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Introduction

It is striking to note the number and variety of indications of what people, groups and nations believe the world ought to do. It is equally striking to note the manner in which implementation of precepts, injunctions, recommendations, resolutions and plans is systematically avoided in some way -- irrespective of whether they are compatible and invite a degree of consensus. Claims to the contrary may well be vociferously made.

The process can be observed through various frameworks. These include: respect for any global ethic (Universal Declaration of Human Rights, Declaration Toward a Global Ethic); response to issues of climate change; implementation of resolutions of intergovernmental organizations; etc.

The issue is notable with respect to the environment through recent recognition of "planetary boundaries" (Anders Wijkman and Johan Rockström, Bankrupting Nature: denying our planetary boundaries, 2012) -- although totally lacking in any consideration of the neglect of remedial action (Recognizing the Psychosocial Boundaries of Remedial Action: constraints on ensuring a safe operating space for humanity, 2009). Advocacy of unilateral geoengineering remedies for global warming is especially noteworthy (Geo-engineering Oversight Agency for Thermal Stabilization, 2008).

As currently envisaged, there is every possibility that global governance of any kind is inherently questionable, as separately argued (The Consensus Delusion, 2011; Ungovernability of Sustainable Global Democracy? 2011). The strategic dilemma can be represented -- although to little avail -- through various mapping exercises (Map of Systemic Interdependencies None Dares Name, 2011; Mapping the Global Underground, 2010; Mind Map of Global Civilizational Collapse, 2011; Convergence of 30 Disabling Global Trends: mapping the social climate change engendering a perfect storm, 2012).

The approach here is to explore whether there is a case for framing such matters otherwise, through a pattern of questions -- rather than focusing on definitive answers to which the majority are expected to subscribe. The argument is that this pattern might help to frame the "language" through which attractive global governance of any viability can be usefully envisaged -- prior to articulating the content of any global governance proposal. The approach is partly inspired by the initiative of Johan Galtung with respect to Forms of Presentation in the context of the UNU project on Goals, Processes and Indicators of Development (Forms of Presentation and the Future of Comprehension, 1984).

Any such pattern could call itself into question in a spirit of self-reflexivity consistent with the argument of Douglas Hofstadter (Gödel, Escher, Bach: an Eternal Golden Braid, 1979), as discussed previously (Consciously Self-reflexive Global Initiatives: Renaissance zones, complex adaptive systems, and third order organizations, 2007). With the focus on questions, rather than aspiring to be definitive, the possibility of its refinement could be an active concern built into the pattern. Some consideration has previously been given to this possibility (Strategic Implications of 12 Unasked Questions in Response to Disaster, 2013)

Pattern of governance-related questions
The preliminary set of questions might take the following "form".

<table>
<thead>
<tr>
<th>Is the proposed articulation of the approach to global governance constrained by ...</th>
<th>Comments / Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive simplicity / brevity?</td>
<td>&quot;back-of-the-envelope&quot; proposals for world governance vs. unreadable 1000-page legislative proposals</td>
</tr>
<tr>
<td>Excessive complexity (time-demanding)?</td>
<td>Desperate lack of know-how vs. inability to marshal available know-how fruitfully</td>
</tr>
<tr>
<td>Shortage of resources / skills?</td>
<td>Promoting the only truth but with the challenge of handling dissenters</td>
</tr>
<tr>
<td>Excessive resources / skills?</td>
<td>Inherent tedium of a proposal for some vs. addictive distraction it constitutes for others</td>
</tr>
<tr>
<td>Being uniquely right / righteousness?</td>
<td>Business-as-usual (&quot;as our forefathers did it&quot;) vs. disruptive radicalism</td>
</tr>
<tr>
<td>Dissenters being especially wrong?</td>
<td>Focus on delivery at all cost vs. habitual indifference to delay and procrastination</td>
</tr>
<tr>
<td>Being uniquely boring / uninteresting?</td>
<td>Facilitating consumerism and employment at all costs vs. impractical idealism (&quot;not by bread alone&quot;)</td>
</tr>
<tr>
<td>Being excessively absorbing / distracting?</td>
<td>Preference for particular styles (open, closed; centralized, decentralized) vs. anything goes (&quot;hundred flowers blooming&quot;)</td>
</tr>
<tr>
<td>Excessive reliance on single medium?</td>
<td>Specific outcomes (political, religious, ideological, profit-making) at any cost vs. anything goes</td>
</tr>
<tr>
<td>Excessive reliance on complex multimedia?</td>
<td>The safe and just space for humanity</td>
</tr>
<tr>
<td>Dependence on excessive unilateralism?</td>
<td>Environmental sustainability</td>
</tr>
<tr>
<td>Dependence on excessive multilateralism?</td>
<td>Climate change</td>
</tr>
<tr>
<td>Excessive abstraction / elegance / subtlety?</td>
<td>Food</td>
</tr>
<tr>
<td>Excessively concrete / &quot;practical&quot;?</td>
<td>Water (fresh and clean)</td>
</tr>
<tr>
<td>Excessively respectful of authority?</td>
<td>Education</td>
</tr>
<tr>
<td>Excessively disrespectful of tradition?</td>
<td>Jobs</td>
</tr>
<tr>
<td>Excessive focus on material livelihood?</td>
<td>Children</td>
</tr>
<tr>
<td>Excessively unrealistic?</td>
<td>Resilience</td>
</tr>
<tr>
<td>Excessively particular organization?</td>
<td>Public health services (including access and equity)</td>
</tr>
<tr>
<td>Excessively disorganized?</td>
<td>Arid and semi-arid lands (water scarcity)</td>
</tr>
<tr>
<td>Excessively locked into a single (hidden) agenda?</td>
<td>Social equity</td>
</tr>
<tr>
<td>Excessively dissociated from any agenda?</td>
<td>Energy (sustainable)</td>
</tr>
<tr>
<td>Excessive focus on implementation?</td>
<td>Social protection and social security (income generation and employment)</td>
</tr>
<tr>
<td>Excessive detachment from fulfillment of commitments?</td>
<td>Social development (human rights and social dialogue)</td>
</tr>
</tbody>
</table>

The approach to refining any such pattern from the perspective of different disciplines is considered in a later section below. The case for attaching greater significance to "questions" rather than focusing immediately on "answers" to a future form of global governance has been partly addressed separately (World Futures Conference as Catastrophic Question: from performance to morphogenesis and transformation, 2013; Clustering Questions of Existential Significance, 2010).

### Representing boundaries to governance (constrained by other boundaries)

On the occasion of the Rio+20 Earth Summit -- the United Nations Conference on Sustainable Development (Rio de Janeiro, 2012) -- Oxfam released a discussion paper produced by Kate Raworth (A Safe and Just Space for Humanity: can we live within the doughnut? February 2012). The paper presents a single visual framework -- shaped like a doughnut -- that represents a space within which humanity can thrive. This doughnut-like area is defined by combining the above-mentioned set of 9 "planetary boundaries" with a new set of 11 social boundaries, based on the 11 dimensions of human deprivation that emerged from the issues raised by governments in their Rio+20 submissions.

### Oxfam Doughnut

![Oxfam Doughnut](from Kate Raworth, A Safe and Just Space for Humanity: can we live within the doughnut?, 2012).

An earlier discussion of the Oxfam paper presented the above image in relation to both that of the "planetary boundaries" and one developed in response to the latter on the "psychosocial boundaries of remedial action" (Exploring the Hidden Mysteries of Oxfam's Doughnut: recognizing the systemic negligence of an Earth Summit, 2012). The two images are presented below.
Inspired by the Oxfam presentation, could some such "doughnut pattern" be used to frame a viable pattern of global governance -- in the light of the set of extreme questions with respect to the 12 dimensions in the table above? How then to highlight the zone of viable governance within some such representation?

The design choice for such a representation can be illustrated by the preliminary representation below. The image could suggest that the viable approach is:

- **within the brown zone**, following the Oxfam approach (where it is coloured green)? This is problematic, given that the 12 dimensions of the pattern of questions cut across the doughnut. This suggests the possibility that there are two "safe" ranges (on the brown) preceding the extremes of each dimension. This "illogical" interpretation is inconsistent with the Oxfam approach, but is the basis for a refinement of the design proposal (as discussed below)

- **within the green-coloured central hole** of the doughnut, surrounded by the brown zone? This "abandons the doughnut philosophy", implying instead that there are compromise possibilities to be found between the extremes on each dimension -- in the green zone close to the centre of the doughnut. Changing from the "doughnut" metaphor to an "eye" metaphor, this would imply that viability is associated with the "pupil" rather than the "iris". This is the option illustrated in the image immediately below.

"Bi-focal" option? There is however a third way of considering use of the doughnut (see image below). This could take greater account of the inherent incompatibility of strategic perceptions in relation to each dimension. This approach is somewhat inspired by the slider commonly used in web maps to enable zooming in or out by users -- to expose greater detail (and less overview) or less detail (and greater overview). From a geographical perspective, this accords with the sense that both global and local perspectives are valuable.

Thus in the case of the complexity/simplicity dimension, a more systemic, complex view is to be valued, just as a simpler view is also valuable to more immediate understanding. Strategically this reflects the different framings of global and local perspectives -- even though they may be appropriately complementary.

The concern with this design approach is the implication that on each dimension there are then two zones of viability (rather than one). With respect to any approach to global governance, using the simplicity/complexity dimension as an example, this then implies that:

- the governance approach may be **too complex** -- namely outside the green zone (and the doughnut) at one extreme
- the governance approach may be **too simple** -- namely outside the green zone (and the doughnut) at the other extreme
- any compromise combination of complexity/simplicity in the approach may be **non-viable** -- namely in the clear zone towards the centre of the doughnut
A viable governance approach may however require comprehension through two "incompatible" (or "incommensurable") perspectives, just as it is problematic to combine a global and local perspective in the exploration of any map. For the viability of the proposal, the two incompatible perspectives then need to be within the green zone on opposite sides of the doughnut -- for each of the 12 dimensions.

An appropriate degree of "separation" can be usefully understood through the two-eyed requirement of stereoscopic depth perception. This approach is also illustrated by the Uncertainty Principle in physics, understood here as precluding a global perspective if a local perspective is chosen -- and vice versa (cf. Garrison Sposito, Does a generalized Heisenberg Principle operate in the social sciences? Inquiry, 1969).

With respect to the last point, a further possible implication, well illustrated by the "being-right/dissenter-wrong" dimension, is that both perspectives may be at their respective polar extremes, namely outside the green zone of the doughnut -- as with a sense of being "absolutely right", accompanied by a sense that dissenters are "dangerously wrong".

### Illustration of design option using "incompatible" perspectives

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>viability</td>
<td>Indicated by being &quot;within the green zone&quot;</td>
</tr>
<tr>
<td>Note</td>
<td>Two non-viable cases of &quot;being-right/dissenter-wrong&quot; dimension and the &quot;implementation/commitment-indifference&quot; dimension</td>
</tr>
</tbody>
</table>

Suggestive use can be made of a normal distribution curve to distinguish the representations above. This has the advantage of implying of the greater proportion of any population adhering to perspectives relatively closely associated with the mean, in contrast with those preferring greater or lesser emphasis, and with those adopting even more extreme positions.

<table>
<thead>
<tr>
<th>Illustration of contrasting design options above</th>
<th>(presented as cross-sections of the circle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green zone indicative of viability</td>
<td>Green ring indicative of &quot;bi-focal&quot; viability</td>
</tr>
</tbody>
</table>

The "bi-focal" design option is discussed further below.

### Refinement through disciplinary perspectives and cognitive preferences

Avoiding closure, the argument is that both the "form" and "content" of the pattern of questions merit challenge -- through an iterative process. The approach could also invite the insights from a variety of typically incompatible perspectives and disciplines, potentially including: aesthetics (arts), mathematics, philosophy (theology), politics, as suggested by:

- **aesthetics:**
  - how could the pattern be represented more attractively in graphic form?
  - how could any pattern of articulations in text be reframed fruitfully by poetry?
  - how could music and song refine the pattern -- rendering it singable to ensure its memorability?
  - etc

- **mathematics (cybernetics):**
  - how could the set of questions and their relationships be framed otherwise (in a more coherent and integrative manner) from a formal perspective?
  - what requisite variety might emerge from a cybernetic perspective?
  - etc

- **philosophy (theology)**
• how can philosophical preoccupations refine such a pattern?
• how can religious preoccupations refine such a pattern?
• politics:
• how can the power issues of governance be better represented within such a pattern
• etc

The relevance of a variety of such “languages” in their own right has been previously explored (12 Complementary Languages for Sustainable Governance, 2003; Eliciting a 12-fold Pattern of Generic Operational Insights: Recognition of memory constraints on collective strategic comprehension, 2011; Enabling a 12-fold Pattern of Systemic Dialogue for Governance, 2011)

In each case the challenge is how to acknowledge the sensitivities of any particular discipline without completely transforming the pattern into the language of that discipline -- such as to alienate those with contrasting perspectives. In this sense the pattern is an approach to a "meta-pattern", as suggested by Gregory Bateson:

The pattern which connects is a meta-pattern. It is a pattern of patterns. It is that meta-pattern which defines the vast generalization that, indeed, it is patterns which connect. (Mind and Nature: a necessary unity, 1979)

Such a framework could then be used to "challenge" any formulated proposal for "global governance". Perceived inadequacies could encourage revision of the pattern.

Consideration could also be given to challenging the pattern in the light of:
• the various extant sets of cognitive axes of bias, of which summaries are provided separately (Systems of Categories Distinguishing Cultural Biases, 1993). Of particular interest is that of W. T. Jones (The Romantic Syndrome: toward a new method in cultural anthropology and the history of ideas, 1961).
• the implication of the number of "dimensions" considered appropriate, as discussed separately (Distinguishing Levels of Declarations of Principles, 1980).
• the number of "value polarities" that might be taken into consideration, again understood as "dimensions". A possible checklist is provided separately as developed within the Human Values Project (Value polarities)

Reframing sets of injunctions through questions

Given the fundamental importance attached to the Ten Commandments in Christianity and Judaism, the “form” of that set can be instructively challenged by transforming the injunctions into questions. This is especially relevant to the extent that it is cited as a pattern of guiding principles in relation to the faith-based approach to the governance of Western countries -- with their key involvement in framing proposals for global governance. Reframing in terms of questions is however particularly relevant, given the manner in which individual precepts of the set tend to be more honoured in the breach than in the observance.

<table>
<thead>
<tr>
<th>The Ten Commandments tentatively reframed by questions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles</td>
<td>Practices?</td>
</tr>
<tr>
<td>1 Should thou not have other gods before me? Should thou have other gods before me?</td>
<td>radical disagreement in practice about &quot;god&quot; (possibly as being a delusion) and &quot;worship&quot; of a variety of surrogates (notably promoted by advertising)</td>
</tr>
<tr>
<td>2 Should thou not make unto thee any graven image? Should thou make unto thee any graven image?</td>
<td>elaboration of every variety of image in celebration of disparate values and preferences -- as &quot;something to believe in&quot;</td>
</tr>
<tr>
<td>3 Should thou not take the name of thy God in vain? Should thou take the name of thy God in vain?</td>
<td>frequent use of &quot;god&quot; as an expletive or in seeking support for selfish aims (potentially harmful to others)</td>
</tr>
<tr>
<td>4 Should thou not remember the sabbath day? Should thou remember the sabbath day?</td>
<td>convergence on 24/7 lifestyles, precluding exceptions and shared quality time</td>
</tr>
<tr>
<td>5 Should thou not honour thy father and thy mother? Should thou honour thy father and thy mother?</td>
<td>frequently problematic relations between generations, especially given the increasingly evident irresponsibility of elders for the current crisis situation</td>
</tr>
<tr>
<td>6 Should thou not kill? Should thou kill?</td>
<td>heavy investment in arms with relative indifference to their ready availability and the consequence of their use (perversely celebrated through media violence)</td>
</tr>
<tr>
<td>7 Should thou not commit adultery? Should thou commit adultery?</td>
<td>celebration of problematic personal relationships (as a prime theme in the media) and as focus of &quot;affairs&quot;</td>
</tr>
<tr>
<td>8 Should thou not steal? Should thou steal?</td>
<td>heavy commitment to depriving others of resources, especially when they are not aware of the process or are disempowered by it</td>
</tr>
<tr>
<td>9 Should thou not bear false witness? Should thou bear false witness?</td>
<td>heavy reliance on misleading others whenever expedient (and denying that to be the case)</td>
</tr>
<tr>
<td>10 Should thou not covet? Should thou covet?</td>
<td>considerable interest in acquiring possessions owned by others -- whether from them or otherwise (especially to become &quot;Number 1&quot;)</td>
</tr>
</tbody>
</table>

It might be provocatively asked whether any attempt is made to report on global progress with respect to each of the precepts implied by
the questions above, (or by their Islamic equivalents) -- as is attempted with respect to the Millennium Development Goals.

Dynamic representation of proposals for principled global governance

Exploration of the more dynamic approach implied by questioning is of interest as a challenge to the somewhat static nature of an injunction in what is in practice a dynamic context, as separately argued (Dynamic Transformation of Static Reporting of Global Processes: suggestions for process-oriented titles of global issue reports, 2013).

The "bi-focal" doughnut representation might again be used to highlight the ambiguity implied by the 10 paired extremes of the Ten Commandments, as in the experimental animation below. **Dimensions are highlighted below in red when either of the two defining parameters falls outside the boundaries of appropriateness suggested by the green ring of the doughnut.** This could be understood as suggesting a "bloodshot" image of the "eye" of governance (using that metaphor as an alternative to doughnut ring).

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<table>
<thead>
<tr>
<th>&quot;Bloodshot governance&quot; in practice?</th>
</tr>
</thead>
<tbody>
<tr>
<td>tentatively illustrated by animation of a doughnut representation of the Ten Commandments (respect for the Commandments is indicated by points within the green zone)</td>
</tr>
</tbody>
</table>

![Doughnut Animation](image1)

The "bi-focal" doughnut approach could be similarly applied to the 31 articles of the Universal Declaration of Human Rights -- on the assumption that each of the 30 main articles gives rise to paired questions -- indicating a total of 60 extremes. This could be represented through an animation as above.

With respect to the 12 dimensions of governance proposals (in the initial table above), indications with respect to the pattern of questions could also be represented in an animation -- such as that below.

![Doughnut Animation](image2)

The fundamentally problematic inapplicability of conventional proposals for global governance suggests the need to rethink how such sets are formulated -- if they are to constitute a framework of any relevance to the future. An earlier consideration of the challenge took account of an extensive set of such proposals (Structure of Declarations Challenging Traditional Patterns, 1993; Sustainable Development Declarations and Documents: configuring strategic dilemmas in intersectoral dialogue, 1992).

Global governance via multipolar global oscillations

The above exercise can be considered a thought experiment to provoke consideration of alternatives. Of interest is whether the experiment can be taken further, especially in the light of the dynamics implied by their animation -- beyond the arbitrary illustrations above. These are crude indications of a succession of proposals on the table, or emergent -- and the manner in which they may exceed bounds of viability suggested by the doughnut ring. Its ring-like form, is however suggestive of an "iris", inviting consideration of some dynamic role in relation to adjusting the size of the "pupil" -- as with the function of any eye. The "dimensions" might then be understood as having functions reminiscent of muscles adjusting the size of the pupil.
The following image is indicative of the dynamic between the extremes of any dimension of global governance. It endeavours to illustrate how "simple" and "complex" (for example) may both have their value, but that a "simple+complex" compromise is unlikely to be meaningful, comprehensible, credible or appropriate from either perspective. There is however the possibility (and desirability) of some form of alternation or oscillation between them, as previously argued (Policy Alternation for Development, 1984). The nature of this alternation can be explored through a variety of metaphors (Metaphors of Alternation: an exploration of their significance for development policy-making, 1984).

![Clarification of relationship between viable polar extremes on any dimension](image)

Framed in this way, it is the alternation amongst a multiplicity of proposals which merits consideration with respect to a set of question-defined dimensions. Could the dynamics be organized and coordinated -- aided by mathematical and aesthetic insights -- to suggest how together they might frame a "portal". This reframes metaphorically the "hole of the doughnut" and the "pupil" to suggest a strategic "gateway".

As interpreted above, points on dimensions within the central hole constituted non-viable compromises -- meta-stable conditions with respect to the dimensions with which they were variously associated. This is a valuable consideration in that the "way forward" for global governance may indeed involve a degree of paradox in traversing the "portal" (Antagonistic Dualities: Polarization and Paradox, 1983; Embodying the Paradoxes and Contradictions of the Pursuit of Happiness, 2011). In terms of the "eye" metaphor, the argument suggests that strategy envisaged through a single "eye", as conventionally understood, is not viable. A stereoscopic (or polyocular) cognitive facility is required, as separately argued (Cyclopean Vision vs Poly-sensual Engagement, 2006).

Another interpretation is that the dynamic juxtaposition of the proposals may facilitate a form of convergence consequent on some process of mutual entrainment. Entrainment in physics is a process of mode locking of coupled driven oscillators, whereby two interacting oscillating systems (of different periods when they function independently) assume a common period. Entrainment in chronobiology occurs when rhythmic physiological or behavioural events match their period and phase to that of an environmental oscillation.

This would suggest the value of examining psychosocial applications of the Van der Pol oscillator -- a non-conservative oscillator with non-linear damping. Van der Pol found stable relaxation-oscillations, now known as limit cycles, in electrical circuits. When these circuits were driven near the limit cycle they become entrained. Potentially this damping suggests a way of thinking about the reduction of "excesses" on some dimensions of governance -- associated above with non-viability.


A phase portrait of the Van der Pol oscillator appears in the Psychology Wiki. Research of relevance to consciousness is summarized by Lawrence M. Ward (Psychological Magnitude, Relaxation Oscillators and the Dynamic Core of Consciousness, 2009). See also references cited by J. C. Sprott (Dynamical Models of Happiness, Nonlinear Dynamics, Psychology, and Life Sciences, 9, 2005, 1). It is readily forgotten that viable governance depends on the constraints on comprehension of the governors and their electors. This notably applies to the credibility of the dimensions considered relevant and the perspectives by which they are refined (as noted above). In this respect it is appropriate to note that psychophysical measurements indicate that humans can store approximately seven short-term memories (John E. Lisman and Marco A. P. Icardi, Storage of 7 ±2 short-term memories in oscillatory subcycles, Science, 267, 1995).

This is necessarily a challenge for the implementation of any 12-fold strategy of governance, as variously discussed (Checklist of 12-fold Principles, Plans, Symbols and Concepts, 2011; Enabling a 12-fold Pattern of Systemic Dialogue for Governance, 2011; Representation, Comprehension and Communication of Sets: the Role of Number, 1978).

Although of seemingly questionable relevance to "global governance", from a systemic perspective it is appropriate to note the patterns of oscillation of great significance to global climate, and to concerns with its governance. These are indicated by such phenomena as the Madden-Julian Oscillation (originating in the Indian Ocean), El Niño-Southern Oscillation, Pacific Decadal Oscillation, Interdecadal Pacific Oscillation, North Atlantic Oscillation, Arctic oscillation, Antarctic oscillation, Atlantic Multidecadal Oscillation. As is recognized: Many of these... interact as a coupled system, with ocean conditions influencing the atmosphere and atmospheric conditions influencing the ocean (El Niño and Other Oscillations, Woods Hole Oceanographic Institution).
Imaginatively enabling attractive "Six Sigma" global governance

It is appropriate to conclude with reference to the keywords in the title of this document: Imagining Attractive Global Governance: questioning possibilities and constraints of well-boundedness. The term "governor" is also well-recognized as a device used to regulate oscillations in the speed of a machine, notably an engine -- as speculatively considered previously (Global Governance via a Double-breasted Strange Attractor, 2009). Robert Hoppe (The Governance of Problems: puzzling, powering and participation, 2011) addresses:

... the macro-level question of how to move the political system as a whole towards a more reflexive level of governance of problems... The notion of meta-governance... is elaborated as deliberate interpolable balancing through the alignment and transformation of institutions in policy networks... I advocate a governance of problems as fruitful oscillation and alternation between puzzling and powering. (p. 20)

The challenge of "imagining" and "attractive" could be informed by consideration of the above-mentioned application of Van der Pol oscillation to "consciousness" and "happiness" -- and to music (Rolf Bader, Nonlinearities and Synchronization in Musical Acoustics and Music Psychology, 2013). The latter is usefully indicative of a "bridge" along the dimension between the "complexity" (of mathematics) and the "simplicity" (of music) as incommensurable modes of comprehension. This reinforces arguments for the role of aesthetics in relation to governance (A Singable Earth Charter, EU Constitution or Global Ethic? 2006; Poetry-making and Policy-making: arranging a marriage between Beauty and the Beast, 1993).

The seductive lure of cognitive closure on a conventional compromise between extremes is unrealistic, as can be variously argued (Paradoxes of Engaging with the Ultimate in any Guise, 2012; Living as an Imaginal Bridge between Worlds: global implications of "betwixt and between" and liminality, 2012; Eliciting a Universe of Meaning -- within a global information society of fragmenting knowledge and relationships, 2013). The need for counter-intuitive strategy has been variously expressed (Charles Handy, The Age of Unreason, 1991; Charles Handy, The Age of Paradox, 1995; Michael Foley, The Age of Absurdity: why modern life makes it hard to be happy, 2011; Nassim Nicholas Taleb, Antifragile: how to live in a world we don't understand, 2012).

The cognitive nature of the strategic challenge of interrelating any "resolutique" with the "problematique" -- to use terms promoted by the Club of Rome -- can be expressed diagrammatically by integrating them with an "imaginatique" and an "iresolutique" (Imagining the Real Challenge and Realizing the Imaginal Pathway of Sustainable Transformation, 2007).

Further insight can be suggested by reference to the Six Sigma techniques and tools for process improvement, widely used by industry - - but of some potential relevance to global governance (Six Sigma and its use in Government; Tom McCarty, Michael Jordan and Dan Probst, Six Sigma for Sustainability: how organizations design and deploy winning environmental programs, 2011; Suresh Madhavan, Six Sigma: a healthy compliance regime for corporate governance). The technique was perfected in Japan [more] and copyrighted (making its applicability to global governance questionable). Its name derives from sigma as used to indicate one standard deviation from a statistical mean. This is held to imply that with six standard deviations between that mean and the nearest specification limit, practically no items will fail to meet specifications.

The question is whether any such framing of "specifications" is of value with respect to the planetary and other boundaries of global governance (as discussed above). Separately the relevance of the technique has been indicated with respect to democratic oversight of worldwide electronic surveillance (Ensuring confidence in democratic supervision, 2013). This is potentially controversial in that the focus could be placed to different degrees on:

- ensuring the efficacy of democratic oversight with respect to avoidance of excessive surveillance
- ensuring effective detection of extreme behaviours relative to desired norms, meriting further targetting and possible termination -- offering a particular connotation of the statistical "cut-off" point (Norms in the Global Struggle against Extremism, 2005)

If only for mnemonic purposes. "six sigma" can be "adapted" in relation to the normal distribution curve (as used above) to indicate the span of six sigma with respect to the boundaries of concern to global governance (in the left-hand image below). This misappropriation (and misrepresentation) of the approach may also offer a means of reframing criticism of Six Sigma. This includes stifling of creativity and innovation (especially in response to uncertainty) through the elimination of extreme perspectives by which they may be engendered.

The representation can be taken further (in the right-hand image below) by superimposing of the many Asian symbolic gateways -- in this case the Japanese variant (known as torii). Such gateways may well stand in isolation in the countryside leading "nowhere". They tend to be associated with the Zen classic -- The Gateless Gate -- a compilation of koans. 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).

<table>
<thead>
<tr>
<th>Viable governance symbolically framed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six sigma spanning of governance boundaries</td>
</tr>
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As used in Asian cultures, the symbolic gateway is a strong reminder of the counter-intuitive attitude required to pass through it "successfully". It can indeed be navigated with little implication, as by using a conventional mindset. However this reflects the inadequacy of the plans for global governance typically elaborated -- with little longer-term significance through "going nowhere". Curiously it is the young, as inheritors of the future, who are more imaginatively attuned to the way the gate might "work" than the adults nourished on a diet of conventional information and "project logic". For humanity, widely acclaimed as "reaching for the stars", such a strategic gateway needs effectively to function as a "stargate" -- appropriately eliciting imaginative engagement. Sustainability could be framed in those terms (In Quest of Sustainability as Holy Grail of Global Governance, 2011). How otherwise is imaginative appeal to be elicited by global governance?

As a gateway imbued with Zen-like existential implications and cognitive challenges, it is only possible to "go through it" by paradoxically "not going through it". This accords with the recognition that neither "A" nor "B" offers strategic viability alone, or through any compromise. The viable strategic gateway is engendered through oscillation between those contrasting options -- namely neither A nor B alone -- a much-neglected option noted by Kinhide Mushakoji (Global Issues and Interparadigmatic Dialogue: essays on multipolar politics, 1988). As an integrative device, the gateway then has functions akin to "healing" (or "enwholing") the fragmentation currently undermining viable global civilization.

With respect to the operation of any such gate, it is appropriate to note the operation of the set of logic gates fundamental to a wide variety of information processing operations (AND, OR, NOT, NAND, NOR, XOR, XNOR). Associated discussion of "universal logic gates" and "functional completeness" is of potential relevance to more subtle consideration of global governance (C. E. Stroud, Elementary Logic Gates, 2006). For example, discussion of the three-input universal logic gate notes that are the 8 ways it is possible to NOT or NOT-NOT each of the 3 inputs. Of particular interest is the manner in which the necessarily counter-intuitive operation of quantum computers may be associated with conventional logical gates -- and how their operation may be indicative of cognitive insights into how the paradoxical gate might be traversed to enlighten global governance (Markus Aspelmeyer and Anton Zeilinger, A Quantum Renaissance, Physics World, July 2008).

"Integrating" the Western statistical perspective with that of an Asian symbolic perspective is potentially fruitful, as argued more generally by Susantha Goonatilake (Toward a Global Science: mining civilizational knowledge, 1999) and separately discussed (Enhancing the Quality of Knowing -- through Integration of East-West metaphors, 2000). Of relevance to suggestive imagination, is an explicit degree of recognition in the Six Sigma approach of levels of expertise and attitude in terms of Eastern martial art philosophy (Six Sigma: Leading and Governance -- structures for leading Six Sigma and the roles of Green, Yellow and Black Belts; Compliance Zen Practical: FDA compliance intelligence and insights; Zen, Project Management, and Life; Kaizen with Six Sigma Ensures Continuous Improvement; Lean, Six Sigma and Kaizen Compared).

Attractive global governance through animation and "special effects"

The imaginative engagement of the individual can be taken further by enabling personal appropriation of the strategic challenges through a cognitive reinterpretation of Goonatilake's "mining" -- namely "making mine", as might be argued (World Introversion through Paracycling: global potential for living sustainably "outside-inside", 2013).

This can be variously enabled through animation. It could be considered extraordinary that so little use of animation is made to render comprehensible the possibilities of new forms of psychosocial organization of relevance to viable global governance. Few of the proposals for global organization are supported by simulations with interactive possibilities over the web enabling people to explore their viability and the conditions under which they might become unstable. This is especially noteworthy in the case of the global financial system as the manifestation of public confidence. The focus is on simplistic statistical graphing of various indicators -- not on representation of the organization through which the variety of functions could be appropriately managed. Especially relevant is the possibility that some form of crowdsourcing would enable weaknesses in proposals to be detected (Enabling Collective Intelligence in Response to Emergencies, 2010). It is tragically ironic that the only "special effects" of direct relevance to global governance are those evident on the occasion of disasters, whether natural, accidental or deliberately engendered.

There is a further irony in the fact that the paradoxical dynamic within the symbolic gate discussed above is surprisingly represented within Chinese culture at every level of society by the dragon dance. One traditional pattern involves two intertwining dragons "looking for the pearl of wisdom" -- an admirably imaginative representation of the implications of global governance. The Hall of Supreme Harmony at the centre of the Forbidden City has three stairways lead to it. The middle one has a huge stone engraving with dragons playing with pearls. The ceiling above the throne has a dragon with a pearl in its mouth.

Missing from the image with the symbolic gate is the sense in which both images (above) represent situations along only one of the 12 dimensions with which extremes are associated (in the pattern discussed above). The subtlety of the 11 other dimensions is therefore implied -- effectively "curled up", as suggested with respect to the extra dimensions in string theories, most notably the conjectured
eleven-dimensional M-theory. Why is it assumed that the reality of the strategic challenge of global governance should be of lower dimensionality?

The following image, as an animation, suggests the possibility of further insights into how viable global governance might be understood through colour coding a range of alternatives -- of some relevance since political colour coding is one technique whereby political ideologies tend to distinguish themselves in campaigning. In order to render more explicit the 12 "dimensions" suggested in this argument, the image above representing generically the distribution of contrasting perspectives along a single dimension is replicated 12 times. Rather than the dimensions passing through the common centre of the circular images (as implied above), here they are chained together around the circumference of the circle -- leaving the centre empty. The images are distinguished by the use of complementary colours from the standard RGB colour wheel (although there may be issues with regard to the rendering of these colours on different browsers). The colour wheel is placed in the centre of the image, oscillating with its inverted form to emphasize the oscillation between the complementary extremes within the 12 individual images (as described above). Use of the colour wheel is of course a helpful indication of "full-spectrum" global governance -- although the various alternative colour wheels are suggestive of other considerations.

An animated image of better quality and aesthetic design could of course be imagined -- perhaps allowing user control of features like the rate of oscillation, background colour, colour quality, in order to enhance its aesthetic attraction and implications for global governance. In its current form, the use of white as the centre colour of each image emphasizes the operation of the paradoxical "gateway" (as mentioned above) -- whereas other animation designs might "open" and "close" that gateway periodically. The extreme portions of each of the 12 images are coloured black to emphasize their problematic nature from the perspective of the central norm. The circular configuration also helps to suggest how each image (especially in its conventional, "closed-gate" mode) effectively has a "flat earth" perspective -- with its two extreme positions "over the horizon", and therefore threatening as an indication of the unacceptable otherness introduced by curvature.

Imaginative exploration of the animation could be taken further in considering how the qualitatively distinct functions indicated by the 12 dimensions might be systematically interrelated for global governance to be dynamically viable rather than statically portrayed, as noted above (Dynamic Transformation of Static Reporting of Global Processes: suggestions for process-oriented titles of global issue reports, 2013; Eliciting a 12-fold Pattern of Generic Operational Insights Recognition of memory constraints on collective strategic comprehension, 2011). With the proliferation of drones, emerging as a favoured "instrument of governance", there is a case for recalling the principles involved with respect to the original development of the helicopter. The developer of the Bell helicopter, Arthur M. Young, endeavoured to generalize those principles to engender a "psychopter" -- perhaps indicative of possibilities through which global governance might actually "take off" for "sustainable flight", as separately discussed (Engendering a Psychopter through Biomimicry and Technomimicry: insights from the process of helicopter development, 2011).

A three-dimensional representation of the cognitive challenge of appropriately interrelating the 12 "functions" is usefully recognized in various logos based on interlocked Borromean rings. Most notable is the logo of the International Mathematical Union -- one variant of that available for interactive exploration in Wolfram Mathematica. The 12 vertices of an icosahedron form five sets of three concentric, mutually orthogonal golden rectangles, whose edges form such Borromean rings (Towards Polyhedral Global Governance: complexifying oversimplistic strategic metaphors, 2008). As concluded by Edward B. Burger and Michael P. Starbird (The Heart of Mathematics: an invitation to effective thinking, 2005, p. 381):

Three ideas -- the Golden Rectangle, the Platonic solids, and the Borromean rings -- all come together in the icosahedron; they exemplify the interconnectedness and beauty of our geometric universe.

Appropriate to the above argument, the topology of Borromean rings is now seen as a means of understanding quantum entanglement (Ayumu Sugita, Borromean Entanglement Revisited, 2007) -- and is recognized to be of potential relevance to future topological quantum computing.

<table>
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<tr>
<th>Variants of Borromean rings in 3-dimensions</th>
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<tr>
<td><strong>Logo of International Mathematical Union</strong></td>
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<td>(see Wolfram Mathematica animation)</td>
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<tr>
<td><strong>Rectangles linked as Borromean rings</strong></td>
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<td>(image reproduced from Wikimedia Commons)</td>
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Such images point to the nature of the challenge of interrelating the three Abrahamic religions, so fundamental to issues of global governance and the conflicts undermining its possibilities. A notable pointer is an early Borromean-ring configuration of the Christian Trinity (below) together with related forms (Triskelion, Triquetra). Also known as "Borromean rings", the Triquetra (or Tripod of Life) is formed from a third circle added to the Vesica Piscis, together related to the Flower of Life (valued in Judaism and Islam). Islam is noted for the remarkable richness of symbolic patterning in two dimensions -- including Solomon's Knot. Whether representation of Borromean rings in three dimensions offers an unsuspected key to more fruitful relationships between those belief systems, honouring their different orientations, remains to be discovered (Peter R. Cromwell, The Search for Quasi-Periodicity in Islamic 5-fold Ornament).

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