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Part II of Collapse and Renaissance of Civilization: dilemma of communication and engagement understood otherwise

Introduction

This argument is the counterpart to that developed in Inminent Collective Communication "Info-death"? (2018). That focused on the collapse of global civilization understood otherwise than in terms of the many current arguments regarding an impending collapse, whether that of the economic system (as some kind of replica of 1929 or 2008), of the ecosystem (notably as a consequence of climate change), or of overpopulation and other post-peak implications (notably the exhaustion of non-renewable energy resources), as can be variously recognized (Checklist of Peak Experiences Challenging Humanity, 2008). Dystopian fiction has extensively explored the process. Possibilities envisaged include extinction of the human race.

As noted in the introductory paper, rather than being a purely hypothetical exercise, an understanding of collapse could be recognized in the widely discussed disastrous effects of President Trump's actions as de facto leader of global civilization. However, from a systemic perspective, greater insight might be derived from interpreting his role in terms of the trickster archetype of which the Norse deity Loki is perhaps the most relevant example. As portrayed operatically by Richard Wagner, Loki's ambition is to destroy the realm of the Gods - Valhalla in Norse mythology. In the final opera Götterdammerung, the realm of the Gods is indeed set on fire, resulting in their destruction.

Mythology aside, "Valhalla" then lends itself to recognition as the realm of the highest human values -- arguably now in process of global collapse. An allusion to fire is evident in the title of a documentary film on the psychosocial context engendering the election of Donald Trump (Michael Moore, Fahrenheit 11/9, 2018). This deliberately recalls the title of a renowned dystopian novel alluding symbolically to the temperature at which book paper catches fire, and burns (Ray Bradbury, Fahrenheit 451, 1953). Indicative of the challenge, The documentary has been remarkably reviewed by Glenn Greenwald (Michael Moore's "Fahrenheit 11/9" Aims Not at Trump But at Those Who Created the Conditions That Led to His Rise, The Intercept, 21 September 2018). Missing from both the film and the commentary is any sense of how global civilization might be governed otherwise and how it might rise again following its collapse -- "from the ashes of Valhalla".

The emphasis in the introductory argument was on "information", as it might be understood by physics, as being more fundamental than the more conventional preoccupations with collapse. This includes the intangible loss of confidence and an ever greater focus on the
shortest-term -- to the exclusion of long-term considerations within which the trends towards collapse are more readily recognized. As such it can be explored more specifically in terms of individual and collective attention and the many competing efforts to attract and exploit that resource. However it may be argued that increasingly attention will be withdrawn from the processes which depend on it and on the confidence with which it may be associated.

The focus here is on Renaissance, necessarily on a New Renaissance, long awaited and on which many hopes have been placed. As such this exploration can only be a continuing exercise, following a trail of previous efforts, perhaps most notably the compilation by David Lorimer and Oliver Robinson (A New Renaissance: transforming science, spirit and society, 2010):

- Global Renaissance Alliance
- New Renaissance Magazine
- The New Renaissance (CSSS Talk Explores the Parallels between Historical and Modern Scientific Inquiry. Online: News about the NPACI and SDSC Community)
- Science and the New Renaissance
- New Renaissance Group (Statement from an International Multi-disciplinary Workshop "Beyond Sustainable Development", The Royal Society of Edinburgh, July 2001)

The quest has of course been framed in terms of a new paradigm Dialogue among Civilizations: A New Paradigm (United Nations Headquarters, 6 May 1999). The exploration can be variously framed (Challenges of Renaissance: suggestive pattern of concerns in the light of the birth metaphor, 2003; Renaissance Zones: experimenting with the intentional significance of the Damanhur community. 2003; Missing the New Renaissance? No Room at the In? 2010).

The questions asked here are to do with the ways in which one might engage fruitfully with that process, if only as an exercise of imagination -- which may well be the key to enabling whatever it constitutes as an archetype cherished by many. Imagination may also be vital to exploring the necessary complexity it must embody to be adequate to the challenges of the present time, as previously suggested (Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation, 2007).

The introductory argument anticipated some form of Apocalypse following what has been imagined or prophesied as an Armageddon, Acharit Hayami, Yawm din, Ragnarok or Götterdämmerung (2004). The following addresses the possibility of a subsequent reconfiguration as previously explored (Imaginative Reconfiguration of a post-Apocalyptic Global Civilization: engaging cognitively with the illusion of the "End of the World", 2012).

A probable characteristic, necessarily paradoxical, is any collapse and rise may not bear a conventional relation to one another in terms of the "arrow of time". Rather they may coexist or be entwined in a topology variously envisioned in traditions of the past -- now to be recognized as consistent with the subtle complexities of the space-time hypothesized by astrophysics and cosmology. Consistent with any traditional sense of Eternal Return, time may indeed be better understood as cyclic (Roger Penrose, Cycles of Time: an extraordinary new view of the universe, 2011). This may call for understanding the present otherwise, as separately argued (Re-imagining the future through the present: re-engaging Dreamtime, 2012).

Renaissance beyond the constraints of conventionally reasoned argument?

Cognitive constraints of a "post-truth" civilization? This argument could be elaborated in conventionally reasoned terms, as a further development of previous exercises (En-minding the Extended Body: enactive engagement in conceptual shapeshifting and deep ecology, 2003; Psychology of Sustainability: embodying cyclic environmental processes, 2002; Life-skill Learning from Animal Shareholders and Collaborators: cognitive opportunity for engaging radically with a complex world in crisis, 2014).

There is however a case for recognizing the extent to which any such reasoned approach is increasingly unfit for purpose in a "post-truth" world of "alternative facts" in which any reasoned argument is called into question for a variety of reasons -- whether upheld as invalid or inherently suspect. Denial of validity is increasingly a characteristic modality, whether between disciplines, political ideologies or religions.

At the same time there are many reasons to suggest that remedial strategies proposed for the purported crises of civilization -- at present or to come -- are themselves subject to a similar constraint. Authoritative articulations of a way forward are themselves called into question as being of dubious relevance for many -- however appropriate they may appear to the relatively few.

Cognitive "glass ceiling": There is a sense in which humanity is faced with a cognitive "glass ceiling" separating it from a viable future -- a ceiling into which aspirations vainly "fly" and against which "noses are pressed" in frustration. This is accompanied both by a curious passivity and by a hopeful belief that more of the same will finally address the challenge appropriately. This "positive" belief may come to be held as dangerously naive in the chaotic times variously predicted for the future.

It is of course the case that advocates of various belief systems frame their own modality as the royal road to viability -- if only others would follow the recommended path. Some could be understood as offering a way through the glass ceiling, possibly by denying its existence as a barrier. Why is it that the appeal of such modalities is so limited and readily challenged from other perspectives? Why is each so complacent in that regard?

The concern here is whether the glass ceiling can be understood as a cognitive modality strangely associated with cognitive dissociation from nature. The question is whether it is some kind of fundamental thinking style by which humanity has imprisoned itself -- a form of cognitive incarceration by which it characterizes its identity as "human nature".

Nature of the "cognitive trap": If humanity can be usefully recognized as cognitively trapped, the urgency of the times suggests that the nature of the trap is worthy of collective attention. By what will the future recognize that those of this era have been effectively
trapped? The policy scientist Geoffrey Vickers offers the insight that a trap is a function of the nature of the trapped (Freedom in a Rocking Boat: changing values in an unstable society, 1972). Will the "human nature" of the future be understood quite otherwise -- such as not to be susceptible to being trapped as at present?

More significant is the sense in which any such patterns, to be recognized, have to be traced out through an experiential "journey". In that sense they are to be understood as configurations of learning pathways (cf. Interweaving Thematic Threads and Learning Pathways: noonautics, magic carpets and wizdomes, 2010). The cyclic succession of "b'ak'tuns" may be fruitfully interpreted in that sense as the progressive accumulation of collective learning.

Explication vs Implication: "re-cognizing" the "end of the world": The argument has endeavoured to provide a dynamic framework through which cognitive implications of any "end of the world" might be "re-cognized" -- especially as these relate to the world of the individual ("my world"). In these times many individuals are obliged by circumstances to come to terms with an "end" of their own "world" -- notably consequent on the manner in which the global financial crisis has been engendered.

As an explication referring to structures in space and time, the argument obscures the existential reality of such an "end" -- as is only too evident in the case of the emerging implication of personal mortality for everyone (cf. Arthur Koestler, Dialogue with Death, 1942).

A way of thinking of this is in the terms of the paradoxes of the Mobius loop, effectively "orbiting" around (or between) the explicit and the implicit -- namely with 12 such loops, each encompassing the 13th at the centre. The cognitive challenges of self-reflexivity in the case of a single loop have been explored by Douglas Hofstadter (I Am a Strange Loop, 2007), separately discussed with respect to a multiplicity of such loops (Sustaining a Community of Strange Loops: comprehension and engagement through aesthetic ring transformation, 2010).

Notions of any ultimate "end of the world", according to whatever prophecies and forecasts, merit consideration in terms of the need to "live penultimately" whatever form such an "end" may ultimately take, as separately argued (Paradoxes of Engaging with the Ultimate in any Guise: Living Life Penultimately, 2012). This suggests a way of thinking about the transition between "worlds" -- and from the 13th "b'ak'tun" to the 14th "b'ak'tun" -- in the light of orbital mechanics and the insights into the dynamics of looping between planets (Orbiting Round Nothingness across Communication Space: possibility of an "Inter-other Transition Network", 2012).

Appropriateness of rebirth metaphor for Renaissance of civilization?

Renaissance as rebirth? Any renewal of civilization following collapse is most readily explored in terms of the rebirth metaphor associated with Renaissance (Challenges of Renaissance: suggestive pattern of concerns in the light of the birth metaphor, 2003). However rebirth itself invites reflection in terms of a range of current understandings (Varieties of Rebirth: distinguishing ways of being born again, 2004).

Especially intriguing in the light of the rebirth metaphor are the implications regarding processes and conditions prior to any rebirth. These could be explored in terms of gender distinctions and roles, attractivity, foreplay, and intercourse -- metaphorically understood. The difficulty is of course that all these are the focus of considerable dispute raising the question as to the degree to which any Renaissance will transcend such dynamics, or merely embody the legacy they constitute.

Such questions acquire even greater pertinence in terms of the "biological" details of rebirth -- reframed as metaphors. What indeed are the spermatic seeds in competitive quest of an ovum -- the key to the conception by which the rebirth of civilization might be engendered? Therein could lie the nub of the challenge, especially if the many extant models are to be understood as seeds competing for exclusivity in relation to the sense of wholeness embodied in the ovum.

Modelling ambiguity: There is a profound degree of irony in use of "model" given its role in the fashion industry -- an irony all the greater in that early use of both senses was associated with "world modelling" groups headquartered on the Hudson River. It is curious in that respect that the models of the fashion industry are recognized and promoted as the ultimate attractors ("Miss Universe", etc) -- potentially suggestive of intercourse. Whereas those engendered otherwise variously fail as attractors and as inviting any degree of intercourse.

The dilemma of any insight into rebirth could also be understood as embodied in the challenge of gender differentiation and the unresolved issues regarding dominance. Is it imagined that a single model will be uniquely dominant in the insemination of future wholeness -- as a primary determinant of its "memex" makeup? As a Theory of Everything -- as it "ought" to be -- will this pattern echo current strategic ambitions for full-spectrum dominance? Further insights could well be garnered from the subsequent invagination process (Engendering Invagination and Gastrulation of Globalization: reconstructive insights from the sciences and the humanities, 2010).

Switching to the seed metaphor, the difficulty is that "everything has been said" through models galore -- each with the potential for growth. More models are engendered daily, many with aspirations to global prominence. In the seed metaphor, the majority will fall on stony ground. Others may grow into an ecosystem characterized by a complex mix of collaborative and competitive dynamics. Curiously no models strive to articulate a fruitful ecosystem embodying a high degree of psychosocial diversity -- inspired by the degree of biodiversity. Rather the tendency is to imply behavioural norms which are overly simplistic by comparison.

Paradox of future design: As implied by the ambition to elaborate and impose a Theory of Everything in fundamental physics, there is presumably a need to question and transcend the associated elitism and the non-participative process model it implies. Or is it to be assumed that Renaissance will be engendered in the light of Bogg's TOE -- as has been variously explored in science fiction, preceded by some forms colonisation ("Rhodesia")? This would be consistent with any effort to translate current US global dominance into some future variant. It follows the pattern requiring a single architect for a complex project, a single entrepreneur for a co-prorate enterprise, a single military leader, or a single artist for a complex work.
Non-intervention otherwise understood? The challenge can be explored otherwise as one of "designing without designing" -- avoiding the trap of "too many cooks spoils the broth" (Designing the 21st Century -- through integration of the arts and sciences, 1995). The question would then be how to explore design without designing an exploration of design? Intuitions of such a possibility are to be found in the experimental use of a pattern language by Christopher Alexander (***) -- with the obvious reservation regarding how such a language is designed and implemented. How is the designing instrumentality to be called into question, rather than assuming it will be accepted as Blogg's Process of Everything for Everyone?

To the extent that there is no "we" with a shared awareness permitting coherent action, a further dimension to the design paradox is implied by the slogan on the cover of The (Updated) Last Whole Earth Catalog (1974): We can't put it together; it is together. It is wisdom that is called upon to respond to such dilemmas -- not knowledge.

There is a sense in which design is not called for in any conventional sense in the light of any ultimate new model. It could be explored as nascent or emergent -- if unrecognized, or only partially and dimly so. In this sense it is variously understood through facets, symbols and metaphors -- unrelated to the disastrous degree currently enabling the collapse of the current global order.

In the light of that understanding, people acting through a wide variety of groups are already doing what needs to be done and are deeply committed to that end. The question is why the process does not seem to be working appropriately and what -- if anything -- needs to be done, and by whom? On the other hand it may be that civilizational collapse and human extinction are appropriate in some way which remain a challenge to current human comprehension

Global surrealism farming vs planned reality framing?

Configuration of clues to the process of non-design: If there is a need to remove the designer/observer from the archetypal role in the conventional design process, the question might be best explored in a "hands-off" mode. Given its many traps, how can not-designing be fruitfully discussed?

The question can be framed otherwise in the light of the above-mentioned observation of Geoffrrey Vickers: A trap is a function of the nature of the trapped. Could the kind of Renaissance which might be engendered by current think-tank model-thinking be a trap in its own right? Is there then a risk of designing a civilizational rebirth as a trap -- a new "mousetrap" -- as partially intimated by the use of the incubator metaphor for innovation?

The approach here is to explore a configuration of clues on the assumption that the configuration might itself constitute a form of catalyst for the imagination.

By what will the future recognize that those of this era have been effectively trapped? The policy scientist Geoffrrey Vickers offers the insight that a trap is a function of the nature of the trapped (Freedom in a Rocking Boat: changing values in an unstable society, 1972). Will the "human nature" of the future be understood quite otherwise -- such as not to be susceptible to being trapped as at present?

Detecting the unquestioned and the unquestionable: This exercise takes as its point of departure that there is likely to be something unquestioned in the current cognitive engagement with "reality" -- at least in the eyes of the future. Indications are evident in the process of framing and labelling particular portions of that reality, even definitively. This is more obvious through the manner in which engagement with it is framed by various kinds of "plan", possibly organized over time through spreadsheet-style scheduling. This could even be understood as a busyness plan in contrast with a business plan. Both would seem to engender a built environment within which people are increasingly called upon to live and move and have their being.

People are necessarily defined by such framing. Provoacatively however, it can be asked whether reality is in some way alienated through being "grasped" in this way, as argued separately (Beyond Harassment of Reality and Grasping Future Possibilities: learnings from sexual harassment as a metaphor, 1996). There is a degree of irony to reliance on such plans, given their 2D planar implications -- challenged by the reality of living within a "global" civilization.

Farming surrealism: For the purpose of this exercise, such "framing" of reality is contrasted with an elusive form of "farming" of surrealism -- potentially more characteristic of the future. The dynamic subtleties of surrealism are already variously recognized in the surreal conditions of contemporary society -- seemingly exhausted by the inadequacies of conventional expectations of a well-framed, orderly reality. More particularly it is striking that the Merriam-Webster dictionary has named "surreal" as the word-of-the-year, that the Oxford English Dictionary has opted for "post-truth" -- in a world in which much is now made of "alternative facts".

Beyond the word-play relating framing and farming, there is a sense in which the future engagement with surrealism may recall the early approach to farming -- now more familiar in the hands-on experience of gardening. Of course farming quickly evolved from the hunter-gatherer pattern into settled exploitation of a pattern of "fields". Similarly gardening has evolved through the well-defined layout of "beds". Such layouts are in significant contrast to the cultivation of Japanese gardens, possibly as an inspiration to Zen meditation, for example. What is the nature of the inspiration offered by a formal garden in contrast with the latter?

Planning as entrapment? Does the dependence of global civilization on a high degree of planning somehow constitute a form of entrapment -- possibly to be recognized as a kind of cognitive incarceration, namely entrapment in "flatland"? Could this be in some way fundamentally incompatible with the "global" evolution of human nature (Adhering to God's Plan in a Global Society: serious problems framed by the Pope from a transfinite perspective, 2014) ?

Will civilization as currently understood come to be recognized as essentially alienating in relation to that "quality without a name" which Christopher Alexander has argued is the characteristic of a desirable "place to be"? It was to this end that he elaborated A Pattern Language (1977). Expressed otherwise, is there a dark side to the much vaunted "flowering of civilization", as separately explored (Flowering of Civilization -- Deflowering of Culture: flow as a necessarily complex experiential dynamic, 2014).
Exploiting a play on words for mnemonic purposes, any “flat statement” of the truth, namely an assertion of the “plane truth” [sic], can only with difficulty be distinguished from a falsehood (Irresponsible Dependence on a Flat Earth Mentality in response to global governance challenges, 2008). The process of assertion readily obscures the counter-acting insight -- the underside -- which enables both together to give birth to what cannot be expressed assertively (Elise Boulding, The Underside of History: a view of women through time, 1976).

The dilemma is suggestively highlighted by the widespread use of panels and panelists as a collective modality for articulating truth, subtly evoking the physical reality that any panel has another side. Where multiple panels are a feature of complex conferences, this serves to highlight the question of how they are configured together to constitute a larger whole -- even one potentially framing a future Renaissance. The argument which follows uses polyhedra with multiple "sides" (or "faces") to indicate the integration required. This offers the delightful sense of panelists as "panel beaters" -- even drumming out their respective insights, deprecating the relevance of any other "side".

| How many "panels" have to be "beaten" in quest of value-imbuend global governance? |
|-----------------------------------------------|-----------------------------------------------|
| Universal Declaration of Human Rights         | Requisite complexity of panels for global civilization? |
| ![Rhombicosidodecahedron](image1.png)          | ![Geodesic truncated icosidodecahedron](image2.png) |
| 30 Articles displayed on 1 face-type of a rhombicosidodecahedron | Geodesic truncated icosidodecahedron of 1440 faces of 24 types |

The poorly explored challenge of reconciling a requisite multiplicity of panels and panelists in a global conference is discussed separately (Time for Provocative Mnemonic Aids to Systemic Connectivity? Possibilities of reconciling the "headless hearts" to the "heartless heads", 2018). If, as suggested above, any such global configuration is to be compared to an ovum, how indeed are the competitive spermatic seeds to be understood as engaging with it -- as the key to the cognitive conception by which the rebirth of civilization might be engendered?

A spherical configuration of flat panels, as faces of a polyhedron (as an approximation to a sphere), helpfully frames the horizon effect restricting the visibility of one side from another -- other than from within that form. It also raises the question of the relevance of curved panels (the primary concern of panel beaters in practice) and fundamental to understanding of global navigation (Global Psychosocial Implication in the Pentagramma Mirificum: clues from spherical geometry to "getting around" and circumnavigating imaginatively, 2015).

### Engaging the imagination through metaphorical "stargates"

Rather than imagining a new design and then inviting others to attach credibility to it, a different approach could be to assume that people have already variously configured sets of reference points in order to frame their sense of future potential.

The points preferred, and their configuration, may well be deprecated from other perspectives but that may be far from detracting from their value to the person or group concerned. Extremes from a range of cultures might include sporting heroes, movie celebrities, prayer bead circlets, mandalas, or the like. They may include rose windows, BaGua mirrors, a zodiac of constellations, pantheons of gods, musical playlists, or any sense of the heavenly "pearly gates" (Margaret Wertheim, The Pearly Gates of Cyberspace: a history of space from Dante to the Internet, 2000)

The sense of such a configuration may be echoed in the widely referenced archetypal metaphor of a round table in which wise decision-making is purportedly enabled. Any such configuration can be understood as a form of "gateway to the stars", however the imagination is inspired by "the stars" and some kind of portal offering access to what they are held to represent.

For many this has echoes of the magical gateways to another world in folk tales and legends -- possibly associated with magical mirrors. For those imaginatively influenced by science fiction, the notion of stargates has been extensively developed and visualized in movies (**).

The issue is what of that nature is especially evocative and attractive to the imagination. How does this relate to the enthusiasm for the collective possibility of "being great again" (aside from any Freudian implications of rebirth).

### Configurations of fundamental values as "stargates"

"Fundamental values"? Much is made of fundamental values in speeches by leaders in the political and religious domains, notably within the context of plenary assemblies of intergovernmental organizations where they may be claimed to be "universal" or especially
characteristic of a particular culture. It is extraordinary to note that there seem to be no "checklists" of universal values as such. The many exercises in documenting values tend to be extremely reticent in identifying fundamental values. The methodology of exercises such as the World Values Survey seems to focus on the values upheld by individuals with little tendency to aggregate the data to clarify the nature of fundamental values.

When examples are cited it is typically held to be sufficient to frame them with words (peace, justice, freedom, etc), avoiding any question as to what they are -- or how many there may be. It is assumed that they are readily comprehensible and a natural focus of human aspiration and yet there are many studies of the significance of particular values. Everyone knows what "peace" is? The very nature of such values can however be challenged as meriting deeper comprehension in relation to the challenges of governance in a complex society (Human Values as Strange Attractors, 1993).

It is of course readily denied that there is no formal articulation of the set of "values". This is achieved by citing the various declarations of "rights" by which "values" are somehow implied or in which they are embodied. This is the case with respect to the Universal Declaration of Human Rights, the Universal Islamic Declaration of Human Rights, the European Convention of Human Rights, and the like. Alternatively the argument may be that "values" are implied by "goals", as with the UN's Sustainable Development Goals, as a development of its Millennium Development Goals. The matter may however be further confused by the implication that "values" are embodied in "responsibilities", as with the UNESCO Declaration of Human Duties and Responsibilities, the InterAction Council proposal for a Universal Declaration of Human Responsibilities (1997), that of the Occupy Movement (Universal Declaration of Human Responsibilities, 2012), and the Universal Declaration of Responsibilities of Human Intercourse (2007).

Another approach may take the form of a focus on ethics, thereby implying that values are embodied in elaboration of ethical charters and codes of conduct.

Values vs Rights vs Goals? The confusion and conflations is usefully suggested by the following depictions, with "problems" added to the animation on the right -- since a problem would not be recognizable unless it implied a value. The animations serve to emphasize the extraordinary confusion in practice, especially in discourse. There are of course advantages for all in tolerating and exploiting such confusion since the lack of greater clarity regarding the significance implied facilitates agreement "in principle", whether or not this translates into practice. Given the subtle nature of values, it remains unclear as to whether particular values can be identified as fundamental or universal, or whether the very nature of values and the manner in which individuals identify them inhibits more than superficial consensus in this regard -- especially when consensus may or may not be recognized as a value (The Consensus Delusion: mysterious attractor undermining global civilization as currently imagined, 2011).

<table>
<thead>
<tr>
<th>&quot;Value complex&quot;</th>
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<tbody>
<tr>
<td>Tetrahedral animation in 3D</td>
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<td>2D representation</td>
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<td>Pyramidal animation in 3D</td>
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There may be advantages to the confusion with regard to values -- and for some -- the situation could be described as an extraordinary mess which is neither usefully recognized nor effectively addressed. Given the frequency with which values are cited as fundamental and "non-negotiable", and the implication that the major institutions are government are based on such foundational values, it could be appropriately argued that those structures are built on shifting sands -- if not quicksand, or are vulnerable to sinkholes. Changing metaphor, the manner in which "values" are cited bears some resemblance to use of trial balloons or kite-flying, as can be provocatively argued (Globallooning -- Strategic Inflation of Expectations and Inconsequential Drift: global, glo-ball, glow-ball, glow-bawl, 2009; Sins of Hot Air Emission, Omission, Commission and Promission: the political challenge of responding to global crises, 2009). ***

Logos and similar focal frameworks without "content": The focus implied by values, however they are understood, is frequently indicated by the structure of logos and similar centro-symmetrical diagrams, as illustrated by the following -- most notably with the omission of any text indicating the significance of their parts. *** apologia to logos ***

<table>
<thead>
<tr>
<th>Indicative examples of symbolic frameworks</th>
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<td>Scientific &amp; Medical Network</td>
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Images prepared with the aid of Stella Polyhedron Navigator
The schemas above are obviously abstract -- if not necessarily and deliberately so. The challenge is how to decode them and render memorable the values they may embody. One approach is to associate a set of iconic figures with distinctive values. This is most clearly the case with any pantheon, notably the 12 Olympians of Ancient Greece and their equivalents in the Roman Empire (Dii Consentes). Especially noteworthy in those cases is that the deities are in matching male and female pairs, associated with distinctive qualities and functions. Also significant is that the number was not necessarily 12, but occasionally included other deities in the tales by which their relationships were acknowledged. This prefigures subsequent confusion regarding the coherence of sets of values

**Archetypal configurations**: Another iconic example is provided by the 12 Apostles of Christianity, as configured at the Last Supper. Here too there is a degree of confusion, given the role of Judas Iscariot in the dynamics of the unrolling drama. This configuration has offered inspiration to the iconic set of 12 Knights at the Arthurian Round Table -- which continues to serve as an archetype for gatherings of the wise (George Trevelyan, Twelve Seats At The Round Table, 1976). The configurations presented below are unique in that, as with other sets of values, the deities, apostles and knights are only ever presented in checklists -- with no visually indicative suggestion as to the nature of the communications between them. This extraordinary situation is typical of the many 12-fold articulations of strategic significance (Checklist of 12-fold Principles, Plans, Symbols and Concepts, 2011).

<table>
<thead>
<tr>
<th>Traditional archetypal sets</th>
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<tr>
<td>Deities of Greece and Rome</td>
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<tr>
<td>Apostles of Christianity</td>
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<tr>
<td>Knights of the Arthurian Round Table</td>
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Formally recognized sets of values: Valued qualities can be recognized as implicit in the iconic figures above, but the argument can be developed by detecting values in various formal declarations. Typically presented as checklists lacking any indication of their systemic relations, they can be tentatively configured as follows to enable that possibility. The values identified below were obtained as follows:

- Universal Declaration of Human Rights: in six cross-cutting themes
- Values (European Parliament)
- Core Values of Islam (The Religion of Islam)

<table>
<thead>
<tr>
<th>Examples of sets of values</th>
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<tr>
<td>Universal values</td>
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<tr>
<td>European values</td>
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<td>Islamic values</td>
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<td>Values of the USA</td>
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**Embodiment of values in institutions**: In the practice of governance, values are formalized to a further degree in the pattern of distinctive institutions of governance, variously termed government ministries or departments at the national level. Curiously, as “ministries” they tend to echo the functions associated with distinctive deities. This is evident to a higher degree in the array of United Nations agencies which may offer allusions to the Greek and Roman deities in their iconography. Again the tendency is to present government departments and intergovernmental agencies in checklists with little motivation to configure them otherwise to encourage recognition of of their systemic role and the virtual communications between them. This is also the case with the UN Sustainable Development Goals, as an articulation of values with which UN Agencies and national governments are variously imbued -- purportedly.

<table>
<thead>
<tr>
<th>Indicative configurations of governmental agencies and initiatives</th>
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<tbody>
<tr>
<td>United Nations agencies (suggestive)</td>
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<tr>
<td>Government ministries / departments</td>
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<tr>
<td>UN Sustainable Development Goals</td>
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</table>
Any search for images of value configurations reveals that many groups have articulated their own as a guide to their particular strategic initiatives. These may or may not be specifically related to their logos. Those of international organizations, whether governmental or nongovernmental, have been collected in a *World Guide to Logotypes, Emblems and Trademarks of International Organizations* (Union of International Associations, 1997). The question of how these disparate configurations relate to universal values has yet to be addressed.

**Personal value configurations**: In many cases the articulations above are divorced from experiential engagement with values -- possibly held to be abstractions without personal meaning. Individuals may choose to configure the values central to their imaginary and sense of identity through arrays of iconic images. These may be saints, sporting celebrities, movie stars, or stars from the music scene.

Especially indicative in this respect is the use of necklaces and bracelets, following the traditional engagement with circlets of prayer beads (*Designing Cultural Rosaries and Meaning Malas to Sustain Associations within the Pattern that Connects*, 2000). Mnemonic significance may be associated with individual beads or groups of beads which vary in number up to 108, according to tradition.

Given the range of products marketed by the UNDP Shop (*Sustainable Development Goals Products*), it is surprising that 17-bead bracelets or necklaces have not been made for the 17 Sustainable Development Goals, especially since bracelets were given to those committing as "Youth Ambassador for SDGs and 2030 Agenda". Even more appropriate would be their use as "worry beads".

### Recognizing missing values and the challenge of configuring value dilemmas

**Missing values?** The argument has avoided the issue of the inherent ambiguity in the "values" to which reference is so frequently made. The articulation of simple sets of values or goals disguises the extent to which values may have been deliberately or inadvertently excluded from such articulations. This is evident from comparison of the Universal, Islamic and European values with those of the USA - or with those of other value-related sets not presented here (*Arab Charter on Human Rights*, *American Convention on Human Rights*).

Given that much is made of Christian values and family values, notably within the USA, what values are omitted or subsumed by the articulation of the core values of the USA? Challenging examples in that case are: honour, compassion, love and peace. Others, including empathy, are offered by responses to questions such as: *What are the most important social values and beliefs? Why?* (*Quora*) and *What are fundamental values and beliefs?* (*Quora*). Especially intriguing is why the Universal Declaration of Human Rights (defined by committee) is perceived by various constituencies as failing to encompass the set of rights, with their implied values -- thereby justifying other articulations:

- **UN Declaration of the Rights of the Child (1959)**
- **UN Declaration on the Rights of Indigenous Peoples (2007)**
- **Professional values and ethics**: These are typically articulated as professional ethics, encompassing the personal, and corporate standards of behavior expected by professionals: and notably including: honesty, integrity, transparency, accountability, confidentiality, objectivity, respect, obedience to the law, loyalty. Particular instance include:
  - Religious values as ethical principles founded in religious traditions, texts and beliefs: *Buddhist ethics, Christian ethics, Islamic ethics, Jewish ethics* (see also: *List of Spiritual Values*)
  - Values of academic integrity: honesty, trust, fairness, respect, responsibility, and courage.
  - Sporting values: honesty, integrity, humility, professionalism, discipline, toughness, work ethic, enjoyment, passion, respect.
  - Military and army values: loyalty, duty, respect, selfless service, honour, integrity, and personal courage.
  - Engineering ethics
  - Legal ethics
  - Medical ethics
- **Proposed articulations**:
  - Universal Declaration of the Rights of Human Organization an experimental extension of the Universal Declaration of Human Rights (1971)

In some cases, curiously, a value may be confused with the articulation of a problem -- as in the case of "youth" (as framed by consumers of beauty products), or "age" (given the respect accorded to the elderly in some cultures). Missing in conventional approaches to values is the link between what may be held to be of the highest value by some and how these are implied or subsumed by
what are otherwise identified as fundamental and/or universal values.

**Value detection**: Such considerations gave rise to the Human Values Project, resulting in a database integrated with the problems and strategies databases of the Encyclopedia of World Problems and Human Potential. This specifically addressed the issues of **value confusion and definitions**. The project isolated 987 "constructive values" and 1992 "destructive values" implied by words in English. It was argued that the fundamental nature of values could be indicated by resolving the issues of synonyms and ambiguity by clustering them as 230 "value polarities" -- encompassing the paradoxical dynamic between what may be appreciated in "destructive values" and what may be deprecated in "constructive values" (as exemplified in music). These in turn were clustered as 45 "value types" presented as a 5x9 array.

- 5-fold pattern: focus-in-context, certainty, intrinsic-constraint, necessity, external-constraint
- 9-fold pattern: order, change, form, quality, significance, initiative, achievement, consequence, readaptation

The possibilities of a comprehensible visual configuration of the 5x9 pattern in 3D was subsequently explored (Use of Concordian Mandala for a 2D ordering of value polarities, 2016; Use of Concordian Mandala for a 3D ordering of value polarities, 2016; Concordian Mandala as a Symbolic Nexus: insights from dynamics of a pentagonal configuration of nonagons in 3D, 2016; Speculation on Potential Symbolic Relevance of the Concordian Mandala, 2016).

**Integration of "disvalues"**? It might be assumed that "constructive values" invite universal appeal without reservation and that "destructive values" invite universal condemnation. This far from the case. One group's value may well be another's disvalue. Values held to be constructive and positive by some may lack appeal in comparison with those otherwise held to be destructive -- as is only too evident in the media. It is difficult to devise any attractive aesthetic product which does not combine both. The dangerous assumption is that the "negative" can be simply eliminated as is so frequently the case (Eradication as the Strategic Final Solution of the 21st Century? 2014). How otherness deprecated by some is to be integrated is seldom effectively addressed, as can be variously explored (Elaborating a Declaration on Combating Anti-otherness, 2018; Reintegration of a Remained World: cognitive recycling of objects of systemic neglect, 2011).

**Value configuration in 3D**: Central to that exploration of the visualization of an appropriate containing dynamic for a comprehensive set of values of requisite complexity was the nature of the symmetry which would render any mapping more comprehensible. To this end it was noted there that:

- 9-fold partitioning to recursion levels less than ten were considered suitable for comparison purposes, since surface area, compactness, centerpoint spacing, and other metrics are still computable at the rapidly increasing cell densities (A. Jon Kimerling, et al, Global Scale Data Model Comparison; Comparing Geometrical Properties of Global Grids; Cartography and Geographic Information Science, 1999).
- Zonohedra have the property that all edges belong to one of a few sets of parallel lines. In the case of a polar zonohedron, with polar symmetry, it follows that the edges are all equal and the faces are all rhombi (Steven Dutch, Best Representations of 3-Dimensional Symmetry: Equilateral, 2009)

Those considerations gave rise to the following depictions of how a comprehensive set of universal values might best be visualized. Note the sine curves formed by the edges.

<table>
<thead>
<tr>
<th>Views of zonohedrified 9-gonal antiprism with 9-fold symmetry (9*2m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facetting diagram</td>
</tr>
<tr>
<td><img src="image" alt="Facetting diagram" /></td>
</tr>
</tbody>
</table>

**Stellation diagram**

- 72 faces (4 types)
- 144 edges (9 types)
- 74 vertices (5 types)

**Unfolded net**

Model and displays kindly developed by Robert Webb from Stella Polyhedron Navigator.

The visualization exercises also gave rise to the following the following images in 3D visualization of the 5x9 pattern. The associated animations were created with X3D Edit (and can be viewed as such with HSDViewer as X3D files). The application allows the animations to be converted to the more common legacy format of VRML/WRL in which they can notably be viewed in browsers after installation of a Cortona3D plugin (for example).

<table>
<thead>
<tr>
<th>Screen shots of 3D dynamics of an experimental 5x9 framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model A</strong></td>
</tr>
<tr>
<td><img src="image" alt="Model A" /></td>
</tr>
</tbody>
</table>

(interactive access variants: X3D format or VRML/WRL)
Of lesser relevance, other experiments have been undertaken in mapping the articles of the Universal, European and Arab charters of human rights onto polyhedra (Dynamic Exploration of Value Configurations Polyhedral animation of conventional value frameworks, 2008). Use was made of the rhombicuboctahedron and the rhombicosidodecahedron.

**Getting to the "stars": understandings of how a "stargate" might work?**

Non-operative "stargates"? As emphasized above, any configurations of values in logos, mandala-type devices, sets of deities, declarations, or institutional initiatives, is inherently static -- despite a form of dynamic when depicted on flags. A dynamic may be implied, assumed or can be inferred, as with the mythological relationship described between deities, or the systemic communications between agencies and the strategies they deploy. In terms of governance however, this dynamic is essentially concealed -- and may well be critically absent in particular cases. Anecdotal criticism of the UN Administrative Committee on Coordination have indicated that "coordination" is even avoided as a "dirty word".

To the extent that it can be argued that governance currently does not "work", and is less than "fit for purpose", it is understandable, in metaphorical terms, that as a "stargate" it will not "work". The configuration will not enable individuals or groups to be transported to the "stars" -- despite the global framing offered by the UN Sustainable Development Goals. Somehow the elements framing the "stargate" have been defined in ways that render it dysfunctional -- if only as triggers for the imagination.

It can of course be argued that the configurations of values by individual organizations, as provided by the articulation of their own strategic principles, most "work" to some degree as a "stargate" -- perhaps to be understood as offering access only to "local" destinations in their sector of the communication universe.

**Learning from the dysfunctional stargates of conventional governance?** Exploiting the stargate metaphor, governance as currently practiced may be compared to a desperate effort to render functional a stargate inherited from civilizations and pantheons of the past. The symbolic pantheon of governance functions could be understood as configured as follows, with each element of the configuration framing the gate derived from the values and functions attributed to deities of the past, however deprecated.

The configuration is echoed both in the arrays of national government departments and in the array of UN Specialized Agencies, many of which feature those deities in their iconography, as speculatively explored (Brief Survey of the Gods and Temples of the Onusi Pantheon, 1985). The seemingly questionable reference to the functional roles attributed distinctively to deities is curiously echoed by reference to many national government "departments" as "ministries" with their spiritual connotation -- reinforced by the extent to which they are held to embody particular values. Missing from this pantheon metaphor is the number of ministerial department understood as necessary to governance in systemic terms. Expressed otherwise, how many distinct ministries are required in terms of requisite variety for sustainable governance? How is the distinction between pantheons of major and minor deities to be contrasted with that between major and minor departments of governance? Is there a missing theory of divine articulation to be compared with a missing theory of ministerial articulation -- with both to be compared with the articulation of values?

**Revisiting deprecated "stargates" evoking widespread belief**: Although readily deprecated by conventional authorities (governmental, academic or religious), there is a case for revisiting configurations which continue to engage the imagination of large numbers of individuals in cultures worldwide.

In the current times, the features of such a "stargate" may be of less significance than the engagement with it. There is a sobering reality to the fact that imaginative engagement with such configurations may be many orders greater than that in the issues deemed to be significant -- as articulated by various elites. Unrecognized, people may already be imaginatively engaged to an unsuspected degree -- in ways contrasting with the assumption of the recent exhortation by the Club of Rome (Come On! -- Capitalism, Short-termism, Population and the Destruction of the Planet, 2018) as separately reviewed.

<table>
<thead>
<tr>
<th>Traditional configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Wu Xing cycle 5-phase</td>
</tr>
<tr>
<td>Chinese BaGua &quot;Mirror&quot; Earlier &amp; Later Heaven (animation)</td>
</tr>
<tr>
<td>Zodiac of alchemical processes with 12 &quot;measure formulae&quot;</td>
</tr>
<tr>
<td>9-fold Enneagram with octave designations</td>
</tr>
</tbody>
</table>
These are variously discussed with related configurations in the following, from which they are reproduced:

- **Correspondences between Traditional Constellations and Pattern Languages**: requisite simplicity for sustainable comprehension of complexity, 2014.
- **Now as the Ultimate Cognitive Strange Attractor**: a continuing invitation "down the rabbit hole"? (2014)
- **Geometry of meaning**: an alchemical Rosetta Stone? (2013)
- **Experimental Revolutionary Animations of a Chinese Pattern of Metaphors**: based on rotations of a circular configuration of I Ching hexagrams (2015) includes animations of the circular configuration of the 64 I Ching hexagrams (depicted earlier)

In the following argument regarding the "design" of stargates, of greater relevance may be how they are "de-signed", namely disassociating particular significance from the elements by which they are configured. These would then be secondary to their imaginative function, if not to their trans formative function as "portals".

Framed as a circle, the UN General Assembly/Security Council is presumably then to be understood as the centre of a form of "stargate" through which global transformation is enabled into an attractive future variously imagined. That it does not "work" as a way to "peace" is now only too obvious.

As with movie representations of a "stargate", the challenge is to adjust each of the complementary elements of the circular configuration to activate it. The vain efforts in this regard are reminiscent of those used to crack a high security safe requiring the lost code of each dial to be in accordance with that of each other element. With respect to such systemic concordance, the quest for global governance does not suggest that a high level of insight is brought to bear on the decoding challenge. This is commonly deprecatied as "tinkering" with the options, although analogous terms can be used (Monkeying with Global Governance, 2011).

Argued otherwise, it could be said that every effort is made to bring outdated insight to bear on a riddle which has long proven to be resistant to such thinking (Vigorous Application of Derivative Thinking to Derivative Problems, 2013). As in movie renderings, an alternative approach is to frame access to the stargate (and dominance of the universe it implies) in terms of blasting it with the highest-powered weaponry humans have developed.

**Complementary features of "stargate" de-sign and functionality?**

The approach here is to imagine that the "elements" framing the stargate are of a degree of subtlety consistent with what might be attributed to the mysterious dimensions of deities or values -- imbued with a degree of paradox, possibly to be understood as a form of riddle as with the formulation and function of Zen koans. Clearly it would be presumptuously foolish to endeavour to describe such elements in a new modelling exercise, hence the case for exploring insights into "meta-modelling" (In quest of a "meta-model": engaging in a meta-modelling process? 2010; Models: M-theory as indicative of meta-modelling potential? 2015; Criteria for an Adequate Meta-model: preliminary list, 1971).

**Axes of "bias" implying axes of values?** Of relevance to that quest are the distinctions noted in the diagrams below indicative of a degree of equivalence or correspondence. The axes of bias derive (below left) from the philosophical work of W. T. Jones (The Romantic Syndrome: toward a new method in cultural anthropolgy and the history of ideas, 1961). The image on the right is a slightly redrawn version of that of Oliver C. Robinson (Paths Between Head and Heart: exploring the harmonies of science and spirituality, 2018), as summarized by the author (Palintonos Harmonia: the alchemy of opposites, Paradigm Explorer, 2018, 2). That theme is inspired by the insight of Heraclitus and others into "taut harmony" (or "counter-stretched harmony"), as extensively reviewed by Bernd Seidensticker (Palintonos Harmonia, Hypomenemata, 72, 1982)
With the emphasis on axes in both articulations, this suggests that an imagined "stargate" is as likely to be of higher dimensionality than is seemingly implied by those images. The "portal" is somehow to be understood as through a centre of corresponding dimensionality.

**Configuration of 7-fold axes in 3D:** Most valuable in this respect is the rhombic dodecahedron (14 vertices of 2 type; 12 faces of 1 type) and its dual the cuboctahedron (14 faces of 2 types; 12 vertices of 1 type), as discussed separately (Neglected recognition of logical patterns -- especially of opposition, 2017; Oppositional Logic as Comprehensible Key to Sustainable Democracy: configuring patterns of anti-otherwise, 2018). The rhombic dodecahedron is especially favoured as a pattern in the study of Boolean logical connectivity (Lorenz Demey and Hans Smessaert, *Logical and Geometrical Distance in Polyhedral Aristotelian Diagrams in Knowledge Representation, Symmetry*, 2017). The cuboctahedron has particular characteristics with respect to transformation between polyhedral forms that have been highlighted by Buckminster Fuller, notably proving fundamental to enabling him to design geodesic domes. Of particular significance is enabling the transformation between 2,3,4 symmetry and 2,3,5 of the Platonic polyhedra.

**Animations indicative of transformation between cuboctahedron (12 beige vertices) and rhombic dodecahedron (6 red and 8 yellow vertices)**

Produced with Stella Polyhedron Navigator

**Configuration of cognitive biases implying values:** It could readily be argued that preferred values are a reflection of cognitive biases -- disguised by the manner in which the latter are named and described. In that sense any checklist of cognitive biases could be understood as implying a checklist of values, with the advantage that the mutual exclusivity of particular biases would be an indication of the mutual exclusivity of particular values.

The extremes of the axes in the articulations of Jones and Robinson can be understood as values of a kind. However, as cognitive biases or preferences the argument can be taken further by exploring the articulations of cognitive biases. It is in that respect that the extensive list of cognitive biases in *Wikipedia* is a vital resource. Potentially even more valuable is the remarkable multi-level 2D configuration of 180+ cognitive biases designed by John Manoogian III (*The Cognitive Bias Codex*) -- linking to entries on the majority listed by *Wikipedia*. That initiative has been further developed by Brian Morrissette (*Cognitive Bias Codex With Definitions, an Extension of the work of John Manoogian*).

![Cognitive Bias Codex](https://commons.wikimedia.org/wiki/File:Cognitive_Bias_Codex.png)

The set of biases is discussed separately with respect to cognitive constraints in global governance, as potentially evident in the Group of Seven (*Group of 7 Dwarfs: Future-blind and Warning-deaf -- self-righteous immoral imperative enabling future human sacrifice*, 2018). Centered on the depiction of a human brain, the configuration above raises the question as to how this pattern might be
understood in terms of the "global brain" and the responsibility of the Group of Seven in that regard (Global configuration of cognitive biases: towards mapping G7 susceptibility, 2018). Of particular interest, in the light of the extensive role envisaged for artificial intelligence, is the extent to which such biases may be inadvertently embodied in algorithms with implications for governance. With respect to any Renaissance, centering the diagram on the human brain reinforces the implication that any such process may well be primarily cognitive.

The dimensions by which the detailed biases have been clustered is of particular interest in recalling the constraints on communication engendering global "info-death", as discussed in the introductory paper (Imminent Collective Communication "Info-death"? 2018). There is potentially considerable irony to the 7 axes of Jones and Robinson in relation to any Group of Seven -- if there is notable failure to be able to recognize the distinctions made by such axes as a set. In this sense the Group of Seven may indeed be cognitively "dwarf-like" -- or dysfunctionally biased with respect to particular axes.

The set of cognitive biases can be tentatively configured as follows, necessarily raising the question of how they may be clustered and interrelated in any such mapping.

<table>
<thead>
<tr>
<th>Animations of tentative mapping of biases from Cognitive Bias Codex</th>
<th>Animation of tentative mapping of clusters of Cognitive Bias Codex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animation of tentative mapping of biases from Cognitive Bias Codex on 180 vertices of truncated truncated icosahedron</td>
<td>Animation of tentative mapping of clusters of Cognitive Bias Codex on 20 faces of icosahedron</td>
</tr>
</tbody>
</table>

Animations prepared using Stella Polyhedron Navigator

Values as psychosocial "amino acids"? Whether coincidental or of significance to be explored, it is appropriate to note that the articulation of biases in the Codex involves a clustering of the 180+ biases into a set of 20, clustered in turn into a set of 4. Do these imply higher, or more fundamental, clusterings of values? The set of 20 is of interest given that 20 amino acids are understood as encoded directly by the codons of the universal genetic code (namely the standard or canonical amino acids). Beyond their role as residues in proteins, amino acids are vital to a number of processes such as neurotransmitter transport and biosynthesis. Arguably fundamental values could be explored as a memetic analogue (Memetic Analogue to the 20 Amino Acids as vital to Psychosocial Life? 2015).

Given the relation of amino acids to vitamins, and the necessity of a limited set of the latter for nutrition, could values be understood as vital to psychosocial growth, if only as a metaphor. Could functional correspondences between vitamins and the more fundamental values be identified, if only for mnemonic purposes (Deficiencies in the information diet, 2008; Cognitive or memetic "vitamins"? 2015; E. Duniec and M. Raz, Vitamins for the Soul: John Bowlby's thesis of maternal deprivation, biomedical metaphors and the deficiency model of disease, History of Psychiatry, 22, 2011)?

It is ironic to note that the number of vitamins is (almost) identical with the number of values with which the pantheons of Greek and Roman deities are associated -- where "almost" could be seen as a reflection of the count of such deities as being "plus or minus 12".

Qualitative values vs Quantitative values: a fundamental irony?

Is some such vitamin "numerology" equally relevant to the mysterious preference for 12-fold strategic sets (Checklist of 12-fold Principles, Plans, Symbols and Concepts, 2011)?

How do such preferences relate to the distinctive significance of a 7-fold axis with its 14 distinctions, especially in the light of the importance conventionally attached to the effective size of decision-making groups, notably in relation to information processing capacity (George A. Miller, The Magical Number Seven, Plus or Minus Two: some limits on our capacity for processing information and size, Psychological Review, 63, 1956).

Especially curious are the numbers of relevance to justice in exemplifying the value of truth, most notably the appropriateness of a 12-member jury or the number of judges. (** other). At the time of writing worldwide attention was focused on the unprecedented drama of the appointment of the ninth justice to the US Supreme Court of 9. The International Criminal Court is composed of 18 judges, each elected for 9 years. (** nonagons?). The International Court of Justice of the UN comprises a panel of 15 judges elected for 9-year terms. The European Court of Justice normally hears cases in panels of three, five or 15 judges -- assisted by 11 Advocates-General.

With what insight are such numbers determined? Alternative ways of understanding the potential issues have been explored by cognitive psychologists (George Lakoff and Rafael Núñez. Where Mathematics Comes From: how the embodied mind brings mathematics into
Császár polyhedron has no internal diagonals; every pair of the 14 vertices is connected by one of the 21 edges.

The term "value" is in fact most commonly used with respect to the monetary value of anything -- including intellectual property. For many this inspires a quest for its possession. Notions of growth, especially economic growth, are framed in those terms. The qualitative value of growth is readily conflated with its quantitative value -- to the point of being indistinguishable. This creates contorted preoccupations with the "evaluation" of features of the natural environment (trees, rivers, landscapes, fauna), with that of human life and "quality time".

There is a third aspect to such confusion in that "value" is a fundamental notion in mathematics with respect to adjusting parameters in any equation, potentially evident in the control of any system in practice, whether a manufacturing process or a vehicle. And a stargate?. This use incorporates aspects of the quantitative and the qualitative. How much or how little is appropriate -- as is so evident in culinary prowess?

The most obvious dilemmas arise with the confusion between qualitative value and quantitative value (wealth) in defining human identity - - whether for the person or as a measure of social status. Personal qualities may be valued, but there is confusion in how they are to be valued. The social imaginary is understood as the set of values, institutions, laws, and symbols common to a particular social group and the corresponding society through which people imagine their social whole and its identity. However from this perspective no effort whatsoever is made to enumerate the number of values in any such set.

Rather than "follow the money" in the quest for value in an economic Renaissance, the argument here could be framed as a case for "follow the numbers" as a quest for insight relevant to a qualitative Renaissance.

### Cognitive challenge of a "stargate": paradox, twist, riddle?

**Unity, symmetry and concord:** There is a marked tendency to associate the harmonious unity and concord -- to which global civilization purportedly aspires -- with that implied by a circle or a sphere, as widely used in symbols of that goal. Patterns of numbers may exemplify this, as with respect to images of 7-foldness and 12-foldness, if not with 3-foldness and 5-foldness. The reality to be confronted, however, is the disparate understandings of such unity as variously perceived -- and the conflicts which they engender as a consequence.

As catastrophes, such conflictual relationships may be potentially explored in terms of the integrative reframing of catastrophe theory offered by René Thom ([Structural Stability and Morphogenesis, 1972](http://example.com)) and clarified by David Aubin ([Forms of Explanations in the Catastrophe Theory of René Thom: topology, morphogenesis, and structuralism, 2004](http://example.com)). To the extent that in cognitive terms, catastrophes can be understood in terms of strategic questions, formal relations between the two merit inquiry ([Conformality of 7 WH-questions to 7 Elementary Catastrophes: an exploration of potential psychosocial implications, 2006](http://example.com)).

**Twistedness, asymmetry and discord:** There is therefore a case for exploring visualizations of extreme "awkwardness" and asymmetry -- and any subtly hidden relationships they may have to the alluring simplicities of circles and spheres (or to their polyhedral approximations). The language of polyhedra may be used to that end. The Szilassi polyhedron, together with its dual the Császár polyhedron, offer particular insights in relation to this argument ([Mapping of WH-questions with question-pairs onto the Szilassi polyhedron, 2014](http://example.com)). Both offer particular insights into the relation between the 7-fold and the 12-fold as discussed above.

### Polyhedra potentially used for mapping purposes

<table>
<thead>
<tr>
<th>Polyhedra</th>
<th>Faces</th>
<th>Edges</th>
<th>Vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Szilassi polyhedron</td>
<td>7 [of 4 types]</td>
<td>21 [of 12 types]</td>
<td>14 [of 7 types]</td>
</tr>
<tr>
<td>Császár polyhedron</td>
<td>14 [of 7 types]</td>
<td>21 [of 12 types]</td>
<td>7 [of 4 types]</td>
</tr>
<tr>
<td>(with indication in parentheses below of the maximum number of features visible without rotation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>6 (3)</td>
<td>12 (6)</td>
<td>8 (4)</td>
</tr>
<tr>
<td>Dodecahedron</td>
<td>12 (6)</td>
<td>30 (15)</td>
<td>20 (10)</td>
</tr>
<tr>
<td>Icosahedron</td>
<td>20 (10)</td>
<td>30 (15)</td>
<td>12 (6)</td>
</tr>
<tr>
<td>Cuboctahedron</td>
<td>14 (7)</td>
<td>24 (12)</td>
<td>12 (6)</td>
</tr>
</tbody>
</table>

In the case of the Szilassi polyhedron, uniquely, each of the 7 faces shares an edge with each other face -- namely each face touches every other face, ironically implying the high degree of integration purportedly sought between the disparate. As a result, it requires seven colours to colour all adjacent faces, providing the lower bound for the seven colour theorem. Even more difficult to comprehend, the Császár polyhedron has no internal diagonals; every pair of the 14 vertices is connected by one of the 21 edges.

### Animations and configurations of Szilassi polyhedron

<table>
<thead>
<tr>
<th>Animations of wireframe versions</th>
<th>Szilassi polyhedron (rotation)</th>
<th>Circular configuration of 7 Szilassi polyhedra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Szilassi polyhedron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circular configuration of 7 Szilassi polyhedra</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In characterizing a Renaissance "stargate" as a new approach to higher orders of questioning, it is appropriate to recall the classic compilation of 48 Zen koan -- known as a Gateless Gate -- as discussed below.

**Discordant patterns?** As discussed separately, it is therefore of interest to use the unique combination of 7-fold and 12-fold characteristics of the Szilassi polyhedron to take the argument further (Time for Provocative Mnemonic Aids to Systemic Connectivity? 2018).

Surprisingly, it is indeed the case that 7 Szilassi polyhedra can be configured in an unexpected way to form an unusual structure indicative of the kind of coherence that might be expected of 7-fold discourse. This is illustrated above right (see also: interactive 3D variants (vrml; x3d); videos (solid mp4; wireframe mp4)). Separately the equally improbable dynamic configuration of 6 Szilassi polyhedra is shown in a Schatz linkage cycle (Association of the Szilassi polyhedron with cube inversion, 2018; interactive 3D variants (vrml; x3d); videos (solid mp4; wireframe mp4)).

**Paradox of "cognitive twists"**: Folk tales about magical gateways (still told to children), as well as science fantasy accounts of a network of portals whereby the universe may be traversed, typically suggest that the key to their use lies in some kind of secret enigma to be decoded or a riddle to be solved. Rather than passing through a conventional gateway, such riddles in turn imply a necessary "cognitive twist".

The nature of such a twist is most readily suggested by a Mobius strip (as noted above), a Necker cube, or a Klein bottle, as extensively argued by Steven M. Rosen (Science, Paradox, and the Moebius Principle: the evolution of a "transcultural" approach to wholeness, 1994). A way of thinking of this is in terms of the paradoxes of the Mobius loop, effectively "orbiting" around (or between) the explicit and the implicit -- namely with 12 such loops, each encompassing the 13th at the centre. The challenge to obvious interpretation is visually reinforced by the "twist" in the Mobius loop and its potential cognitive significance (cf. Engaging with Questions of Higher Order: cognitive vigilance required for higher degrees of twistedness, 2004; Twistedness in Psycho-social Systems: challenge to logic, morality, leadership and personal development, 2004).

Implying a higher order of self-reflexivity, such an argument has been otherwise developed by Douglas Hofstadter (Gödel, Escher, Bach: an Eternal Golden Braid, 1979). The cognitive challenges of self-reflexivity in the case of a single loop have been explored by Douglas Hofstadter (I Am a Strange Loop, 2007), separately discussed with respect to a multiplicity of such loops (Sustaining a Community of Strange Loops: comprehension and engagement through aesthetic ring transformation, 2010).

In the current surreal condition of global civilization -- as perceived by many -- engaging with a "stargate" necessarily also implies a degree of paradox of as yet unfathomed subtlety

**Humour?** As noted below with respect to the catalytic role of music and poetry in enabling the comprehension of complexity, the same can be said of the universal appeal of humour -- even among authorities totally averse to its inclusion in their texts. It is highly probable that this current global civilization will be framed as some form of "joke" in relation to any foreseen Renaissance, as can already be argued (Humour and Play-Fullness Essential integrative processes in governance, religion and transdisciplinarity, 2005). Such humour is likely to have an enabling function a with the more fundamental form of intercourse in enabling rebirth.

*** paradox, twist, riddle *** papers?

**Pattern of value interrelationships implied by "metabolic pathways"?**

**Mapping to enable Renaissance?**: With amino acids implying a functional analogue to values in psychosocial systems, this points to the possibility of a highly significant metaphor interrelating fundamental values -- otherwise assumed to be quite distinctive, surprisingly without any call to clarify their interrelationship. Metabolic pathways maps provide a systemic view of the reactions occurring in a living
For example, one pathway may be responsible for the synthesis of a particular amino acid, but the breakdown of that amino acid may occur via a separate and distinct pathway. There are two types of metabolic pathways that are characterized by their ability to either synthesize molecules with the utilization of energy (anabolic pathway) or break down of complex molecules by releasing energy in the process (catabolic pathway). The two pathways complement each other in that the energy released from one is used up by the other.

**Musical rendering?** How might the systemic relationship between fundamental values be understood through some such visualization? The pathway map is complex and far from being as readily memorable as values are upheld to be -- hence the case for mapping such relationships onto polyhedra.

It is however appropriate to note that students of biochemistry have long benefitted from renderings of particular pathways into song as mnemonic aids (Harold Bau 2006). The Biochemists' Songbook Book, 1982; with mp3 files). It could be asked why no effort is made to render the set of all "value pathways" into song -- with appropriate transitions between them. Could the harmonies between values of a civilizational Renaissance be significantly embodied in music and song, as separately argued (*A Singable Earth Charter, EU Constitution or Global Ethic?* 2006).

It is strange to note that it is the practice of authorities to define and delineate the future evolution of humanity through text -- a belief that it can be "scripted" -- typically unrelieved by any illustrations, animations, colour, music or poetic lyrics. At the same time the vast proportion of the population ignores such efforts to plan and model their future and is attracted to a far higher degree to alternatives to text. Rather than "script", more fruitful insight might be suggested by storyboarding or choreography. In envisaging rebirth, it may be more a case of composing a Renaissance, as suggested by the exercises of Mary Catherine Bateson (*Composing a Life*, 1991; *Composing a Further Life: the Age of Active Wisdom*, 2010), framed by a study with her father Gregory Bateson (*Angels Fear: towards an epistemology of the sacred*, 1987).

**Helical "twist":** Somewhat ironically, metabolic metaphors of values suggest the possibility of a further "twist" to the argument through the fundamental relationship of amino acids to double-stranded DNA. The possibility is reinforced by ongoing interest in the *Triple Helix concept of innovation* -- with the latter readily appreciated as a value engendered by a 3-stranded association of universities, government and industry. Quadruple and quintuple variants are already envisaged (*Framing Cyclic Revolutionary Emergence of Opposing Symbols of Identity: Eppur si muove -- biomimetic embedding of N-tuple helices in spherical polyhedra*, 2017).

The associations illustrated below are discussed separately (*Psychosocial Learnings from the Spiral Form of Hurricanes: implications of the triple helix and the 3-fold triskelion as "cognitive cyclones"?* 2017). The relationship to the art and mathematics of of juggling, as a valuable metaphor in its own right for the relationship between values, is presented separately (*Governance as "juggling" -- Juggling as "governance": dynamics of braiding incommensurable insights for sustainable governance*, 2018) in the light of the work of Burkard Polster (*The Mathematics of Juggling [excerpt]*, Monash University, 2003).
Given the role of DNA in biological reproduction through the genetic code, this suggests that the rebirth of global civilization may well require some kind of helical association of values derived from a memetic code (Identifying 20 "amino acids" of a memetic code potentially vital to psychosocial life? 2015). A viable Renaissance may depend on engendering a new psychosocial metabolism -- whether or not this can be imagined through memetic engineering.

The focus of the Triple Helix initiative on innovation is a reminder of the relevance of metaphor to any creative process, as fruitfully argued by Douglas Hofstadter and Emmanuel Sander (Surfaces and Essences: analogy as the fuel and fire of thinking, 2013)

**Value "flow dynamics": Renaissance as a "time machine"?**

**Values as verbs?** Arguably there is a fundamental misunderstanding reinforced by repeatedly stressing the distinctively separate nature of values through forms of definition as categories characteristic of conventional thinking. They may however be more meaningful and significant as verbs rather than as substantive nouns, as argued separately (Freedom, Democracy, Justice: Isolated Nouns or Intertwined Verbs? Illusory quest for qualities and principles dynamically disguised, 2011). Their treatment as categories with some form of existence can also be challenged by the implication that they are better understood as open questions -- recalling the classic compilation of 48 Zen koan -- known as a Gateless Gate (as discussed below).

This argument is consistent with criticism of many strategic reports preoccupied with the "state" of the world (or some sector thereof), when it is far more vital to emphasize the dynamics of the condition (World Dynamics and Psychodynamics, 1971). Whether civilization "works" or not is more appropriately framed through an understanding of dynamics.

**Fluidity of values?** Rather than being understood as "solid", as is typical of their use with respect to the solid value founations of institutions, values may also be understood as having a fluid modality. This would be consistent with process philosophy. It is also consistent with the argument of Yolles (From Solid to Liquid Development, 2019) as featured in a keynote conference paper for Borders Without Borders: systemic frameworks and their applications for sustainable well-being in the global era (University of Pavia, 2019). There is then a sense in which values may switch between modalities, as separately argued (Policy Alternation for Development, 1984).

The argument could have been understood as having been developed by Douglas Hofstadter (Fluid Concepts and Creative Analogies: computer models of the fundamental mechanisms of thought, 1995)

**Fuzziness of values?** Embedded as they are in a psychosocial context, Yolles (2019) indicates succinctly how they partake of other understandings which do not lend themselves to precise definition, most notably beliefs:

Culture is an important to any social, whether it is a society, an organisation or a coherent long-lasting group. Human activity systems are belief-based, and it is through beliefs that culture ultimately arises. After Archer-Brown (2012) and Taylor et al. (2015), culture may be defined through its (propositional-descriptive) knowledge, beliefs, values, and norms:

- **Beliefs** are a state of mind in which something is thought to be the case (Churchland and Churchland, 2013), independent of any empirical evidence. Beliefs develop into values when they are seen to be important and a commitment is made to them (Immigration Advisory Authority, 2018).
- **Values** are stable long-lasting beliefs about what is important in a variety of situations (McShane and Ginow, 2003). They are desirable individual or commonly shared conceptions (Morris, 1956), and are associated with actualization and the emergence of spontaneous order (Zetterberg, 1997).
- **Norms** are shared beliefs about conduct, composed as informal rules that guide cognition and behaviour of those who are members of a culture (Morris, 1956; Cialdini et al., 1990; Zetterberg, 1997). Norms exercise social compliance (Zetterberg, 1997), and as belief derived concepts, the use of one may activate others perceived to be semantically close (Cialdini et al., 1990). Behavioural norms govern social behaviour of the members of a culture. Cognitive norms derive from knowledge (Lavine, 1942) that structures cognitive processes and are reflected in of inquiry and discourse (Bohme, 1977).
- **Knowledge** is constructed through beliefs and values and is manifested as the sharable objects of the attitudes2 and the primary bearers of truth and falsity3. Cultures are dichotomous in their value system (Sensate-Ideational division: Sorokin, 1957), and in their normative system (tight-loose division: Pelto, 1968; Gelfand et al., 2011)
Values associated with "flow"? As verbs indicative of processes, embedded in a pattern of psychosocial "metabolic pathways", values might be better understood in terms of flow psychology (MihÁly CsíkszentmihÁlyi, Flow: The Psychology of Optimal Experience, 1990). The experience of "being in the flow" could well have value implications, as with "going with the flow". Of relevance is the extent to which flow-related experiences are now actively cultivated: surfing, roller-blading, gliding, and the like -- especially the formative experience of traffic (Being in the Flow on Strategic Highways and Byways: enabling sustainable self-governance through traffic signage, 2011).

Of particular interest in envisaging any Renaissance, is the question: "what flows?", or better still, "what circulates?". There is an extensive literature on the "circulation of the light", as discussed separately (Circulation of the Light: essential metaphor of global sustainability? 2010). This has notably been highlighted by Carl Jung and Richard Wilhelm with respect to a Chinese classic, The Secret of the Golden Flower (Tai Yi Jin Hua Zong Zhi). A more obvious metaphors with which value is associated include money, as the token of confidence in civilization (Circulation of the light: What flows? What circulates? Cryptocurrency? 2014).

Values as waves? A more radically paradoxical approach, perhaps more appropriate to the times, is to recognize the subtlety of values as strange attractors (Human Values as Strange Attractors, 1993). As such they may call for recognition analogous to the distinction made between wave and particle. In that sense the "existence" of a value may be as elusive as fundamental particles. Given that amino acid molecules lend themselves to analysis within a quantum mechanical framework in molecular orbital theory, there is a case for applying to values the insights of Alexander Wendt (Quantum Mind and Social Science: unifying physical and social ontology, 2015; video; interview).

He argues that quantum consciousness theory is speculative, but compared to the alternative its simplicity is hard to beat (p. 292). He concludes with a bold claim: "whatever their current force as explanatory virtues, the coherence, breadth, and simplicity of the quantum hypothesis make it too elegant not to be true". (p. 293). In arguing that individuals are "walking wave functions" (On being "walking wave functions" in terms of quantum consciousness? 2017). Wendt refers primarily to the parameter sense of values, but concludes:

As graduate students in the social sciences we are taught that it is legitimate to let our values and interests guide us in choosing our questions. But in the conventional, Weberian understanding, that value-laden process ends when we start our actual research; then, the goal of objectivity demands that we keep our values and interests out of the picture. Such a dualism cannot be sustained in quantum physics, and lately is coming into question even in other physical sciences, where non-epistemic values are increasingly seen by philosophers as having a role to play not only in choosing research questions, but also in evaluating their answers. This subject-object "endogeneity" is all the more important in the social sciences, where researchers may be members of the very system they are observing (p. 286).

An advantage of recognizing the dual nature of values as "wave-particle" is that it enables discussion of the manner in which their solidity may be both affirmed and effectively denied (Being Neither a-Waving Nor a-Parting: cognitive implications of wave-particle duality in the light of science and spirituality, 2013). As argue in the introductory paper, there is a case for seeing the collapse of civilization as the collapse of a wave function. Similarly, as an encounter with otherness, there is a case for seeing Renaissance as an encounter with a wave function (Encountering Otherness as a Waveform; in the light of a wave theory of being, 2013).

Identification with "undulating values": Values are readily upheld as fundamental to the identity of an individual or a group, if not to the coherence of a global civilization. Such identification is clearly cultivated in the flow processes mentioned above, notably including dance. With any Renaissance of the kind imagined here, it is appropriate to ask whether this will be characterized by the birth of a successor to Homo sapiens. One exploration of this is with respect to the cognitive engagement with otherness (Authentic Grokking: emergence of Homo conjugens, 2003).

Of far greater relevance to the above argument is the description of Homo undulans as the theme of a penultimate chapter of the very detailed study by Daniel Dervin (Creativity and Culture: a psychoanalytic study of the creative process in the arts, sciences, and culture, 1990), as discussed separately (Emergence of Homo undulans -- through a "grokking" dynamic? 2013). Appropriately Dervin relates
This to a "third birth" of "self-creation", discussed at length in his final chapter. For Dervin, with respect to *Homo undulans*:

> On his most rudimentary level, Einstein has taught us that, even more than vacuums, nature abhors straight lines. At least Relativity abhors them... So a straight line put under pressure, as it were, of scientific observation is recreated as a curve. Does the awareness of curvature also mark the beginning of creativity? One can be grateful, in any case, to Einstein for locating in the bending of light and the curving of space some faint correspondence to that "vain, diverse, and undulating object" that [Michel de] Montaigne described as man, adding "is hard to find any constant and uniform judgment on him" (p. 244)

Dervin then continues:

> ... in the psychological sphere, the abnormal (trauma) -- like the bend of light particles, the swerve of evolution into neoteny, the narcissistic blow in the artist's early years, the gaps and uncertainties of natural creativity... can all be entertained as indigenous to the normal curves of our human nature -- or so I think, not wanting to exempt myself from the wavering principle of uncertainty. (p. 249)

Through the appropriate emphasis on "undulating" (as a characteristic of "wave language"), and through a sense of embodied cognition, this usefully suggests cognitive implication in the body in movement -- most obviously dance, as noted above (*Dancing with the reality of othersness*). This is consistent with the arguments of Mark Johnson (*The Meaning of the Body: aesthetics of human understanding*, 2007; *The Body in the Mind: the bodily basis of meaning, imagination, and reason*, 1987), and with George Lakoff (*Philosophy in the Flesh: the embodied mind and its challenge to western thought*, 1999). Undulatory locomotion is the type of motion characterized by wave-like movement patterns that act to propel an animal forward and is the most primitive of vertebrate locomotor patterns.

Engagement with others of any form is clearly a fundamental challenge in society -- with its extremes of violence and being in love. Whether understood in the form of dialogue or otherwise, that engagement can be explored metaphorically as "intercourse" (*"Human Intercourse": "Intercourse with Nature" and "Intercourse with the Other", 2007).

**Spatial bias vs Temporal bias?** Arguably the widely deprecated preoccupation with short-termism implies a predominance of values which are insensitive to any flow of time into the longer-term. There could be said to be a distortion in the balance between space and time as perceived, most notably at the collective level -- most evident in the overexploitation of natural resources, the insensitivity to consequences of unchecked population growth, and depredation of the environment.

Emphasis has been variously placed on the metaphor of Spaceship Earth -- reflecting a spatial bias, with relatively little consideration of time. A case can be made for the new Renaissance as constituting a timeship -- calling for consideration of "Timeship Earth", in ways as yet to be understood (*Embodying a Timeship vs. Empowering a Spaceship*, 2003; *Timeship: Conception, Technology, Design, Embodiment and Operation*, 2003; *From space-ship design to time-ship embodiment as a requisite metaphor of governance*, 2015). With values intimately related to flow, this suggests that any Renaissance would require a particular attention to time, whether in the moment or in the long-term, as can be variously explored (*Waiting as an Experience of Fundamental Significance: commentary on web resources on types of waiting and anticipation*, 2018; *Comprehending the shapes of time through four-dimensional uniform polytopes*, 2015).

There is an intriguing possibility that the engagement with another person may be experienced as a form of stargate -- a particular distortion of space-time, even a wormhole (*People as Stargates: an alternative perspective on human relationships in space-time*, 1996). This is increasingly recognized in the light of the so-called reality distortion fields engendered by charismatic leaders.

**A "stargate" of higher dimensionality -- the Renaissance as a Gateless Gate?**

In the light of the argument above, the following are potential clues to enabling the operation of a "stargate" in cognitive terms.

<table>
<thead>
<tr>
<th>Clues to design of a cognitive &quot;stargate&quot; -- complementary metaphors</th>
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<td>Unsaying &amp; Aphophasis (Via negative)</td>
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<td>Atteniveness to the moment (&quot;Beginner's mind&quot;)</td>
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<tr>
<td>Higher order cybernetics (self-reflexivity)</td>
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<td>Dynamics &amp; Statics (values as verbs)</td>
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<td>Negative capability (critical questioning)</td>
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<td>Encompassing paradox (surgeality)</td>
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<td>Metaphorical stepping stones (creativity via naivety)</td>
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<tr>
<td>Temporal obfuscification (&quot;laying down a path in walking&quot;)</td>
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<td>Embodiment of otherness (&quot;They are&quot;)</td>
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<td>Regulate cognitive twist (dramatic pivot)</td>
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<td>Identifying with flow (&quot;Homo undulans&quot;)</td>
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<td>Uncertainty (intimacy/disorders)</td>
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<tr>
<td>Renaissance (&quot;Earth &amp; self-reinvention&quot;)</td>
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<tr>
<td>Re-cognizing extended body (&quot;outside-inside&quot;)</td>
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<tr>
<td>Embedded of archetypes (&quot;Know ye, not that ye are gods&quot;)</td>
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</table>

**Definition -- "unsaying" and apophatic discourse?** The art of engaging with an operational "stargate" would appear to require clues of a higher order which consciously avoid any obsession with definition and closure (Christopher James Galloway, *Deliver us from Definitions: a fresh way of looking at public relations*, Public Relations Inquiry, 2, 2013, 2). Whilst definition may be essential to the design of one kind of motor or spacecraft, there is the possibility that overdefinition may inhibit other kinds of movement. The difficulty is determining how the motor required may be "stuck" as a consequence.
There is a clue to the possibility that significance may be associated with what cannot be effectively said, if only because of constraints in the communication process. In that sense nothing that can be said may be worthwhile saying -- as this may assertion can be variously interpreted. Arguments to that effect include:

- the recognition in some traditions that the most fundamental deity cannot be named
- the process variously recognized in theology as the via negativa or apophasis, as separately discussed (Being What You Want: problematic kataphatic identity vs. potential of apophatic identity? 2008; Michael A. Sells, Mystical Languages of Un说着, 1994)
- the argument of Christopher Alexander with respect to the quality without a name as being associated with the most desirable place to be
- the initial statement of the Tao Te Ching as variously translated:
  - The name that can be named is not the enduring and unchanging name -- with the strategic implication that: The Dao that can be trodden is not the enduring and unchanging Dao.
  - The name that can be named is not the eternal Name -- with the strategic implication that: The Reason that can be reasoned is not the eternal Reason..
  - An idea that can be expressed in words cannot be the infinite idea -- with the strategic implication that: The Dao that can be understood cannot be the primal, or cosmic, Dao
- the insight of Hinduism known in Sanskrit as Neti Neti, (especially valued in Jnana Yoga and Advaita Vedanta) understood to mean "not this, not this", or "neither this, nor that"
- the concluding phrase by Ludwig Wittgenstein: Whereof one cannot speak, thereof one must be silent (Tractatus Logico-Philosophicus, 1921).
- whether sayable or not, there is clearly a need for greater attention to what is unsaid (Global Strategic Implications of the "Unsaid": from myth-making towards a "wisdom society", 2003).
- negative capability as understood in poetic terms by John Keats: capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason
- unmaking ***

Container? If there is a need for a new "metabolism" to ensure the viability of global civilization reborn, as argued above, there is a case for exploring the possible form of the container (Containing significance in the con-quest of the moment, 2016; Cognitive significance of a con-tainer, 2016). Just as much is made of the transition from a flat Earth understanding to the global form of the present incarnation, it is possible that Renaissance will be associated with a new type of container for whatever then "flows" in order to sustain it.

A valuable clue in this respect is the toroidal form of the reactor currently under construction to enable nuclear fusion -- known as ITER. The primary criterion is to design the container to ensure that what circulates within the torus -- plasma at very high temperature -- does not come in contact with the wall of the torus, which would destroy it catastrophically. Arguably this illustrates the challenge in the current global civilization in which significance -- notably that of values -- tends to degrade (or be degraded by) whatever definitional container is used to communicate it. Are conflicts effectively between definitional "tanks" rather than between the significance they may contain or imply ("Tank-thoughts" from "Think-tanks": metaphors constraining development of global governance, 2003)?

The ITER design may therefore be used as a means of reflecting on the nature of cognitive fusion from which a higher order of psychosocial energy may be elicited (Enactivating a Cognitive Fusion Reactor: Imaginal Transformation of Energy Resourcing (ITER-8), 2006; Eliciting a Universe of Meaning -- within a global information society of fragmenting knowledge and relationships, 2013).

Embodiment of fundamental paradox: As variously noted above, and as has become evident through the increasing surrealism of a global civilization of conflicting perceptions, there is a case for embodying paradox suggestively in some way. Reference was made above to the Mobius strip, the Necker cube and the Klein bottle as a means of "containing" insight into such paradox.

Other such cognitive devices are required to hold incommensurable perspectives. The argument has been developed with respect to use of the traditional Ouroboros to that end, especially given the toroidal form it shares with the ITER design (Complementary visual patterns: Ouroboros, Môbius strip, Klein bottle, 2017). In the light of the physiological process of osmosis, so vital to the interface between internal and external processes, this highlights the challenge of comprehension between the two sides of a paradox (Cognitive Osmosis in a Knowledge-based Civilization: interface challenge of inside-outside, insight-outsight, information-outformation, 2017).

Dynamics of diversity: As emphasized above, there is a particular challenge to introducing the requisite dynamics to contain what can no longer be effectively held in a static form, most notably any definition -- as with any set of values and notably those implied by the Universal Declaration of Human Rights (whose periodic update is curiously never envisaged). A valuable dynamic is provided by the Chinese BaGua pattern, both through the alternation between its two forms and the dynamics between the 8 distinctions in each.

The ITER design offers a particular clue of relevance in that it is a configuration of magnets which ensures that the plasma circulating around the torus is held at a distance from the toroidal wall. The BaGua dynamics can be considered as indicative of a cognitive equivalent, ensuring balance between the variety of cognitive extremes. How many "cognitive magnets" are required to enable and sustain Renaissance? How might they be most fruitfully configured? How is the dynamics between them to be rendered appropriate?

Imagining ways of imagining the Renaissance: As is implied by the above argument, there is a need to recognize the variety of complementary ways in which the Renaissance may be fruitfully imagined. One approach to the challenge is inspired by a much-studied poem by Wallace Stevens (Thirteen Ways of Looking at a Blackbird), as previously explored (Anticipating When Blackbirds Sing Chinese: conversion from tweets to songbites to ensure integrity of communication, 2014). This included sections on:

- Engaging with a memescape of paradoxical complexity
- Embodiying a multiverse of uncertainly ordered
Ways of looking at ways of looking -- in a period of invasive surveillance
Post-modern challenge to simplistic binary framing of the other
Imaginative composition of ways of looking or listening

incongruity
Thirteen ways of apprehending blackbird song
Imagining future communication integrity enabled by aesthetics

That argument is supported by many visual clues. In the light of the potential complementarity of the distinctive images indicated above, the argument is further developed separately (Topology of Renaissance "stargate" of higher dimensionality: complementary ways of imagining engagement with otherness, 2018).

Renaissance as a "Gateless Gate"? Consistent with the nature of a cognitive "stargate", that metaphor should be susceptible to challenge. Should a Renaissance "stargate" be "gateless" in some sense?

Especially intriguing in this respect is the classic articulation of what is commonly translated into English as the "Gateless Gate". This is a collection of 48 Zen koan -- each framing a provocative question to elicit insight. The classic collection was compiled in 1228 by the Chinese Zen master Wumen Hui-k'ai. It is known in Mandarin as WuMenKuan and in Japanese as Mumonkan. It is commonly translated in English as The Gateless Gate, although the implications of this are contested -- as evident in the translation by Robert Aitken (The Gateless Barrier: the Wu-Men Kuan, 1991). The ambiguity is itself appropriate. A 49th koan, which appeared in a classic edition, has also been considered part of the set.

In the spirit of this argument for higher dimensionality, the traditional list of 48 koan was variously "configured" onto a polyhedron to constitute a 3-dimensional "gate" -- as an exercise in response to the emergence of Twitter (Configuring a Set of Zen Koan as a Wisdom Container: formatting the Gateless Gate for Twitter, 2012). Twitter itself can be provocatively interpreted in terms of the traditional language of the birds -- a perfect language, itself a potential feature of Renaissance (Re-Emergence of the Language of the Birds through Twitter? 2010).

For the purpose of that exercise, use was made of the extensive rendering of The Gateless Gate on Wikisource which includes both the original koan, extensive commentary, and the succinct commentary of Wumen on each koan. The following are selections from that mapping exercise.

<table>
<thead>
<tr>
<th>Exercise in arbitrary mapping of 48 Zen koan onto polyhedra</th>
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<tbody>
<tr>
<td>Rhombicuboctahedron (48 edges)</td>
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<tr>
<td>(reflection planes shown)</td>
</tr>
<tr>
<td>Truncated cuboctahedron (48 vertices)</td>
</tr>
<tr>
<td>(symmetry axes shown)</td>
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<tr>
<td>Rhombicuboctahedron (4D simulation)</td>
</tr>
<tr>
<td>Truncated cuboctahedron (4D simulation)</td>
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</tbody>
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Images prepared using Stella Polyhedron Navigator

Any understanding of a "gateless gate" is usefully recalled by another suggestive configuration -- the traditional symbolism of the gateway offering entry to a sacred space, as discussed separately (Civilization as a Global Configuration of Silences: recognizing silence of a higher order, 2013).

There are many forms of symbolic gateway in Asia, as with the palou of China and the torana of India. In Japan these are known as torii, of which there are many variants. The ambiguity between the problematic and constructive alternatives is indicated in the image below by use of a simple animation. Such gateways may well stand in isolation in the countryside. Leading "nowhere", they are now appropriate symbols for the future as many experience it (Going Nowhere through Not-knowing Where to Go, 2013; Way Round Cognitive Ground Zero and Pointlessness? Embodying the geometry of fundamental cognitive dynamics, 2012). It is mnemonically appropriate that the sign most closely associated with mathematical insight into its nature should be the pi sign -- resembling the torii in significant respects.

Embodying externalities -- engaging otherwise with otherness

In the light of the above, of interest in what follows is whether individuals and groups can recognize more consciously the patterns by which their particular behaviour is characterized -- and possibly how they may "shape-shift" between several such patterns, especially over the course of a life, as a consequence of education and experience. How do people transform between information patterns, especially when they "reinvent themselves"? How is the binary framing of otherness as a kind of enemy to be "combatted" -- without succumbing to that framing (Elaborating a Declaration on Combating Anti-otherness, 2018; Engaging an Opposing Ideology via Martial Arts Philosophy, 2016)?
More speculatively, it is possible that such considerations are fundamental to the psychology of sustainability, as separately discussed (Psychology of Sustainability: embodying cyclic environmental processes, 2002). It is even possible that the extinction of natural species, understood in systemic terms as a loss of requisite variety, may engender the emergence of an equivalent pattern in human behaviour and “insight” -- otherwise understood. The possibility has been intimated by various authors (Henryk Skolimowski, The Participatory Mind: a new theory of knowledge and of the universe, 1994; Darrell Posey, Cultural and Spiritual Values of Biodiversity, 1999; David Abram, Becoming Animal: an earthly cosmology, 2011; Robin Wall Kimmerer, Braiding Sweetgrass: indigenous wisdom, scientific knowledge and the teachings of plants, 2015).

Lost behavioural characteristics, in information processing terms, may become manifest in strategic modes of cognition by individuals and groups. Arguably, as a speculative provocation, the extinction of dinosaurs subsequently engendered the emergence of multinational corporations (Systemic Biomimicry of Dinosaurs by Multinational Corporations: clearing the ground for future psychosocial evolution, 2011).

More intriguing, given the desperate quest by science for alien life elsewhere, there may well be a sense in which "alien life" is engendered and coexists with "normal" human behaviour, as previously explored (Sensing Epiterrestrial Intelligence (SETI): embedding of "extraterrestrials" in epistemical dynamics? 2013). There is also a case for reframing the meaning of reincarnation cultivated by some cultures. As information processing patterns, "humans" may well be able to "reincarnate" in animal behavioural patterns (or be effectively obliged to do so by their behaviour). Hence the intuitive recognition of this transformation through nicknames and adoption of totems.

Understood in this way, any successful effort to eradicate species in nature ensures their re-emergence, although seemingly otherwise, yet recognizable in systemic terms through a pattern language. How many "species", understood cognitively, are required for sustainability? Is this consistent with various arguments for human speciation -- reframed in cognitive terms? Given the cognitive significance of weather and topography, long cultivated through the symbolism variously valued in different cultures, there is similarly the possibility of reframing the cognitive relationship with the environment -- in contrast to the detachment from nature widely deplored.

Renaissance of global civilization may then be understood as implying a cognitive rebirth of the environment in which humanity is embedded -- not simply a Renaissance of human civilization alone, replicating its misinterpreted role in dominance of that environment. This argument is developed separately (Cognitive Embodiment of Nature "Re-cognized" Systemically: radical engagement with an increasingly surreal reality, 2018).

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