancer* application, to map insights emerging from the Copenhagen mega-conference on climate change (*Insights for the Future from the Change of Climate in Copenhagen*, 2010; *Magic Carpets as Psychoactive Systems Diagrams*, 2010).

More generally, such mapping is the primary concern of the *Global Sensemaking Network*: *a group of people dedicated to helping humanity address complex, interrelated global problems -- such as climate change, energy policy, poverty, and food security -- by developing and applying new web-based technology to assist collaborative decision making and cooperative problem solving*. They develop "tools for dialogue and deliberation on wicked problems".

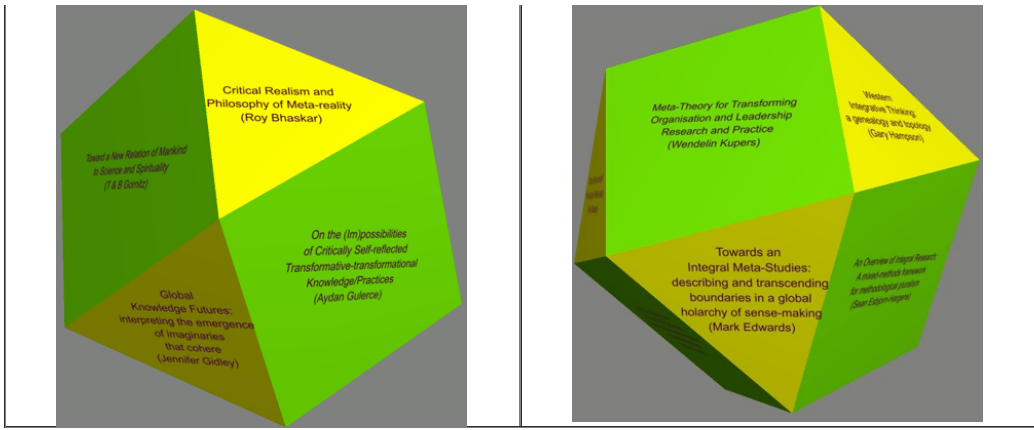
"Passing patterns": Writing in a period when the world is focused on the *Football World Cup*, it is remarkable to recognize that greater sophistication is applied to the analysis of patterns of interaction in various sports -- *passing patterns* -- than is applied to the patterns of dialogue at vital strategic gatherings (Jochen Voss, *The Mathematical Theory of Juggling*, 2007; Ben Beever, *Guide to Juggling Patterns*; Mark Weston, *Passing Patterns*, 2006; Athalie Redwood-Brown, *Passing patterns before and after goal scoring in FA Premier League Soccer, International Journal of Performance Analysis in Sport*, 2008; Association for Soccer Education and Teaching, *Passing Patterns and Small Sided Games*, 2008; Alan Reifman, *Network Analysis of Basketball Passing Patterns II*, 2006; Patrick Riley, *Coaching: Learning and Using Environment and Agent Models for Advice*, 2005).

The approach has been adapted to message passing in complex organizational networks. The situation is all the more curious given the widespread metaphoric use of "ball" in strategic dialogue -- as in the "ball is in their court". There is clearly a case for tracking, visualizing and mapping "point-passing" amongst participants within a supposedly integrative dialogue.

Software configuration: There is however another approach, namely to use readily available software packages to represent the programme content configured in spherical form rather than in the conventional list form commonly used. This was, for example, explored with respect to both the content and participants of the last conference of the *International Peace Research Association* with the theme *Building Sustainable Futures: Enacting Peace and Development* (Leuven, 2008). Using the *Stella Polyhedron Navigator* package (produced in Australia) the results were also output as readily available animations offering a variety of dynamic perspectives on the event (*Polyhedral Conference Representation as a Catalyst for Innovation*, 2008). Some possibilities are indicated below using that software package to represent contributions and contributors. The images are normally to be viewed interactively -- rotating them and transforming them into related geometric forms.

This process could be better shown as an **animation and edited into a movie** (as was done with the peace research conference). **The views below are purely illustrative and merit further thought regarding the juxtaposition of contributions and use of distinguishing colours. In the case of the contributors, the allocation is arbitrary and notably determined by the quality of the photograph available** (from the programme document). The polyhedral forms used were those with numbers of features corresponding to the number of contributions or the number of contributors.

Symposium contributions on polyhedral faces of cuboctahedron (View I)	Symposium contributions on polyhedral faces of cuboctahedron (Rotation of View I)



Symposium contributions on vertices of cuboctahedron	Symposium contributions on vertices (morphing to names on faces)

Stage in exploration of relationship between contributions	Experimental use of representation of relationships in 4D

Mapping of symposium contributors on an icosidodecahedron (unfolded net in 2D)	Mapping of symposium contributors on an icosidodecahedron (folded into 3D form)



Is this one approach to understanding the relationship between the 30 "conference birds" cited in the Sufi tale above? Note the polyhedral form is basic to the syntegrity approach of Stafford Beer as mentioned above. A richer set of illustrations using this approach, and links to related commentary, is provided in a separate document (*In Quest of a Strategic Pattern Language: a new architecture of values*, 2008).

Whilst the primary symbol of global, integrative understanding is traditionally and naturally the sphere, it is appropriate to note that approximations to it (in geometric terms) are more readily achieved by polyhedral configuration of multiple flat earth perspectives -- the greater the number symmetrically configured, the better the approximation. However, attention can appropriately be given to the memorability of globality presented in this way when the fewer the flat earth perspectives so configured the less the challenge to "remembering" them. It is in this respect that the sets of Platonic and Archimedean polyhedra are of primary interest. Hence the use of the cuboctahedron and the icosidodecahedron in the exercises above -- and the use of the icosahedron by Stafford Beer.

In the light of need for psychoactive catalysts of engagement, such configurations of topics -- of topoi in the tradition of [mnemotechnics](#) and memory palaces -- merit reflection (*Degrees of Cognitive Engagement with Interrelated Global Categories*, 2009; *Topology of Valuing: dynamics of collective engagement with polyhedral value configurations*, 2008).

As a common focus of integration of requisite variety, a 12-fold pattern also merits a great deal of attention (Knights of the Round Table, jury size, etc) especially given the universal popularity of integrative perspectives offered by the horoscope -- like it or not. It is appropriate to recall the [Dodekathalon](#) of classical Greece ("the 12 Olympian deities"), and its Roman parallel, as reflecting a comprehensive integration of a diversity of (systemic) functions. This 12-fold pattern is given particular attention by [R. Buckminster Fuller](#) (*Synergetics: explorations in the geometry of thinking*, 1975) through his focus on the cuboctahedron. Some implications have been discussed separately (*Geometry of Thinking for Sustainable Global Governance*, 2009; *Geometry, Topology and Dynamics of Identity*, 2009; *Union of Intelligible Associations: remembering the dynamic identity of a dodecameral mind*, 2005).

Reflexivity as a paradoxical requisite of integrative comprehension

Of potentially more challenging significance is consideration of the adequacy of the spherical form to hold insights relating to the paradoxical self-reflexivity by which global civilization is challenged. [Hilary Lawson](#) (*Reflexivity: the post-modern predicament*, 1986) has clarified the dilemmas it implies for the future arguing that self-reference is central to contemporary philosophy.

[George Soros](#) has argued strongly for the relevance of reflexivity to any understanding of the credit crisis of 2008 (*The New Paradigm for Financial Markets*, 2008) -- a theory he had developed in an earlier work (*The Alchemy of Finance*, 1987). He argues that the theory is not confined to the financial markets alone but deals with the relationship between thinking and reality, claiming that misconceptions and misinterpretations play a major role in shaping the course of history:

My starting point is that our understanding of the world in which we live is inherently imperfect because we are part of the world we seek to understand... People with imperfect understanding interact with reality in two ways. On the one hand they seek to understand the world in which they live. I call this the cognitive function. On the other, people seek to to make an impact on the world and change their situation to their advantage. I used to call this the participating function, but for some purposes I now consider it more appropriate to call it the manipulative function.... When both functions are in operation at the same time they may interfere with each other.... In reflexive situations each function deprives the other of the independent variable which it would need to produce determinate results.... Reflexive situations are characterized by a lack of correspondence between the participants' views and the actual state of affairs.... As a result outcomes are liable to diverge from expectations. Economic theory has gone to great lengths to exclude reflexivity from its subject matter (p. 3-5).

In a recent interview, Soros framed these insights succinctly: *Markets don't reflect the facts very well, partly because they create the facts themselves*. Trends in the real world reinforce a bias in market participants' minds, which in turn reinforces those trends in a *double feedback, reflexive connection*. Realities create expectations, but expectations also create realities (Timothy Garton Ash, *Listen to the financial Wizards of Oz and prepare for another disaster*, *The Guardian*, 24 June 2010). Given the theme here of playful elegance, there is a degree of irony to the recognition of this skill in the common metaphor of "playing" the stockmarkets -- as demonstrated by Soros himself. More fundamentally is the role of confidence in coherence, whether taking the form of financial investment or of cognitive investment in some integrative framework.

The challenge for any integrative initiative is therefore how to incorporate elegantly this dimension of reflexivity into its endeavours and outcomes, as emphasized by Bateson's: **we are our own metaphor**. The argument has been otherwise made, and metaphorically framed,

by [George Lakoff](#) and [Mark Johnson](#) (*Philosophy in the Flesh: the embodied mind and its challenge to Western thought*, 1999).

Approached differently, Michael Schiltz discusses the fundamental assumptions associated with presentation of information (written text) on a flat surface (as with this document), arguing for the merits of a torus (*Form and Medium: a mathematical reconstruction, Image [&] Narrative*, 6, 2003). The torus is effectively a geometric complexification of a sphere and the argument may be associated with the tendency to present taxonomies in matrix form (*Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics: transforming a matrix classification onto intertwined tori*, 2006). With respect to paradox, the geometric argument can be extended further with consideration of the cognitive implications of the [Möbius strip](#) and the [Klein bottle](#), addressing the illusions of an "underside" and of "inside vs outside" (*Intercourse with Globality through Enacting a Klein bottle*, 2009). What then is the surface with which integrative discourse can be fruitfully associated and how is this to be rendered comprehensible?

Given the argument for "**mothering spaces**" for the requisite cognitive integration, the polyhedral forms indeed constitute a form of enfolding spherical "matrix". Clearly the nature of the requisite dynamics between the "sides" is of vital importance -- as held in collective memory by the narrated dynamics between the deities of a Dodekathion. But of greater importance is how more complex forms, like the Klein bottle, provide a mothering space more appropriate to the cognitive challenge of emergent integration -- as separately discussed (*Engaging with Globality through Knowing Thyself*, 2009).

Provocatively, given use of the alchemical metaphor by Soros in relation to global finance, and the discussion above regarding the design of a container for "cognitive fusion", it is useful to recall, as a metaphor, the nature of *alkahest* -- as characterizing the human creative capacity to dissolve any containing framework, however integrative and encompassing. Of related relevance, in the quest for sustainability, is the "philosophical furnace" or *athanor* -- a self-feeding furnace for alchemical digestion. More intriguing is the sense in which global finance is based on confidence, presumably fundamental to any (collective) cognitive engagement with reality.

Transformative embodiment of the extraordinary

It could be argued that any collective event, endowed with a rich diversity of participants, will evoke or engender extraordinary roles to enhance its sense of integrity. Traditionally these included the [troubadour](#) and the [court jester](#). Two aesthetically significant extraordinary figures were evident in the Luxembourg event. Had they been deliberately programmed in as part of a research project, it could not have been better done.

As a magnificent exemplification of the challenge of embodying the extraordinary, the contrast between the two was perhaps of greatest significance -- embodying as they did the contrast between "strong integration" and "weak integration", whilst highlighting admirably the weaknesses of the former and the strengths of the latter:

"A"	"B"
older male	younger female
eminent and widely-known	essentially unknown and unrecognized
extraordinary musical talent	extraordinary dress talent
arriving at the last moment, too busy to be present	necessarily omnipresent, throughout the event
requiring an orchestrated configuration of attentive participants	moving freely amongst participants
performing to the audience of participants	recording the speaker-participant interaction of others
demanding attention by right	eliciting attention indifferently
dominating the auditorium soundscape	essentially silent with no right to speak
reproducing the aesthetics of yesteryear	embodying the aesthetics of the present
repetition of known patterns	imagining unexpected patterns
body language of a male demiurge	body language of a female muse
concentrated self-reproduction	serial self-reinvention and self-transformation
focused and directive	multifaceted and interactive
embodying unquestionable knowledge	embodying a question for the future
embodying the challenges of the past	embodying the challenges of the future
<i>Fiat Lux</i>	<i>Lumen Vitae</i>

Harmony: Music is of unquestionable significance to more fruitful integration, as discussed separately (*A Singable Earth Charter, EU Constitution or Global Ethic?* 2006; *Structuring Mnemonic Encoding of Development Plans and Ethical Charters using Musical Leitmotifs*, 2001). The former paper notes the significance of the initiative of the Director of the [German Research Centre for Applied Knowledge Processing, Franz-Josef Radermacher](#) in articulating a strategy for sustainable development supplemented by an illustrative DVD of songs (*Balance or Destruction: ecosocial market economy as the key to global sustainable development*, 2004).

The role of "A" was therefore potentially of great value to integrative insight. However, as noted by [Jacques Attali](#), it is the organization of the music of today that anticipates the psychosocial organization required by the challenges of tomorrow (*Noise: the political economy of music*, 1985). The structures and procedures of the institutions of today are constrained by programmes and procedures characteristic of the music of yesteryear -- exemplified by the use of the *Ode to Joy* as the anthem of the European Union at a time when the Eurovision Song Contest was won by [Lordi](#), a demonically masked hard rock band. There is seemingly no role for the Lordi favoured by younger generations in the *Ode to Joy* of their elders.

In that sense "A" failed in his conventional use of the theory of harmony to offer insight into the subtleties required of the psychosocial organization of the future -- and without being able to use the marvels of that theory to transform the patterns of the Symposium. He

effectively provided a perfect illustration of why the music of yesteryear, as performed, is irrelevant to the emergent harmonies of a turbulent future. "A" might even be unfairly caricatured as "*Nero fiddling while Rome burned*" (as reported by Suetonius). Who would dare to protest or question?

Unconstrained performance: Again there is every justification for introduction of aesthetic dimensions into integrative discourse in this period of cognitive and strategic fragmentation, as separately argued (*Poetry-making and Policy-making Arranging a Marriage between Beauty and the Beast*, 1993). However, as with facilitators, there is a real challenge to enabling and constraining "performance", as discussed with respect to that argument in the case of poetry (*Proposal for an exploratory international conference*, 1993).

Hermann Hesse says little about the discipline required in managing the archetypal **Glass Bead Game** which has been such an inspiration to many as the cohesive dynamic of a future community (*Magister Ludi*, 1943). If the masters of that game do not understand how they are part of the problem, however, they cannot understand the nature of the resolution required in enabling engagement with the songlines of the noosphere (*Cultivating the Songlines of the Noosphere*, 1996).

Reframing differences: Of particular interest in this respect, in the light of the theory of harmony, are the possibilities of reframing differences in terms of notes in octaves, given all the known challenges of tuning systems and tuning itself (*Tuning a Periodic Table of Religions, Epistemologies and Spirituality: including the sciences and other belief systems*, 2007; *Polarities as Pluckable Tensed Strings: hypercomprehension through harmonics of value-based choice-making*, 2007; *Paradigm-shifting through Transposition of Key*, 1999). How to convert a cognitive trajectory -- however deep-drilled and productive a bore-hole -- into a pluckable string, preferably configured into a wind-harp exposed to the winds of change?

Notably of relevance is reframing the different voices of integration through polyphony (*All Blacks of Davos vs All Greens of Porto Alegre: reframing global strategic discord through polyphony?* 2007). More challenging to conventional approaches to integrative frameworks is moving beyond the technicalities of ensuring that everyone "sings from the same hymnsheet" to those of engaging meaningfully with others who express themselves through other hymnsheets based on other rhythms and tuning systems (*Self-reflexive Challenges of Integrative Futures*, 2008). Is ignoring them and their discordance, or seeking their elimination, a sustainable option in a global society (*Framing the Global Future by Ignoring Alternatives: unfreezing categories as a vital necessity*, 2009; *Patterning Disagreement*, 1995; *Using Disagreements for Superordinate Frame Configuration*, 1995) ? If there is a dissonant *diabolus in musica* in integrative discourse -- unresolved by any possibility of **overtones** -- what then is the appropriate musical metaphor?

Tragically instigators of integrative discourse are seemingly united only in their incapacity to address their fundamental disagreement -- or to consider it to be of any significance to a more encompassing worldview (*Evaluating Synthesis Initiatives and their Sustaining Dialogues*, 2000). The ultimate "lipoproblem" (*Lipoproblems: developing a strategy omitting a key problem*, 2009)? Divorced of its tragic implications, the term derives from the elegantly playful methodology of *Oulipo* (French abbreviation for: **Ouvroir de littérature potentielle**; roughly translated: "*workshop of potential literature*"), a group of writers, poets and mathematicians interested in the creation of literature using **constrained writing** techniques.

Arguably, as first approximation, the integrative worldview required is then necessarily multifaceted -- "multi-sided" -- with consequent implications for its governance (*Towards Polyhedral Global Governance: complexifying oversimplistic strategic metaphors*, 2008) and the configuration of its "discordant" values (*Coherent Value Frameworks: pillar-ization, polarization and polyhedral frames of reference*, 2008).

Epistemological enrichment: In the light of the resonances between the songs of the birds, to make further use of that metaphor, of considerable interest is the argument by Antonio de Nicolas (1978) regarding the use of languages based on tone in his study of the four complementary conceptual languages of the *Rg Veda* considered necessary to hold the complexity of insights and experience:

Therefore, from a linguistic and cultural perspective, we have to be aware that we are dealing with a language where tonal and arithmetical relations establish the epistemological invariances....Language grounded in music is grounded thereby on context dependency; any tone can have any possible relationship to other tones, and the shift from one tone to another, which alone makes melody possible, is a shift in perspective which the singer himself embodies. Any perspective (tone) must be 'sacrificed' for a new one to come into being; continuity, and the 'world' is the creation of the singer, who shares its dimensions with the song.

In ancient times, the infinite possibilities of the number field were considered isomorphic with the infinite possibilities of tone...Rg Veda man, like his Greek counterparts, knew himself to be the organizer of the scale, and he cherished the multitude of possibilities open to him too much to freeze himself into one dogmatic posture. His language keeps alive that 'openness' to alternatives, yet it avoids entrapment in anarchy. It also resolves the fixity of theory by setting the body of man historically moving through the freedom of musical spaces, viewpoint transpositions, reciprocities, pluralism, and finally, an absolutely radical sacrifice of all theory as a fixed invariant. (Antonio de Nicolas, *Meditations through the Rg Veda*, 1978, p. 57)

If the relationship between the arguments of the conference "birds" might be understood in terms of the interference patterns between bird song, how might that relate to integrative understanding derived from insights into integrative patterns of resonance from quantum models of cognitive reality?

Neglected integrative insights

As an account necessarily inspired primarily by insights from only one of the four threads of the Symposium -- that on *Reflections on Integrative Frameworks* -- this constraint reinforces the argument concerning the challenge of any integrative comprehension of globality. That argument was made by noting the predominance of contributors to that theme from other hemispheres, notably Australia.

Those in other threads could of course "read" the contributions regarding that perspective -- had they the time or inclination -- just as one may view extensive media coverage of Australia.

By contrast, the aesthetic and symbolic insight into the globality of the Earth is acknowledged to have become strikingly evident by views from the Moon. Furthermore it is the Moon which enabled comprehension of the globality of the Earth. With respect to the emergence of integrative understanding -- across boundaries -- the tale of Marcus du Sautoy merits consideration (*Finding Moonshine: a mathematician's journey through symmetry*, 2008). What are the subtle and unforeseen correspondences, appropriately characterized as "moonshine", which would enable integrative insight?

As pointers in that direction, mention might be made of the necessary complementarity of insights to be elicited from the other threads:

Integrative frameworks crossing multiple boundaries:

- *Critical realism and the philosophy of meta-reality* (Roy Bhaskar): This challenges the value of statements about our knowledge of the world whilst celebrating the development of integrative pluralism. It asserts the need for understanding to incorporate absence, negativity and process (in contrast with a purely positive account of reality). Seven levels are distinguished culminating in the incorporation of non-duality and the priority of identity over difference and unity over antagonism and split (themes evoked by the author in a [keynote presentation](#)). Self-realization then occurs when the embodied personality is at one with the ground state.

The fundamental challenge posed is that of engaging with the variety of apparently legitimate (flat earth) views which contest that understanding, especially when it is itself so readily framed and experienced, by others, as just another view. This is the essence of the challenge of engaging with otherness -- implicit in the organization and processes of the Symposium itself.

- *Insights into knowledge cybernetics*: This emerging field was the focus of Francis Heylighen (*Self-organization of complex, intelligent systems*) and Søren Brier (*Cybersemiotics*). The implied challenge is however its application to the organization of the knowledge processes of the Symposium itself. As noted above such insights were first applied by Stafford Beer and Gordon Pask to the processes of a meeting of the Society for General Systems Research (London, 1979) through an iterative method described as metaconferencing (*Metaconferencing*, 1980; *Metaconferencing possibilities*, 1981). More specifically, how can current insights benefit from the huge advances in software for processing information, as noted above with respect to the Symposium itself? How might the need and processing of "feedback" be rendered explicit and appropriately organized? How might the Symposium then be enabled to "self-organize"? Of great interest is the possibility of facilitating the emergence of organizations reflecting "third order" cybernetics, as previously argued (*Consciously Self-reflexive Global Initiatives: Renaissance zones, complex adaptive systems, and third order organizations*, 2007).

The other papers for this thread were:

- *On the (Im)possibilities of Critically Self-reflected Transformative-transformational Knowledge/Practices* (Aydan Gülerce)
- *An Overview of Integral Research: a mixed-methods framework for methodological pluralism* (Sean Esbjörn-Hargens)
- *An Opportunity for Integrative Frameworks? Revision of worldviews through the lens of the economic turmoil* (Gaudenz Assenza)

The first raises the dramatically evident issue of dialogue between worldviews (*Guidelines for Critical Dialogue between Worldviews*, 2006). The points to the increasing pressure for more integrative perspectives (*Designing Global Self-governance for the Future*, 2010; *Enabling Collective Intelligence in Response to Emergencies*, 2010).

Matter and mind, culture and consciousness:

- *Nonreductive Physicalism: integrating science, theology, and philosophy of mind* (Nancey Murphy)
- *Generalised Entanglement (as) an Integrative Model: non-local correlations support regularity beyond causal interaction* (Harald Walach)
- *Toward a New Relation of Mankind to Science and Spirituality* (Thomas and Brigitte Görnitz)
- *The Arc From Bodily Experience to Cultural Concepts* (Michael Kimmel)
- *Human Action: troublemaker and troubleshooter in psychological theorizing - and beyond?* (Lutz Eckensberger)
- *Cognitive Enhancement and the Nature of Selfhood: neurofeedback and deep-brain stimulation* (Tatjana Meira-Kochetkova)

As noted above, these contributions highlight the possibility of a transformation of cognitive engagement with supposedly objective reality (*Existential Embodiment of Externalities*, 2009; *Cognitive Implications of Lifestyle Diseases of Rich and Poor: transforming personal entanglement with the natural environment*, 2010; *Towards Conscientific Research and Development*, 2002).

Global societal transformations:

- *Meta-Theory for Transforming Organisation and Leadership Research and Practice* (Wendelin Küipers)
- *Transdisciplinary Consumption* (Sue McGregor)
- *Universities-4-Humanity: locally transforming society - globally renewing humanity* (Ronnie Lessen and Alexander Schieffer)
- *From Modernity to Transmodernity* (Enrique Dussel)
- *Towards a Transmodern Transformation of our Global Society: European challenges and opportunities* (Marc Luyckx Ghisi)
- *Visions of Transmodernity* (Irena Ateljevic)

These challenges may be reframed as *Governing Civilization through Civilizing Governance: global challenge for a turbulent future* (2008). A unique collective exercise to that end was that of the [Institute of Cultural Affairs](#) in its initial period of activity (*Collective Strategy-making: designing a strategic array*). Especially challenging in a global context is the cognitive nature of globality in relation to

the **mothering space** offered by a university, as variously argued with respect to a [University of Earth](#).

More neglected in this account than those cited above, are the papers contributed by contributors who were not present -- an apt metaphor for the unheard voices at any integrative event, behind which are the myriad voices whose contributions are not even considered, as notably indicated by the current oil crisis (*Framing the Global Future by Ignoring Alternatives*, 2009; *Enabling Collective Intelligence in Response to Emergencies: illustrated by the case of deep oil spill containment*, 2010).

Questionable answers

The Sufi tale of the quest of the birds highlights the questionable nature of any closure on a premature answer -- a "bird cage" -- whilst reframing the nature of any ultimate answer to an integrative quest (*Constraints on a Meta-answer*, 1995; *Questionable Answers*, 1995; *Evaluating Synthesis Initiatives and their Sustaining Dialogues*, 2000). It raises the question as to the assumed significance of questions as they are conventionally framed. The thematic streams of the Symposium were each invited to formulate questions to be considered in the subsequent World Cafe process.

Questions have now acquired dramatic, if not tragic, significance for a global civilization. There are the questions -- with answers of uncertain quality -- of whether it will simply collapse, of how a turbulent future may be navigated, and of whether the global management and leadership capacity is adequate to the challenge:

- *In Quest of Optimism Beyond the Edge: through avoidance of the answering process*, 2008
- *Emergence of a Global Misleadership Council: misleading as vital to governance of the future?* 2007
- *Sustaining the Quest for Sustainable Answers*, 2003
- *Questions to which Many deserve Answers*, 2000

For the individual there are corresponding existentially dramatic questions (*Being What You Want: problematic kataphatic identity vs. potential of apophatic identity?* 2008; *Am I Question or Answer?* 2006). They raise the possibility of totally problematic answers (*Epistemological Panic in the face of Nonduality*, 2010; *Beyond the Standard Model of Universal Awareness: being not even wrong?* 2010). How then to engage with a disparate set of more integrative "answers" (*Musings on Information of Higher Quality*, 1996)? What space and opportunity does such a set offer for one's own answers -- or have all the spaces been colonized by imperial authorities?

Curiously these contexts are characterized by a high order of play, whether the "Great Game" between power blocs, political gameplaying, bureaucratic gameplaying, playing the stockmarket, preoccupation with global sports (World Cup, Olympics, etc), interactive gaming on the web, or tourism in the quest of recreation. Nevertheless it is readily assumed that the cognitive significance of play is irrelevant to any integrative framework within which answers might be fruitfully engendered. It might even be argued that the questions formulated are a response to the growth prospects of an "answer economy" (*Cyclic transformation of the global answer economy*, 1982). An interesting question, again, is the potential insight offered by *The Glass Bead Game* of Hermann Hesse.

The humanities have elaborated a literature with regard to the nature of possible questions -- the WH-questions (who, where, what, when, which, why and how). A concern is how they are variously encountered in cognitive development and language acquisition. How might this preoccupation be relevant to global and individual challenges -- and to collective acquisition of a language of requisite richness to respond to them? One approach is to consider the clustering of challenging questions, as with those of the Symposium, in terms of the WH-set -- as previously explored (*Clustering Questions of Existential Significance*, 2010). Of particular interest is the cognitive form of each style of WH-question and what this implies for the manner in which existential space is then framed. How does each style of question frame the above-mentioned **"mothering space"** from which answers may be expected to emerge? Is the process of questioning a form of intercourse engendering cognitive insemination?

Especially intriguing is the possibility that the questions may variously frame the experience of cognitive space in a manner analogous to the ordering of bifurcations in dynamical systems as explored by [catastrophe theory](#) -- a special case of singularity theory in geometry. This may be considered in various ways:

- *Conformality of 7 WH-questions to 7 Elementary Catastrophes: an exploration of potential psychosocial implications*, 2006
- *Interrelating Cognitive Catastrophes in a Grail-chalice Proto-model: implications of WH-questions for self-reflexivity and dialogue*, 2006
- *Towards a Periodic Table of Questions: strategic opportunities from ordering WH-questions*, 2006
- *Engaging with Questions of Higher Order: cognitive vigilance required for higher degrees of twistedness*, 2004
- *Functional Complementarity of Higher Order Questions: psycho-social sustainability modelled by coordinated movement*, 2004
- *Emerging Memetic Singularity in the Global Knowledge Society*, 2009

As has been noted in different contexts, the capacity to respond to catastrophic surprises, experienced in relation to a world understood as "ordinary", may be necessarily dependent on "extraordinary" theories. In physics this has been famously framed by Niels Bohr as the requirement that any adequate theory in fundamental physics be "crazy enough". Arthur C. Clarke argues, in one of his [three laws](#), that it likely to be perceived like "magic". The expectation of an adequate "theory" may itself be called into question, as with the answers from various "crazy wisdom" perspectives. The aesthetic quality of the outcome may indeed embody a sense of moonshine improbability, as mentioned with respect to the fundamental nature of very high orders of symmetry (Marcus du Sautoy, *Finding Moonshine: a mathematician's journey through symmetry*, 2008).

Any relevant insight may also be fundamentally incompatible with conventional claims to intellectual property and territory -- of "getting it" and "grasping it" -- as recognized in the vedic adage *Neti Neti*, and argued elsewhere (*Einstein's Implicit Theory of Relativity -- of Cognitive Property? Unexamined influence of patent office procedures*, 2007).

Any adequate "answer" may then need to be of a subtler nature, a matter of implication rather than explication, as explored by David

Bohm -- recalling the contrast between weak and strong integration. A remarkably insightful case, integrating an aesthetic perspective, has been made by mathematician [Vasily V. Nalimov](#) (*Realms of the Unconscious: the enchanted frontier*, 1982) with respect to a probabilistic theory of truth -- as previously summarized (*Probabilistic vision of the world*, 1995). This recalls the interest in physics in notions of the collapsing of probability functions.

Returning to the Symposium birds, such considerations raise the question as to whether each bird is offering an answer, asking a question, both, or neither. Each may indeed function as a pollinator or spreader of seeds -- seeking to disseminate an insight. Each may be puzzled as to whether it is the target of attempted insemination. But what does their collective dynamic engender? There is however a complementary Sufi tale regarding construction of the ultimate golden bird cage to contain the integrative insight engendered by their efforts. Its bars may then be considered as the trajectories of the birds -- and the interference patterns of resonance between them -- effectively weaving together to form the "**mothering space**". But, being necessarily doorless and empty, the circumstances under which it becomes occupied remain mysterious -- perhaps enabling the mattering of nothing (*Epistemological Panic in the Face of Nonduality: does nothing matter?* 2010; *Import of Nothingness and Emptiness through Happening and Mattering*, 2008).

Concluding expression of appreciation

It is extremely difficult to organize an interdisciplinary event and few can be said to have been adequate to the challenges of the planet as now foreseen. The efforts of Markus Molz, and the support structure of the University of Luxembourg, are therefore much to be appreciated -- recognizing the probable existence of unseen constraints and unfortunate compromises rendering the task nearly impossible.

Gratitude to the organizers is appropriate for having attracted the rich selection of participants. Regret is appropriate regarding the apparently uncritical approach to some dimensions of the event -- especially in the light of its preoccupations. This remains a challenge of continuing concern.

References

Adam Jacot de Boinod. *The Meaning of Tingo -- and other extraordinary words from around the world*. Penguin, 2005 [[review](#)]

Christopher Alexander:

- Notes on the Synthesis of Form. 1964 [[summary](#)]
- A Pattern Language. 1977 [[summary](#)]
- The Nature of Order. 2003-4 [[summary](#)]
- Harmony-Seeking Computations: a science of non-classical dynamics based on the progressive evolution of the larger whole. *International Journal for Unconventional Computing (IJUC)*, 2009 [[text](#)]
- New Concepts in Complexity Theory: an overview of the four books of the Nature of Order with emphasis on the scientific problems which are raised. 2003 [[text](#)]

Ron Atkin:

- *Multidimensional Man; can man live in 3-dimensional space?* Penguin, 1981
- *Combinatorial Connectivities in Social Systems; an application of simplicial complex structures to the study of large organizations*. Birkhauser, 1977

Jacques Attali. *Noise: the political economy of music*. 1985

Stafford Beer. *Beyond Dispute: the invention of team syntegrity*. Wiley, 1994

Nicholas Carr. *The Shallows: how the internet is changing the way we think, read and remember*. Atlantic, 2010

James P. Carse. *Finite and Infinite Games: a vision of life as play and possibility*. Ballantine Books, 1994 [[summary](#)]

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

Edward de Bono:

- *Six Thinking Hats*. Penguin, 1985
- *Six Action Shoes*. Fontana, 1991
- *Six Frames For Thinking About Information*. 2008

Antonio de Nicolas:

- *Habits of Mind: an introduction to clinical philosophy*. Authors Choice Press, 2000
- *Meditations through the Rg Veda*. Shambhala, 1978

Marcus du Sautoy. *Finding Moonshine: a mathematician's journey through symmetry*. Fourth Estate, 2008

David Dunning. *Self-Insight: roadblocks and detours on the path to knowing thyself*. *Psychology Press*, 2005, p. 14-15.

David Dunning and Justin Kruger. *Unskilled and Unaware of It: how difficulties of recognizing one's own incompetence lead to inflated self-assessments*. *Journal of Personality and Social Psychology*, 1999, vol. 77, no. 6, pp. 1121-1134).

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

A. C. Graham. *Yin-Yang and the Nature of Correlative Thinking*. Singapore, The Institute of East Asian Philosophies, 1986 [[text](#)]

Patrick A. Heelan:

- *Space-Perception and the Philosophy of Science*. University of California Press, 1989
- *Music as Base Metaphor and Deep Structure in Plato and Ancient Cultures*. *Journal of Social and Biological Structures*, 1979, 2, pp. 279-291
- *Quantum Relativity and the Cosmic Observer*. In: Yourgrau and Breck, 1977, pp. 29-38
- *The Logic of Changing Classificatory Frameworks*. In: Wojciechowski, J. A. (Ed.): *Conceptual basis of the classification of knowledge*. K. G. Saur 1974. p. 260-274

John Chris Jones. *How Can We Speak of the Future? A paper for the Communications Group, No. 6. Rome Special Conference on Future Research*, 1973

W. T. Jones. *The Romantic Syndrome; toward a new methodology in cultural anthropology and the history of ideas*. Martinus Nijhof, 1961

John Kao. *Jamming: the art and discipline of business creativity*. 1996

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

Hilary Lawson. *Reflexivity: the post-modern predicament*. Open Court, 1986

C. J. Moore. In *Other Words*. Walker and Company, 2004

Kinhide Mushakoji. *Global Issues and Interparadigmatic Dialogue: essays on multipolar politics*. Torino, Albert Meyer, 1988

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

F. David Peat:

- *Looking Glass Universe: the emerging science of wholeness*. 1986;
- *Turbulent Mirror: an illustrated guide to chaos theory and the science of wholeness*. 1989

Martin Pfiffner. *From Workshop to Syntegration: the genetic code of effective communication*. Team Syntegrity International, 2004 [[text](#)]

Darrell Posey (Ed.). *Cultural and Spiritual Values of Biodiversity*. United Nations Environmental Programme and Intermediate Technology Publications, 1999

Franz Josef Radermacher:

- *Balance or Destruction: ecosocial market economy as the key to global sustainable development*. Vienna, Oekosoziales Forum Europa, 2004
- *The Globalization Saga: balance or destruction, 2004* (with Solvig Wehsener and Kai Mettler) [[DVD](#) | [song samples](#)]

Joshua Cooper Ramo. *The Age of the Unthinkable: Why the New World Disorder Constantly Surprises Us And What We Can Do About It*. Little, Brown and Company, 2009

Howard Rheingold. *They Have a Word for It: a lighthearted lexicon of untranslatable words and phrases*. Sarabande Books, 2000

Alec Schaerer. *Systematic Integrality: a methodological arbitration between perspectivity and universality*. 2010

Henryk Skolimowski. *The Participatory Mind: a new theory of knowledge and of the universe*. Arkana, 1995

George Soros:

- *The New Paradigm for Financial Markets*. PublicAffairs, 2008
- *The Alchemy of Finance*. Wiley, 1987

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

Michael Tobias, J. Patrick Fitzgerald and David Rothenberg (Eds.). *A Parliament of Minds: philosophy for a new millennium*. State University of New York press, 2000



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

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