



laetus in praesens

Alternative view of segmented documents via Kairos

1 December 2014 | Draft

Adhering to God's Plan in a Global Society

Serious problems framed by the Pope from a transfinite perspective

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Introduction

The categories in the title together imply a complex framework whose elements, topology and weight are indicative of a dynamic system which is a challenge to comprehension. How indeed can God, Problems, Global, Pope and Seriousness be understood as fruitfully interrelated -- especially as the basis for a Plan, requiring Adherence?

There has been extensive media coverage of recent Papal exhortations. The first concerned world food security on the occasion of the Second International Conference on Nutrition assembling 172 nations (*Pope Francis urges solidarity and concrete action in global nutrition challenge*, *FAO News*, 20 November 2014; *Pope Francis addresses FAO nutrition conference*, *Vatican Radio*, 21 November 2014).

The second exhortation took the form of an address to the European Parliament (Ian Traynor, *Pope Francis attacks EU over treatment of immigrants*, *The Guardian*, 25 November 2014; Nicole Winfield and James Keaten, *Pope to Europe: Accept Immigrants, Create Jobs*, *Associated Press*, 25 November 2014; *Pope Francis complains of 'haggard' Europe in Strasbourg*, *BBC News*, 25 November 2014). He pointedly argued that "We cannot allow the Mediterranean to become a vast graveyard".

Coincidentally, the exhortations of the Pope have been followed by a second announcement at the European Parliament by [Jean-Claude Juncker](#), the newly elected [President of the European Commission](#). This concerns a major Investment Plan for Europe (*Investing in Europe*, *European Commission*, 26 November 2014; *Juncker reveals giant EU investment plan*, *BBC News*, Jorge Valero, *Juncker's plan: Questions abound : Is this the silver bullet the EU badly needs?* *Europolitics*, November 2014).

Whether the two announcements to the European Parliament should be considered as having been carefully orchestrated, and whether that of the Pope was facilitated by Juncker, will be a matter for history. Ironically the role of President of the European Commission offers a strange parallel to that of the [Holy Roman Emperor](#) of centuries past and the special relationship of that role to the Pope's of those times -- a theme variously cultivated by conspiracy and end-times theorists (*EU Plot To Revive 'Holy' Roman Empire by Creating Super-powerful President*, *NTEB*, 4 May 2012)

The concern here is whether the Christian perspective from which the Pontiff and the President of the European Commission choose to offer strategic guidance to the peoples of the world is as appropriate or legitimate as many would like to assume. Potentially more challenging is the possibility that the Pope is unknowingly addressing the "haggard" condition of the Catholic Church for which he considers wider society to be a mirror. At issue is whether and how the recent pronouncements of the Holy Pontiff should be called into question and interpreted otherwise.

The approach here is to consider the terms in the title as indicative of a fundamental challenge to ordinary conventional comprehension -- irrespective of whether the subtle complexity implied is to be considered from a spiritual or scientific perspective. Reference is made to mathematics and astrophysics to reframe perceptions of the gravity of the situation and the manner in which the "light of truth" may be

bent as a consequence. The challenge of planar mapping of a spherical globe serves as a notably illustration.

Articulating insight into God's Plan?

Official visit of His Holiness Pope Francis at the European Parliament in Strasbourg 25 November 2014
(European Union, 2014 EP-012763)



A similar image was used in discussion of *Considering All the Strategic Options: whilst ignoring alternatives and disclaiming cognitive protectionism* (2009).

Authoritative doublespeak?

The argument in this respect follows from a more general discussion, both with respect to religious doublespeak and political doublespeak (*Enabling Suffering through Doublespeak and Doublethink*, 2013).

Catholic scandals and cover ups: The Roman Catholic Church has been characterized by multiple scandals over recent decades -- in addition to failure to fulfill commitments agreed at the [Second Vatican Council](#) (1962-1965). Most evident have been those relating to [controversies regarding the Vatican Bank](#), the very particular relations with the political parties of Christian Democrat persuasion, emerging controversies regarding actions of the Pope with respect to Nazi regime ([John Cornwell, *Hitler's Pope*](#), 1999; [David G. Dalin, *The Myth of Hitler's Pope*](#), 2005), and the extremely problematic complicity of the Church with the [sexual abuses by Catholic clergy](#).

The latter has been the subject of condemnation by the United Nations ([UN condemns Vatican child abuse cover-up](#), *Aljazeera*, 6 February 2014; Meredith Somers, [UN torture committee probes Vatican on sex abuse scandal, human rights issues](#), *The Washington Times*, 4 May 2014; Nick Cumming-Bruce, [UN Panel on Torture Presses Vatican Envoy on Abuse](#), *The New York Times*, 5 May 2014; Barbara Miller, [United Nations Committee against Torture grills Vatican on clerical sexual abuse](#), *ABC News*, 6 May 2014).

Framing "just torture": There is of course considerable irony to any international "torture committee" calling into question the actions of the Church, given the latter's earlier controversial role in the use of torture by its [Inquisition](#). This is especially ironic in that only in 1992 did the Church offer a [convoluted "apology"](#) for its condemnation of [Galileo Galilei](#) in 1633, whom it had threatened with torture if he failed to recant his views regarding [heliocentrism](#) in contrast to [geocentrism](#) -- the so-called [Galileo Affair](#). In response to criticism, the Vatican has engaged in various efforts at reinterpreting the facts of such matters, including the actions of the Inquisition ([Carol Glatz, *Vatican warns against misinterpreting international law, human rights*](#), *Catholic News Service*, 26 September 2014; [Vatican says abuse report 'misinterpreted' 1997 letter](#), *The Tablet*, 10 September 2011).

Just as the traditional complicity of Christian theology with warfare has been successfully reframed in terms of [just war theory](#), it would not be surprising that Catholics, in the light of their history, would welcome current efforts to reframe so-called [enhanced interrogation](#) in terms of a new "just torture" theory as explored by Shunzo Majima ([Just Torture?](#) *Journal of Military Ethics*, 2012). Clearly this would also help to clarify the moral issues for those countries with faith-based governments -- like the USA -- which have made assiduous use of torture (Larry Siems, [The Torture Report: what the documents say about America's post-9/11 torture program](#), 2012; [Philippe Sands, *Lawless World: America and the Making and Breaking of Global Rules*](#), 2005; [Torture Team: Rumsfeld's Memo and the Betrayal of American Values](#), 2008).

Lying when things gets serious? In the case of Jean-Claude Juncker, in November 2014 it was revealed that Luxembourg under Juncker's lengthy premiership had been turned into a major European centre of corporate [tax avoidance](#) -- a scandal now profiled as [LuxLeaks](#) (Simon Bowers, [Luxembourg tax files: how tiny state rubber-stamped tax avoidance on an industrial scale](#). *The Guardian*. 5 November 2014).

With the aid of the Luxembourg government -- of which Juncker has been both Premier and Minister of Finance, companies transferred tax liability for many billions of euros to Luxembourg, where the income was taxed at a fraction of 1%. In a speech in July 2014, prior to his election to the EU presidency, Juncker had specifically promised to "*try to put some morality, some ethics, into the European tax landscape*".

This contradiction has given rise to strong criticism. Juncker defended his role in a speech to the European Parliament ([Juncker: 'No conflict of interest' in Luxleaks tax scandal](#), *Euractiv*, 12 November 2014; [Paull Nuttall calls EU Commission president a hypocrite over tax evasion and demands his resignation](#), *Peoples Voice*, 12 November 2014; [Juncker faces censure motion over Luxembourg tax deals](#), *EurActive*, 19 November 2014).

As noted by *European Dignity Watch*, Juncker explained his understanding of political integrity at a conference in 2011. Referring to the way he and the EU deal with the euro crisis and the financial market, he said: *I have to lie. I'm a Christian democrat and a Catholic, but when it becomes serious, you have to lie* ([Jean-Claude Juncker: a parody on Christian-Democratic Principles](#), 14 May 2014; Mike Shedlock, [Jean-Claude Juncker, Luxembourg PM and Head Euro-Zone Finance Minister says "When it becomes serious, you have to](#)

lie", *Global Economic Trend Analysis*, 7 May 2011). His preference for minimal transparency has long been noted, associated with an admission that he had often lied in his career to prevent the spread of rumours that could feed speculation (Valentina Pop, *Eurogroup chief: 'I'm for secret, dark debates'*, *EUObserver*, 21 April, 2011). How Juncker may have lied for more dubious reasons is not apparent.

Juncker may be presumed to have articulated a modality shared by other Christian leaders, as exemplified by George W. Bush and Tony Blair in relation to the evidence regarding the existence of weapons of mass destruction -- as a key top mobilizing support for invasion of Iraq in 2003.

Juncker Paradox? With such an admission, there is a case for adapting the famous [Paradox of Epimenides](#), deriving from his statement as a Cretan philosopher that *All Cretans are liars*. The strategic **Paradox of Juncker** might then take the form: *All leaders challenged by a serious problem are liars*. The paradox of self-reference then derives from considering the question of how to know whether a problem identified (or ignored) by a leader is serious or not.

Is the massive Investment Plan, newly announced by Juncker, to be considered as consistent with God's Plan? Could it be otherwise, given his proposal of it as a Christian leader potentially subject to both Papal authority and the Paradox of Juncker? Does his declared position on integrity increase the considerable risk with which the proposal is admitted to be associated? Or, more questionably, is the risk considerably alleviated because its dependence on private investment is matched by undeclared obligations arising from the facilities accorded to corporations by Luxembourg over an extended period? In the light of the Juncker Paradox, should the Pope also be considered as liable to dissimulate?

Deniability: It is increasingly incredible that in no respect does the Catholic Church consider itself at fault with respect to the above scandals -- and could be said to have learned nothing from them, other than in order to refine their public relations. Considerable skill is deployed in disassociating the Church from whatever can be isolated as undeniably problematic within its domain. This has been most recently evident in the UN investigations into clerical abuse. Whilst claiming inclusive systemic characteristics, problematic issues are somehow excluded from any systematic perspective -- perhaps to be understood as a form of conceptual gerrymandering.

Is the attitude of democratic leadership now one of denying any wrong doing whatsoever -- extended to the implication that it can do no wrong (whatever the arguments of any opposition)?

European voters are similarly astounded at the blithe acceptance by the European Parliament of the arguments of Juncker -- a man on record for resorting to lying whenever faced with a serious issue. In the course of the debate, Juncker protested the argument of [Marine Le Pen](#) (*'Don't insult me,' pleads scandal-hit Juncker*, *EUbusiness*, 25 November 2014). Referring to the legendary US gangster, Le Pen had stated:

No reasonable person can believe that you will fight sincerely and firmly to undo tomorrow what you have done. It would be as credible as naming Al Capone president of the security and ethics committee. (*Juncker holds ground on tax avoidance before EU confidence vote*, *EuropeOnline-magazine*, 24 November 2011)

The Motion of Censure against the Juncker Commission was however defeated in the European Parliament with 101 MEPs voting in favour, 461 against, while 88 abstained (*European Parliament votes to protect scandal-soaked Juncker Commission*, *UKIPMEPS.org*, 27 November 2014). Should this be considered a valuable indication of the extent to which elected representatives of the peoples buy into lying, whether of their own accord or because they are otherwise obliged to do so?

Are Europeans in danger of falling victim to the Italian disease of voting for a President faced with a variety of court cases and scandals? Or are European parliamentarians unconsciously voting for the leader they consider most appropriate to the policies and practices of their institutions -- so well illustrated in the case of the International Monetary Fund, as discussed separately (*Pre-Judging an Institution's Implicit Strategy by the Director's Private Behaviour: remarkable parallels in the case of the IMF and Dominique Strauss-Kahn*, 2011)?

Commentators have remarked at the massive loss of credibility of elected representatives -- notably by citing surveys in the USA (Rebecca Riffkin, *Public Faith in Congress Falls Again, Hits Historic Low*, *Gallup*, 19 June 2014; Frank Newport, *Congress Approval Sits at 14% Two Months Before Elections: lowest approval in fall before an election since 1974*, *Gallup*, 8 September 2014).

Comprehension of planning in a global context

How is a strategic "plan" to be understood within such a religiously inspired global context? How is "global" to be understood from a planning perspective? How is it expected that ordinary mortals should take seriously the advocacy of either -- especially when their proponents are unable to prove that they are not lying, or making extensive use of "spin"?

Plan and planning: Use of "plan" and "planning" is of course basic to conventional understandings of management, administration and governance. It is evident in urban planning, financial planning, development planning and architectural plans. There may be considerable temporal implications, as with respect to scheduling of any kind -- extending into notions of a career plan or even a life plan. The capacity to plan in this way has been considerably enhanced and reinforced by [spreadsheet software](#) -- now considered basic to the credibility of any proposed plan calling for funding.

What could be understood as a two-dimensional mindset is evident in the tendency to name sets of proposals using the raft metaphor (*EU unveils raft of proposals to combat poverty*, *EurActiv*, 17 December 2010; *Government publishes raft of proposals to tackle youth unemployment*, Association of Employment and Learning Providers, 2014; *Next Congress to consider raft of proposals for Higher Education Act*, *SmartBrief*, 3 November 2014). Presumably the metaphor offers a sense in which the proposals crisscross to form the raft, possibly extended to a sense of liferaft as separately questioned (*Resource Insights from Plus or Minus 12 People on a Liferaft*, 2014).

A degree of conflation between plan and plane is reinforced in many online games in which players progress from one "level" to another. This echoes various articulations of levels of heaven and hell to which people may have access or be ultimately restricted. Level, plan and plane are also conflated in security regimes governing access to classified information.

Given the role of the spreadsheet in [accounting](#), there are obvious implications with respect to any ultimate divine accounting by which a life is supposedly assessed.

Divine plan? The unquestionable arguments of the Pope, informed by Catholic theology, are naturally made in terms of an understanding of what is framed by that theology as God's Plan for humanity (Stephen Smith, [100 Bible Verses about Gods Plan](#), [OpenBible.info](#)). Hence the Pontiff's above-mentioned remarks regarding solidarity and concrete action in response to the challenge of global nutrition and food security -- as well as those relating to the treatment and acceptance of immigrants.

Given that the theological interpretation of "plan" long predated contemporary use, there is merit in considering the manner in which the theological interpretation of any divine plan now invites reflection -- partially framed and informed by contemporary usage. This is most obvious with respect to any architecture upheld as designed to reflect a divine plan, as with the traditional [City of God](#) (perhaps exemplified by Jerusalem), or with the plan of a temple (as with that of Jerusalem).

The term City of God has notably referred to the unity between the Holy Roman Empire and the Church in the Middle Ages -- however its geometry is to be understood. Such interpretations merit careful exploration given the current efforts of the [Islamic State of Iraq and the Levant](#) to establish a [Worldwide Caliphate](#). The three [Abrahamic religions](#) would seem to share variants of an architectural myth -- serving as a powerful integrative metaphor -- usefully reviewed in the case of Islam by [Nick Danforth](#) ([The Myth of the Caliphate: the political history of an idea](#), *Foreign Affairs*, 27 November 2014):

Western pundits and nostalgic Muslim thinkers alike have built up a narrative of the caliphate as an enduring institution, central to Islam and Islamic thought between the seventh and twentieth centuries. In fact, the caliphate is a political or religious idea whose relevance has waxed and waned according to circumstance.

There is a vast and tragic irony to recognition that the "City of God" metaphor suggests that the bloody conflicts between the Abrahamic religions can be understood as a "real estate" problem -- with "planning permission" being righteously claimed within different jurisdictions over the same area. More intriguing of course is that this is more fruitfully understood in terms of "virtual real estate", as now explored with respect to [online virtual worlds](#) such as [Second Life](#). How does "real" then relate to "virtual"? Which is then more "real" and in what circumstances?

Simplistic interpretation of divine plan? With respect to any divine plan, the sophistication of contemporary understanding of plans and planning raises the question as to whether typical reference to a divine plan fails to take account of unsuspected potential subtlety inherent in it -- of which contemporary plans are only a very inadequate reflection.

Understood in design terms, as with architecture and urban planning, use of plan clearly implies and requires a reduction from a multidimensional perspective to a two-dimensional perspective -- whether or not several two-dimensional [plan views](#) are used in conjunction. Understood in spreadsheet terms, as in accounting, use of plan typically highlights and interrelates inputs and outputs over time (income/expenditure, etc). This is exemplified by use of [double-entry bookkeeping](#). From a theological perspective, any divine plan must necessarily be assumed to be of far greater subtlety and sophistication.

Human comprehension of divine plans? The hypothetical relation between divine and mortal plans can be suggestively explored as follows:

- in the architectural/urban planning cases, there is an implication that the extension of design over the surface is somehow constrained and bounded for humanity. Any such constraint and boundedness is naturally called into question in the divine case. This raises fundamental issues regarding the design and dimensionality of any City of God -- then readily distorted if reduced to two- or three-dimensionality.
- in the spreadsheet cases, it could be asked whether two-dimensional representation of a plan is appropriate. This constraint is obvious in the case of conventional spreadsheets requiring multiple dimensions. Less obvious is how any higher dimensionality would inform divine accounting -- especially when the theological argument is typically binary (good/evil, etc). Understandings of "divine accounting" are presented by various authors (Mahmoud Ezzamel ([Accounting and Order](#), 2012; Indeara Hanoomansingh, [Cosmic Accounting: a Journey to Enlightenment](#), 2012; Shlomo Jarcaig, [Divine Accounting](#), *Kol HaKollel*, 2006; Daniel M. Bell Jr., [The Economy of Salvation](#), *theotherjournal.com*, 1 April, 2013). Martin Sicker notes the view that there is a single comprehensive divine accounting of the progress of the world and that what people do individually is ultimately of cosmic significance ([The Moral Maxims of the Sages of Israel: Pirkei Avot](#), 2004).

Mundane plan: Given both its neutrality and rigour, and its appreciation by both theology and the sciences, there is a case for using mathematics to clarify the challenges to understanding global planning and global plans -- whether theologically inspired or otherwise. This points to the potential relevance of "mathematical theology" ([Mathematical Theology: Future Science of Confidence in Belief](#), 2011; Philip J. Davis, [A Brief Look at Mathematics and Theology](#), 1999; David Albertson, [Mathematical Theologies](#), 2014; Cara A. Tacoma, [Implications of Knowing the Infinite for Knowing God: an interdisciplinary study between mathematics and theology](#), 2012).

The relevance is framed mathematically by [Sarah Voss](#) with respect to the "number" of God ([What Number is God? Metaphors, metaphysics, metamathematics, and the nature of things](#), 1995). Rather than any simple understanding of the oneness of God, this highlights the extremely fundamental issue regarding the potential theological implications of contrasting understandings of number explored by mathematicians. These include [zero](#), [negative numbers](#), [rational numbers](#), [real numbers](#), [complex numbers](#), [hypercomplex](#)

numbers, hyperreal numbers, transfinite numbers, and transcendental numbers. Voss considers the use of transfinite numbers as a way of understanding the infinity with which God is frequently associated. Such an association was an early inspiration for the mathematician Georg Cantor. (Joseph W. Dauben, *Georg Cantor and Pope Leo XIII: mathematics, theology, and the infinite*, *Journal of the History of Ideas*, 1977).

Especially intriguing is any sense of how planning is challenged by understanding of a plane extending to infinity, as might be the case with a divine plan (*Planning and the "infinite plane"*, 2011).

The "number" of a unifying plan: Little trace of such insight is evident in common reference to God's Plan and the challenge of comprehending it. More relevant in a secular society would be the question **what number is any proposed global plan?** How would the answer then clarify the complexity of the plan? Traces of the relevance of the question, and the implied complexity, are evident in idiomatic use of the phrase *to have someone's number*.

In quest of an integrative "number"	
Is the salvatory divinity implied by reference to any Divine Plan best understood in terms of...	Is the viable globality implied by reference to any Global Plan best understood in terms of ...
<ul style="list-style-type: none"> • zero? • negative numbers? • rational numbers? • real numbers? • complex numbers? • hypercomplex numbers? • hyperreal numbers? • transfinite numbers? • transcendental numbers? 	<ul style="list-style-type: none"> • zero? • negative numbers? • rational numbers? • real numbers? • complex numbers? • hypercomplex numbers? • hyperreal numbers? • transfinite numbers? • transcendental numbers?

There is a delightful irony to the election of the current Pope from a set of **cardinals (in the religious sense)**, which might otherwise imply a degree of familiarity with **cardinals (in their mathematical sense)**. The Pope is understood by the faithful as a representative of the transfinite within the mundane -- even as an "Earthly Embodiment of a Theory of Everything".

With respect to the "cardinals" of mathematics, recent work by Harvey Friedman (*Boolean Relation Theory and Incompleteness*, 2010), as described by Richard Elwes (*It doesn't add up*, *New Scientist*, 14 August 2010) suggests that:

The only way that Friedman's undecidable statements can be tamed, and the integrity of arithmetic restored, is to expand **Peano's rule book** to include "**large cardinals**" -- monstrous infinite quantities whose existence can only ever be assumed rather than logically deduced.... We can deny the existence of infinity, a quantity that pervades modern mathematics, or we must resign ourselves to the idea that there are certain things about numbers we are destined never to know.

Whilst such irony may be deprecated as simply "surreal", it should not be forgotten that in mathematics, **surreal numbers** constitute an **arithmetic continuum** containing the **real numbers** as well as **infinite** and **infinitesimal numbers**, respectively larger or smaller in absolute value than any positive real number. There may be more to such "mathaphors" than is too easily assumed (Sarah Voss, *Mathaphors and Faith Understandings of Consciousness*, *Journal of Interdisciplinary Studies*, 2005).

The argument is however clearer when the emphasis is on geometry -- given the degree of relationship between "plan" and "plane", and references to "higher planes" and "higher spheres". In a global society, with global problems, this suggests the possibility of fruitful exploration of the manner in which any so-called "global plan" might then be understood. **From a much broader perspective, "global" is then curiously equivalent to "universal" in terms of the extent and possibility of its comprehension** -- and misinterpretation -- by humans (*Future Generation through Global Conversation*, 1997).

Succinctly stated, **what is the planar perspective on globality?** The distorting constraints of map projection (discussed below) are relevant to any response. With the possibility of "having someone's number", the question can be provocatively reframed in terms of any planar perspective on individuality.

The Galileo Affair (mentioned above) is itself a valuable point of departure for reinterpreting the challenge for theology of appropriately framing God's Plan -- given the many arguments presented in support of theological opposition to heliocentrism.

More generally the challenge can be framed in terms of the paradoxical relationship between requisite simplicity and requisite complexity, as separately discussed (*Requisite Simplicity for Sustainable Comprehension of Complexity*, 2014). The latter highlighted the possibility of a generalized **Uncertainty Principle** in which:

- the more exhaustively adequate the explanation, the less engagingly meaningful it is in practice (and conversely...)
- the more engagingly meaningful any representation, the less satisfactory its function as a theoretical explanation

Subsumption of human interpretation: Framed in this way, it is necessarily to be assumed that any divine planning perspective would subsume whatever can be conceived by humanity, as with the Christian view of so-called subsumption theology, namely the systematic subsumption of philosophy into the larger context of true theology (*The History of Subsumption, End Notes*). It would then follow that the subtlest human understandings do not encompass what is implied by any divine plan.

It then follows that simplistic interpretations of any divine plan run the risk of being dangerously inadequate. To what extent do the injunctions of the Pope need to be challenged in those terms?

Curiously the challenge is potentially echoed in the case of the sciences. The many particular disciplines and frameworks are presumably to be considered as subsumed by a hypothetical integrative transdisciplinary perspective -- a [unified science](#) -- yet to become apparent. Whether it would be comprehensible by ordinary mortals, if it could be articulated, is illustrated by the challenge of [M-theory](#), as separately discussed (*Global Brane Comprehension Enabling a Higher Dimensional Big Tent?* 2011)

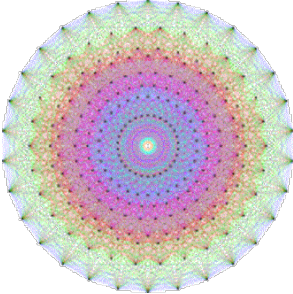
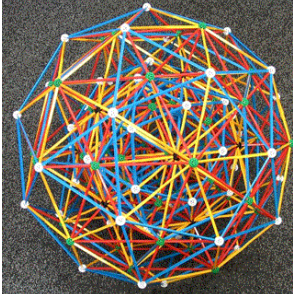
Presumptuous misinterpretation: The assumption of human comprehension of complexity gives rise to several tendencies with extremely dangerous implications:

- Any divine plan must necessarily be considered unconstrained and unbounded. Understood spatially in terms of a plane, this reinforces the sense in which a domain of order "stretches to infinity" in some way. This in turn reinforces any sense in which the spaces over which humans can hold sway are themselves unbounded -- as has been evident in colonial occupation, pioneering enterprises, and the exploration of space, all variously reinforced from a theological perspective. Locally it is evident in unchecked lateral [urban sprawl](#) -- with its associated destruction of green space and the consequences of unrecycled waste disposal.
- Understood in terms of divine accounting, questionable simplification reduces complexity to polarization. Hence the righteous distinctions made between good and evil, or us and them, as argued separately (*Us and Them: Relating to Challenging Others -- patterns in the shadow dance between "good" and "evil"*, 2009). This is most evident in the foreign policy argument -- *You are either with us or against us* -- as was evident as a consequence of 9/11, and the declaration to that effect by [Hillary Clinton](#) (2001), as US Secretary of State.
- Whether understood in planning or accounting terms, especially problematic is simplistic understanding of the injunction to "be fruitful and multiply" (*Genesis 1:28*), as discussed separately (*"Be Fruitful and Multiply": the most tragic translation error?* 1995). Whether or not this phrase is the key to unlocking the global problematique, it is a fact that every effort to explore the possibility is systematically avoided and discouraged (*Institutionalized Shunning of Overpopulation Challenge: incommunicability of fundamentally inconvenient truth*, 2008).

Comprehension of multidimensionality: With respect to the design case, the challenge is evident in the ongoing struggle of astrophysics to achieve some understanding of the [shape of an unbounded universe](#), especially in dynamic terms over time. The theories under discussion are far beyond ordinary human comprehension. Again this suggests that any divine perspective on its design must necessarily be of greater complexity than that conceivable by any human.


It may be as inappropriate to conceive of global society as somehow spheroidal as it is to conceive of the universe as spheroidal. The point can be made more directly by contrasting the plans by which many govern their own lives (career, work/play, agenda, etc) with the elusive sense of "now", however omnipresent and variously cultivated ([Peter Russell](#), *Spirit of Now*; [Eckhart Tolle](#), *The Power of Now*, 1999). As a global experience, now could indeed be imagined as spheroidal in some sense, but this may not reflect its multidimensionality. The attraction of now as an integrative experience is in fundamental contrast -- if not antithetical -- to that of any plan, as discussed separately (*Now as the Ultimate Cognitive Strange Attractor*, 2014).

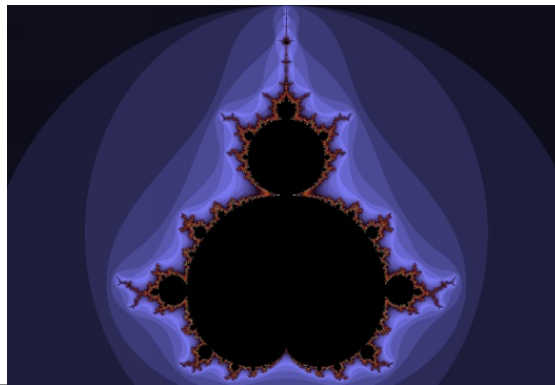
Given the sense in which theology tends to see divine intelligence in symmetry (especially of the highest order), the issue can be explored otherwise in terms of the potentially extreme multidimensionality of [symmetry groups](#), as illustrated (below) by the mathematics of [E₈](#) -- namely any of several closely related [exceptional simple Lie groups](#), linear algebraic groups or Lie algebras of dimension 248 (a figure curiously of the same order as [Dunbar's number](#)).

Multidimensional complexity recognized in mathematics as exemplified by representations of E₈ <small>(images reproduced from Wikipedia)</small>	
Lie group representation	Zome model of the E ₈ root system projected into 3-space, and represented by the vertices of the 421 polytope
	

The challenge to human comprehension is highlighted separately (*Dynamics of Symmetry Group Theorizing: comprehension of psychosocial implication*, 2008; *Comprehensive Formulations and their Cognitive Challenge*, 2009).

The significance and comprehension of such complexity can also be discussed in relation to the so-called [Monster Group](#) (a giant snowflake in 196,884 dimensions) and to the [Mandelbrot set](#) as represented below (*Potential Psychosocial Significance of Monstrous Moonshine: an exceptional form of symmetry as a Rosetta stone for cognitive frameworks*, 2007; *Sustainability through the Dynamics of Strategic Dilemmas -- in the light of the coherence and visual form of the Mandelbrot set*, 2005).

Visual rendering of the Mandelbrot set <small>(reproduced from <i>Structure of the visual representation of the Mandelbrot set</i>, 2005)</small>




Generated by *Xaos: realtime fractal zoomer*
which enables the detail to be zoomed to great depth

With respect to the accounting case, any assumption regarding the relevance of the spreadsheet-reinforced mindset can, for example, be fruitfully challenged by speculative consideration of "spherical accounting" (*Spherical Accounting: using geometry to embody developmental integrity*, 2004). What might be the "accounting" of even higher dimensionality?

As implied above, the argument here is inspired in part by the fictional speculations from a geometric perspective regarding dimensionally constrained perspectives:

- Edwin Abbott Abbott: *Flatland: a romance of many dimensions* (1884)
- Norton Juster: *The Dot and the Line: a romance in lower mathematics* (1963) [animation]
- Dionys Burger: *Sphereland: a fantasy about curved spaces and an expanding universe* (1965)
- Ian Stewart:
 - *Flatterland: like Flatland, only more so* (2002)
 - *The Annotated Flatland: a romance of many dimensions* (2008)
- A. K. Dewdney: *The Planiverse: computer contact with a two-dimensional world* (2000)
- Rudy Rucker: *Spaceland: a novel of the fourth dimension* (2003)

The issue here is how such speculation might inform human comprehension and engagement with either a divine plan or with a secular global plan of higher dimensionality.

Visual representation of planning in a global context

There is an interesting challenge to the appropriate representation of a plan in a global context. How might its implications and limitations be best understood through such depictions -- especially in contrasting a mundane plan with any sense of a transcendent divine plan?

Why is it so readily assumed that an adequately comprehensive plan can be articulated verbally? Should consideration be given to the possibility that the connectivity of argumentation may depend to some degree on visual representation, musical harmony, or other senses, as separately argued (*Strategic Challenge of Polysensorial Knowledge: bringing the "elephant" into "focus"*, 2008; *A Singable Earth Charter, EU Constitution or Global Ethic?* 2006).

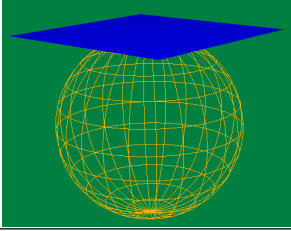
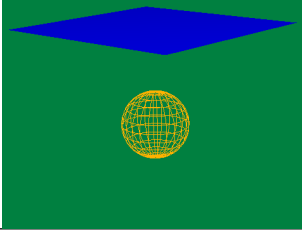
The challenge can be reframed more conventionally in terms of that of relating global and local -- as in the phrase *Think globally, act locally*. This has been widely used in various contexts, including planning, environment, education, mathematics, and business. It figured prominently on the occasion of the [1992 Earth Summit](#). Analogues of various subtlety endeavour to frame the relationship between the individual and the divine:

- *The Practice of the Presence of God*
- *Before enlightenment, chop wood draw water; after enlightenment, chop wood, draw water*
- *Live each moment as if it were the last*

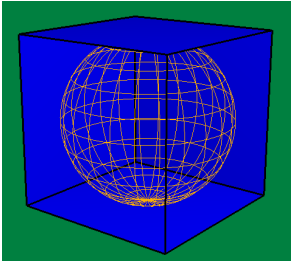
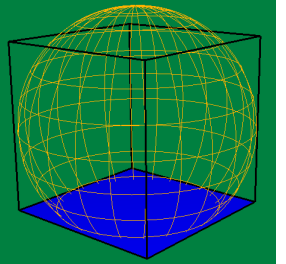
Projections: In geographical terms, the challenge of relating global and local is partially addressed by segmenting the surface of the globe into many zones bounded by latitude and longitude -- each of which may be assertively assumed to be relatively flat, and experienced as such. Whilst this can successfully define local areas with which plans and planning can be comprehensibly associated -- as in town planning -- any sense of global is then extremely elusive, if not entirely absent and meaningless. As argued separately, and noted above, there are dangers to "flat Earth" thinking (*Irresponsible Dependence on a Flat Earth Mentality -- in response to global governance challenges*, 2008).

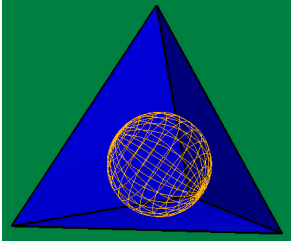
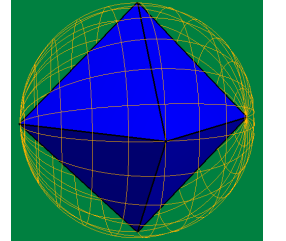
As to how global may be perceived and represented from a planar perspective, the many possibilities of [map projection](#) (see [List of map projections](#)) address the various forms of distortion associated with such projections (as illustrated below). These are indicative of how global may be misunderstood and of how local may be misrepresented.

Global planning: As a form of visual language, the following images (prepared using [Stella Polyhedron Navigator](#)) offer a way of thinking about the relationship between the integrative sense of global (indicated by a sphere) and any plan (indicated by a plane). The globe may be variously interpreted, for example: as the mundane world, with the plane as human capacity to engage with the larger (divine) plan; as the multidimensional (divine) world, as perceived by those restricted in comprehension to life on a two-dimensional plane; or as a global society for whose governance a strategic plan is required.

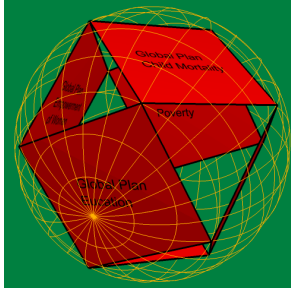

Singular plan	
Plan tangential to the globe (and focused specifically on it -- being limited to it)	Plan distant from the globe (and possibly extending far beyond it -- even to infinity)
	

The following images are indicative of the possibility that an overarching "global plan" may well imply through multiple secondary plans - understood to be configured together to ensure the overall coherence.

Multiple plans	
Configuration of plans (partially encompassing the globe)	Notional configuration of plans (failing to constrain the globe)
	

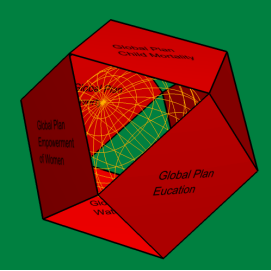
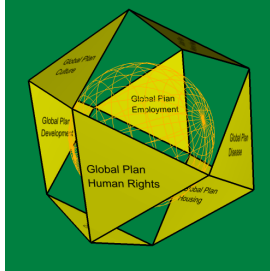
Framing "outside the box" of cubic convention	
Tetrahedral configuration of encompassing plans	Octahedral configuration of plans
	

The following images can be used as a guide to thinking about yet more complex configurations of plans. The images highlight the possibility that some plans may be missing from a cluster -- perhaps otherwise considered as complete from a favoured perspective. Or those missing may simply have been ignored as irrelevant by some advocates and constituencies. Also of interest is that the pattern of connectivity between the plans in a configuration may be variously broken -- suggesting problematic consequences if they are to be understood as needing to be systemically integrated .

Cuboctahedral configuration of multiple plans -- some missing -- I	
Cluster A Plans (missing Cluster B)	Cluster B Plans (missing Cluster A)
	

But what if the configuration was inappropriately disassociated from the globe -- perhaps inadequately concrete and excessively theoretical -- as suggested by the following?



Cuboctahedral configuration of multiple plans -- some missing -- II	
Cluster A Plans (missing Cluster B)	Cluster B Plans (missing Cluster A)
	

Icosahedral mapping: Potentially of great value are the insights deriving from the work of R. Buckminster Fuller (*Synergetics: explorations in the geometry of thinking*, 1975), as separately discussed (*Geometry of Thinking for Sustainable Global Governance: cognitive implication of synergetics*, 2009). With respect to minimal local distortion in global mapping, he designed a **Dymaxion Map** based on the icosahedron, as shown below.

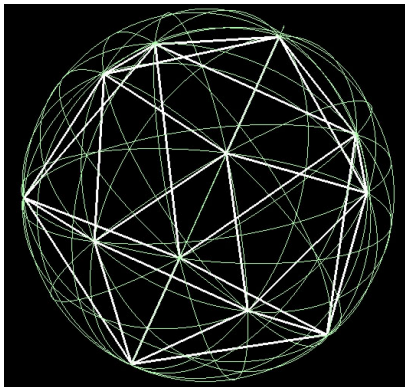
Animation of Dymaxion Map
(reproduced from *Wikipedia*)



Strategic mapping: Fuller's map was an inspiration to the mapping of the strategic dilemmas of the **UN Earth Summit** (Rio de Janeiro, 1992), as discussed separately (*Configuring Globally and Contending Locally: shaping the global network of local bargains by decoding and mapping Earth Summit inter-sectoral issues*, 1992; *Spherical Representation of Icosidodecahedral Net of Strategies: configuring strategic dilemmas in intersectoral dialogue*, 1992).

As in that case, major international conferences are frequently convened in response to complex systems of problems. The intention is often to develop a strategic plan to coordinate a collective global response. Such initiatives are severely handicapped by the preferred output format, namely a checklist of strategic categories and sub-categories, which usually ignores the systemic links between the issues on which action is planned. The best example is *Agenda 21*, resulting from that UN Earth Summit. It clustered some 2,000 strategies into a strategic framework of 30 "chapters" (at that time) lacking any systemic linkages between its strategic elements, as noted separately (*Strategic Correspondences: computer-aided insight scaffolding*, 1995). This was not remedied in the follow-up events (*Johannesburg, 2002; Rio de Janeiro, 2012*).

As indicated below, rather than the cuboctahedral mapping above, consideration could be given to associating the **15 Global Challenges** identified by the **Millennium Project** with the 15 great circles of the icosahedron in order to explore the interrelationship of those strategic challenges, presumably vital to the coherence of any implied global plan. These challenges (developed as a framework for the project's **Global Futures Intelligence System**) provide a framework to assess the global and local prospects for humanity.

Basis for 15-fold strategic pattern?	
15 Great circles of an icosahedron (generated from <i>Stella Polyhedron Navigator</i>)	15 Global Challenges for Humanity (reproduced from the <i>Millennium Project</i>)
	<ol style="list-style-type: none"> 1. Sustainable development and climate change 2. Clean water 3. Population and resources 4. Democratization 5. Global foresight and decision making 6. Global convergence of IT 7. Rich-Poor gap 8. Health issues 9. Education 10. Peace and conflict 11. Status of women 12. Transnational organized crime 13. Energy 14. Science and technology 15. Global ethics

Any strategic sense of "global plan" could be further informed by the extremely comprehensive 4-volume synthesis produced by **Christopher Alexander** (*The Nature of Order: an essay on the art of building and the nature of the universe*, 2003-4). In its focus on

material design, "human nature" is subtly and curiously excluded -- as with the current challenges of designing psychosocial systems and the strategies of global governance. The work is the culmination of decades of reflection on design, and the appreciation of the subtle quality which makes "a good place to be". This notably gave rise to *A Pattern Language* (1977), discussed separately as a template for psychosocial analogues (*5-fold Pattern Language*, 1984). The new synthesis explicitly offers a powerful methodology for eliciting beauty as a driver of the emergence of increasing wholeness. This has been carefully integrated with the science of complexity theory.

Understood from a psychosocial perspective, of possible relevance to the association above of 15 Global Challenges with the 15 Great Circles of the icosahedron, are the 15 systemic transformations Alexander has distilled from his work (*Harmony-Seeking Computations: a science of non-classical dynamics based on the progressive evolution of the larger whole*, *International Journal for Unconventional Computing (IJUC)*, 2009). The 15 transformations or properties he identifies are:

15 "Transformations" in Alexander's pattern language			
Levels of Scale	Positive Space	Contrast	The Void
Strong Centers	Good Shape	Gradient	Simplicity
Thick Boundaries	Local Symmetries	Roughness	Not-Separateness
Alternating Repetition	Deep Interlock	Echoes	

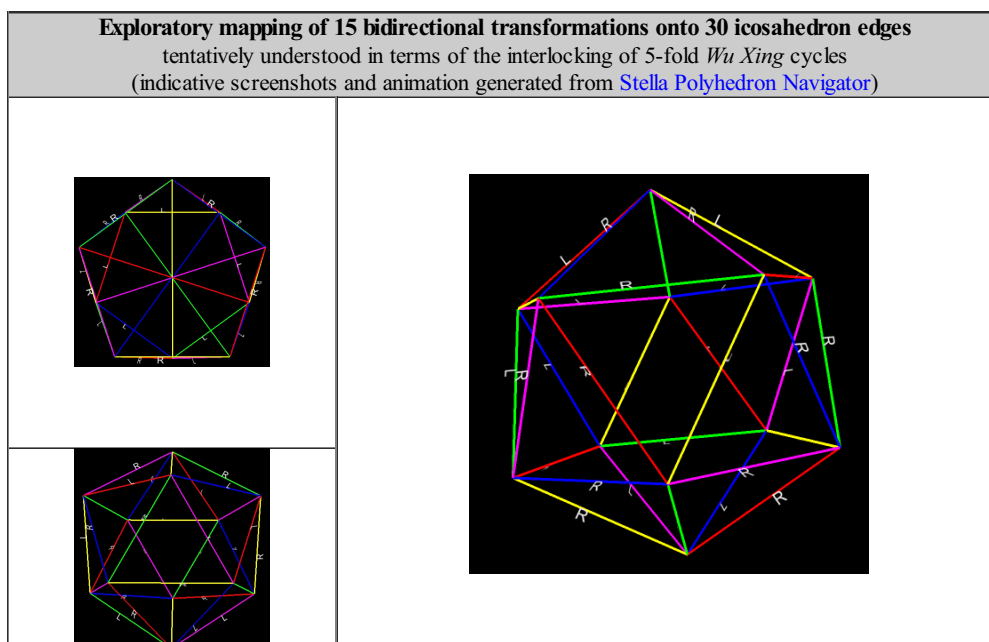
Of particular interest is the possibility of their polyhedral configuration -- consistent with Alexander's own emphasis on geometric adaptation, in order to enable comprehension of a higher order -- as discussed separately (*Harmony-Comprehension and Wholeness-Engendering: eliciting psychosocial transformational principles from design*, 2010; *Patterns Essential to Individual and Global Health?* 2010).

Rather than using the **great circles** of the icosahedron (as above), also of interest is the possible association of the pattern of 15 "challenges" or "transformations" with the 30 **edges** of the icosahedron, especially in the light of the interest of **Stafford Beer** in such a configuration of 30 elements from a cybernetic perspective (*Beyond Dispute: the invention of team synteegrity*, 1994). The 15 transformations would then be understood as bidirectional -- challenging resistance and remedial response?

The pattern of 30 might then be combined with the classical Chinese insight into the cycle of 5 movements -- known as *Wu Xing* -- to give an interlocking system of cycles offering a more comprehensive sense of systemic "health" (*Wu Xing (5-element theory) revisited*, 2007; *Cycles of enstoring forming mnemonic pentagrams: Hygiea and Wu Xing*, 2012). The argument for representing the *Wu Xing* dynamic in 3 dimensions follows from that developed separately with respect to other symbols considered to be of significance to "global" understanding, but more typically represented in 2D (*Representation of Creative Processes through Dynamics in Three Dimensions: global insight from spherical reframing of mandalas, the zodiac and the enneagram*, 2014; *Correspondences between Traditional Constellations and Pattern Languages*, 2014).

As a very preliminary exploration of this, 5 colours are used in the animation below as an indication of such contrasting movements. These could be associated with the 15 transformations -- each distinguished in terms of two (cybernetic) directions ("L" and "R" in the images below). Any sense of globality is then associated with the dynamics of the system as a whole. Given the potentially fundamental significance of such a configuration for collective life, consideration could be given to the possibility that the L and R directionality is characterized by a form of resonance -- effectively characterizing systemic globality as a so-called **resonance hybrid** -- as discussed separately (*Enabling Wisdom Dynamically within Intertwined Tori: requisite resonance in global knowledge architecture*, 2012).

Further work is required to make the interlocking attributions in the animation systemically meaningful in terms of the 15 strategic challenges. A sense of globality could then be associated with appreciation of recognizable patterns arising from the dynamics amongst the coloured lines. The screen shots give a sense of such patterning. Other "solutions" may prove to be more appropriate (the L and R attributions are as yet inadequate).



This animation can of course be combined with the depiction of the 15 great circles above, as suggested by a [separate image](#) of greater complexity.

Visually associating incommensurable worldviews and global plans

Rival plans: Of greatest relevance to any appeal for adherence to a global plan -- or to God's Plan, as implied by the Pope -- is the extent to which plans may be perceived as incommensurable, incompatible or variously irrelevant. The nature of God's Plan may itself be inherently incommunicable -- if not an essentially inconvenient truth (*An Inconvenient Truth -- about any inconvenient truth*, 2008). The longstanding problematic relationship between the religions offers a remarkably valuable illustration of this. Each religion naturally considers that it constitutes the exemplary application of insight into such a divine plan, however subtly this may be uniquely interpreted.

There is therefore a strong case for exploring the application of the visual language suggested above to a set of religions. It is extraordinary that no attempt is seemingly made to do so. This is however consistent with the view associated with any singular plan and the mindset of those who faithfully adhere to it.

Why are [argument maps](#) not articulated in the course of interfaith discourse -- and appropriately "massaged" into configurations through which a global pattern of connectivity may be elicited and comprehended? The failure to do so could be considered indicative of a flaw in the approach to such discourse -- and of deficiencies undermining the capacity of religions to offer guidance in the reconciliation of fundamental differences in global society.

Geometrical theology? Such an undertaking could be considered as an exercise in mathematical theology, as argued above, although more precisely named as one of geometrical theology, if not topological theology. The possibility is fruitfully framed by the argument of [Stephen Prothero](#) (*God Is Not One: the eight rival religions that run the world -- and why their differences matter*, 2011) and that of Sarah Voss (*What Number is God? Metaphors, metaphysics, metamathematics, and the nature of things*, 1995), as noted above.

These suggest the questions:

- *if there is no singular global plan, how might eight rival plans run the world?*
- *how might the number of any singular global plan be understood?* (in the light of the mathematical understandings of number, as indicated above).

The emphasis in this exercise is not on any definitive number of plans or on any disagreements regarding what is distinguished, but rather on the constraints on making meaningful distinctions, as most notably highlighted in the much-cited study by [George Miller](#) (*The Magical Number Seven, Plus or Minus Two: some limits on our capacity for processing information*, *Psychological Review*, 1956), as discussed separately (*Comprehension of Numbers Challenging Global Civilization: number games people play for survival*, 2014).

Prothero's distinction of eight is therefore considered here as primarily indicative. His study does indeed include a ninth chapter on atheism as a form of religion, for example. For the purpose of the following provisional exercise in perceptual geometry, the number considered is reduced to seven (by excluding the Yoruba religion). Such arbitrary exclusion needs to be called into question within a context of consideration of a much more extensive array of religions -- and the possibilities of configuring them together as planes within more complex polyhedra ***

The purpose of this geometrical exercise is primarily to explore the potential of such a visual language in clarifying relationships in situations in which dependence on verbal discourse has proven to be distinctly unfruitful in practice.

7 Plans and 12 Qualitative distinctions: An interesting approach to configuring the set of plans associated with key religions is then to distinguish two "natural" clusters from Prothero's eight (minus one):

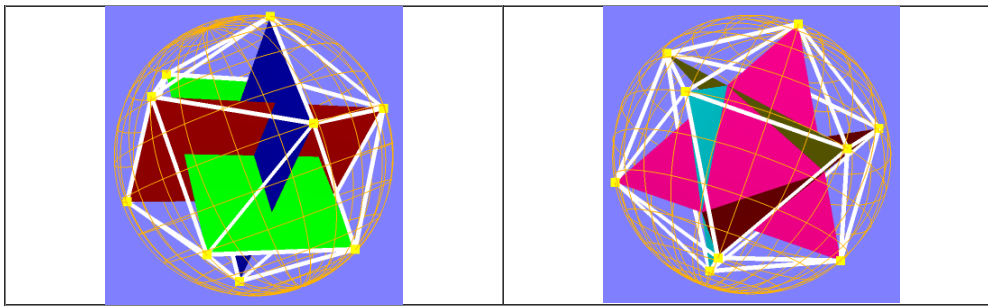
- 3 Abrahamic religions: Christianity, Islam, Judaism
- 4 Eastern religions: Buddhism, Confucianism, Daoism, Hinduism

These can be distinctively configured together within a single global framework as 3 rectangles and 4 triangles -- as planes within an [icosahedron](#) (as shown below). The icosahedron is appropriate to any such quest for globality because of its well-recognized elegant symmetries and its approximation to a sphere -- both being suggestive of elusive integrative globality and understanding of "wholth" (*Wholth as Sustaining Dynamic of Health and Wealth: cognitive dynamics sustaining the meta-pattern that connects*, 2013).

The two clusters are then separately associated with 12 qualitative distinctions -- the 12 vertices of the icosahedron. In this way each "plan" can be understood as having a distinctive set of characteristic qualities, however these might be named.

A configuration of 12 complementary qualities has long been a feature of civilization and of integrative strategic understanding, as can be variously explored, most notably with regard to the enthusiasm for "round tables" (*Checklist of 12-fold Principles, Plans, Symbols and Concepts: web resources*, 2011; *Implication of the 12 Knights in any Strategic Round Table*, 2014). This proclivity can be explored with respect to global governance (*Eliciting a 12-fold Pattern of Generic Operational Insights: Recognition of memory constraints on collective strategic comprehension*, 2011; *Imagining Attractive Global Governance: questioning possibilities and constraints of well-boundedness*, 2013; *Enabling a 12-fold Pattern of Systemic Dialogue for Governance*, 2011).

2 distinct clusters of divine plans of 7 "incommensurable" religions represented by distinctly oriented planes within 2 icosahedra (animations generated from the Stella Polyhedron Navigator software by its developer Robert Webb , from a great icosahedron augmented by an icosahedron, then hiding selected faces)	
Configuration of plans of 3 Abrahamic religions (Christianity, Islam, Judaism)	Configuration of plans of 4 Eastern religions (Buddhism, Hinduism, Confucianism, Daoism)

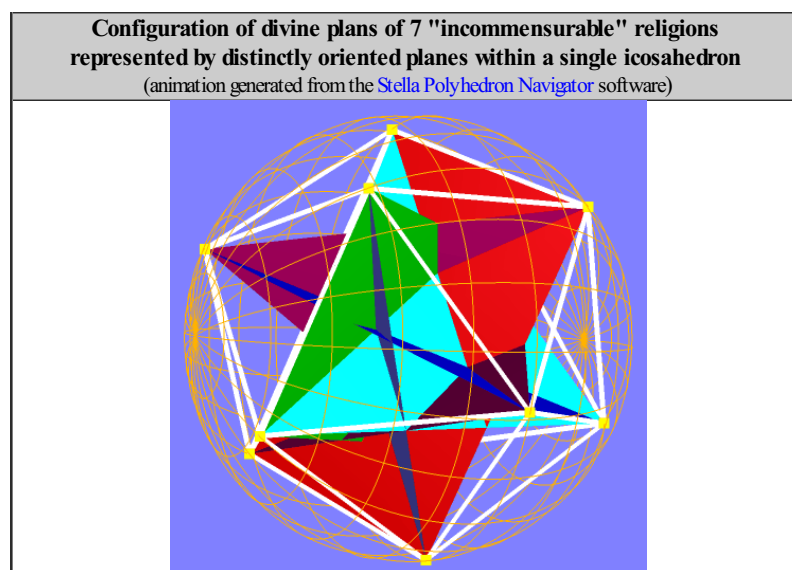


The configuration of plans of the 3 Abrahamic religions (on the left above) is interesting in that their mutually orthogonal relationship (as depicted) is usefully indicative of their natural incompatibility in practice -- and the bloody conflicts to which it gives rise between those adhering to a particular planar understanding. Disagreement is "held" and "justified" by the geometry -- together with the sense of each being unquestionably "right" from the perspective of its plan. [NB: Metaphorical use of "agreement" may be used in carpentry and engineering].

Of further interest is that each plan of the Abrahamic cluster is associated with a [golden rectangle](#) -- with which particular properties and symbolism are recognized in terms of a so-called "divine" proportion ([Luca Pacioli, Divina Proportione, 1509](#)). Appropriately, further to the argument above with regard to divine accounting, Pacioli is recognized as a seminal contributor to the field now known as accounting.

Aside from a form of complementarity between the distinct plans **within** each image above, there is the further complementarity **between** the two images -- especially given the manner in which they both associate all 12 vertices.

The 7 plans in the two separate animations above can be integrated into a single animation, as shown below. This integration associates the (global) qualities distinguished separately by the vertices in the animations above. The approximation of the icosahedron to the globality of a divine sphere is usefully indicated by the circumsphere with which the "supernal" nature of divinity might then be usefully associated -- in contrast with the 2-dimensionality of the individual plans of the incommensurable religions challenged to communicate integratively..



Complementary languages? Whether as the 4 vertices of each of the 3 rectangles, or as the 4 triangles linking the vertices of those rectangles, the configuration above is potentially indicative of 4 "languages" of some kind. One interesting indication in this respect is the set of languages distinguished by [Antonio de Nicolas \(Meditations through the Rg Veda: Four-Dimensional Man, 1978\)](#). He associates these with intentionality-structures (following Husserl): *The internationality-structure of a particular language then determines, or prefigures, the kind of answer it will receive.* In *Habits of Mind* (1989), he has applied these insights to the educational challenge of training inner mental skills, instead of transferring accumulations of facts, data and information. The languages distinguished are:

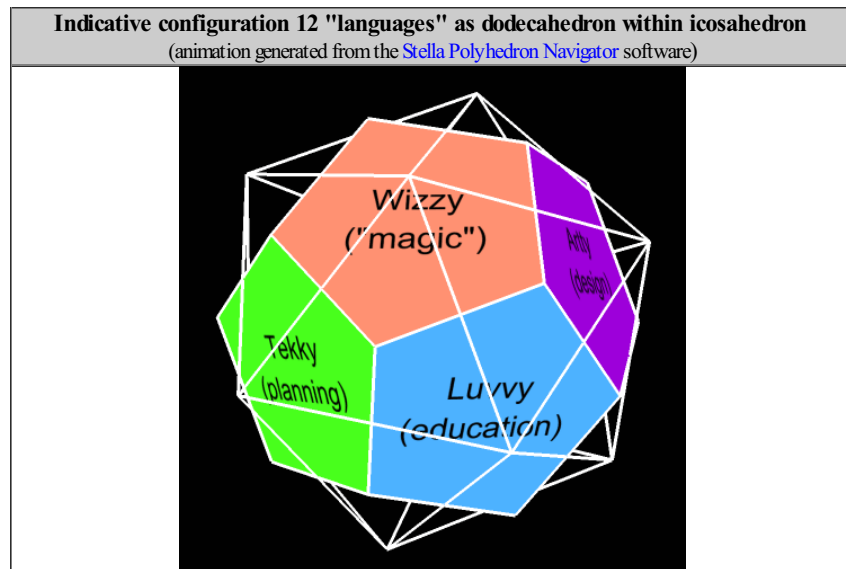
- Language of non-existence: Provides the modality of being a world, either of possibilities to be discovered, or of stagnant dogmatic attitudes.
- Language of existence: Provides the possibility of acting in a world of truth to be built or established, as the discontinuous results of innovation
- Languages of image and sacrifice: Provides the modality of acting in a world through regathering the images of the dismembered sensorium... by sacrificing their multiple and exclusive ontologies.
- Language of embodied vision: Provides the modality of having gone through, and of being in, a world which remains continuously because it comprehends the totality of the cultural movement on which it is grounded ([Epistemological Challenges: Language](#))

Configuring the distinctiveness of the 12 qualities above can be explored otherwise -- if controversially -- through an exercise in mapping the 12 traditional signs of the zodiac, as discussed and illustrated separately ([Spherical mapping of conditions traditionally associated](#)

with the zodiac, 2014) in an exploration of *Representation of Creative Processes through Dynamics in Three Dimensions: global insight from spherical reframing of mandalas, the zodiac and the enneagram* (2014).

Although deprecated by science and religion, the widespread enthusiasm for the framework offered by the zodiac merits consideration - given the relatively incomprehensible complexity of explanation with which science is now widely associated. People in general derive more personal meaning and sense of identity from reference to their astrological sign -- or some equally memorable symbol -- than from any complex pattern of explanation formulated by qualified authority. There is the further possibility that it may only be an indicative instance of the need for a 12-fold language to engage effectively with globality, as argued separately (*12 Complementary Languages for Sustainable Governance*, 2003).

Presented in that document using caricatural terms, and understood as characteristic "languages" of complementary plans, they can be usefully configured as the 12 faces of a dodecahedron, nested within the icosahedron used above -- as in the animation below. The faces can be understood as distinct modes of "ex-planation" of the global comprehension they together represent.



Distortion of global insight through planar projection

The challenge of representing global insight in terms of a plan -- especially a divine plan -- is remarkably clarified by consideration of how the spherical Earth can be represented on any map. The issue is then how a plan view distorts understanding of the integrity of the whole and what alternatives might be imagined (*The Territory Construed as the Map: in search of radical design innovations in the representation of human activities and their relationships*, 1979).

As noted above a valuable discussion of how global may be perceived and represented from a planar perspective is articulated in terms of the many possibilities of [map projection](#) (see *Wikipedia List of map projections*). These address the various forms of distortion associated with such projections. These are indicative of how global may be misunderstood and of how local may be misrepresented.

As noted by *Wikipedia*, with respect to the contrasting classification of projections, one fundamental classification is based on the type of projection surface onto which the globe is conceptually projected. The projections are described in terms of placing a gigantic surface in contact with the earth, followed by an implied scaling operation. These surfaces are cylindrical (e.g. [Mercator](#)), conic (e.g., [Albers](#)), or azimuthal or plane (e.g. [stereographic](#)). Many mathematical projections, however, do not neatly fit into any of these three conceptual projection methods. Hence other peer categories have been described in the literature, such as pseudoconic, pseudocylindrical, pseudoazimuthal, retroazimuthal, and polyconic.

Wikipedia notes another way to classify projections according to properties of the model they preserve -- recognizing that it is impossible to construct a map projection that is both equal-area and conformal. Some of the more common categories are:

- Preserving direction (*azimuthal or zenithal*), a trait possible only from one or two points to every other point
- Preserving shape locally (*conformal or orthomorphic*)
- Preserving area (*equal-area or equiareal or equivalent or authalic*)
- Preserving distance (*equidistant*), a trait possible only between one or two points and every other point
- Preserving shortest route, a trait preserved only by the [gnomonic projection](#)

World views are usefully recognized as being necessarily planar -- to the extent of implying a [cyclopean perspective](#) lacking the depth perception requiring at least "two eyes" (*Cyclopean Vision vs Poly-sensual Engagement*, 2006; [John A T Robinson](#), *Truth is Two-eyed*, 1979). How then is global to be understood from a planning perspective? The question is what such considerations imply for the articulation of any global plan. Of particular interest is the sense in which **any articulated plan -- including interpretations of a divine plan -- may variously and necessarily reflect distortions analogous to those in global mapping.**

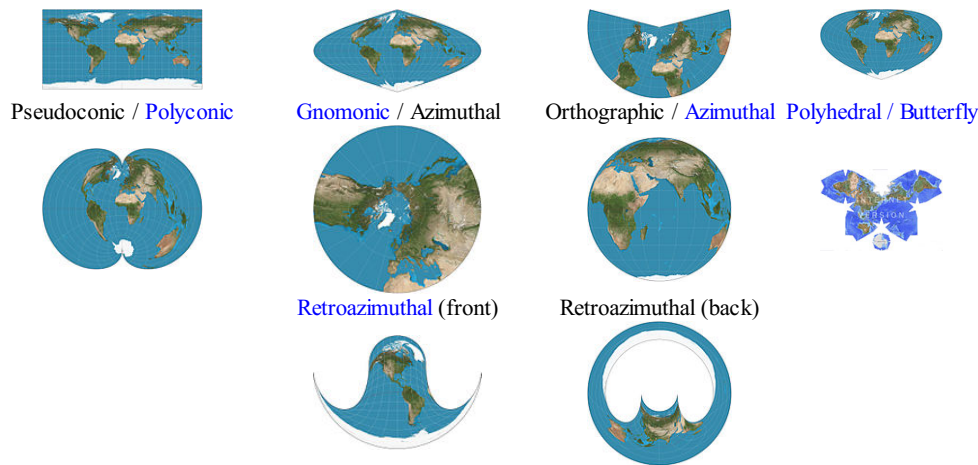
Selected examples of planar projections as indications of distortion of globality

(thumbnails reproduced from *Wikipedia*)

[Cylindrical / Equirectangular](#) [Pseudocylindrical](#) / [Sinusoidal](#)

[Conic](#)

[Pseudoconic](#)



Do such images suggest the variety of ways in which integrative insight may be misrepresented when conventionally presented? Is the representation of integrative belief systems effectively associated with one or other such projection?

Interpreting exhortation to adhere to God's Plan

This argument arose from the above-mentioned exhortations of the Pope with respect to nutrition and immigration. The assumption has been made that these emerged from the Pope's interpretation of God's Plan from a Christian perspective -- irrespective of whether this might be challenged by others from this same perspective.

The difficulty in a global society is to reconcile this Plan with the Plans of other religions -- irrespective of the (competing) secular global plans of the international community. How is the globality of integrative insight to be recognized under such circumstances? How are different understandings of globality to be meaningfully related?

Hence this geometrical exercise in depicting the challenge of interrelating incommensurable planar perspectives otherwise. This is in order to offer an indication of "where" transcendent globality is located -- whether from a divine or a secular perspective -- in terms of comprehension. This offers a visual sense of the particular problems of comprehending its nature. The difficulty is usefully compared with that of comprehending the globality of the Earth from any particular area on its surface.

Criticism of the Pope's assumption as to the nature of God's Plan can be taken further by recalling the struggle to formulate (and ensure adherence to) a Global Ethic on the occasion of a [Parliament of the World's Religions](#) (*Towards a Global Ethic: an initial declaration*, 1993). Significantly absent from the debate was the Roman Catholic Church.

Adherence: The geometrical configurations of plans (presented above) also offer a useful means of discussing adherence to any plan -- especially in a global context in which seemingly alternative global plans are on offer. Explored metaphorically, if adherence is a matter of "sticking to" then how does this work in practice? Is stickiness ensured by argument, by faith, by peer group pressure, by authority, by habit, by clinging to, or otherwise? Imagined as a platform in outer space, does this imply "roping on" with the aid of some form of safety harness, or possibly the use of magnetic (gravity) boots?

The configurations incidentally draw attention to the possibility of "sliding off" any plan -- consistent with reference to [backsliding](#). Potentially more dramatic are the dynamics associated with heresy and apostasy -- then to be understood as movement from "the Plan" to another, necessarily to be severely deprecated.

The difficulty in interpreting the Pope's exhortation is that the Catholic Church is unable to reconcile its views with the views on globality of other religions -- and is seemingly casual and tokenistic in its attempts to do so, despite declarations to the contrary. This is reminiscent of primitive debates between astronomers located on different parts of the Earth's surface. Why should any one understanding of God's Plan be considered adequately insightful and comprehensive in a global society?

Transfinite perspective? In variously recognizing the omnipresence of the divine and associating it with infinity, any divine plan calls for insights of commensurate complexity. This has been recognized by religiously inspired mathematicians, as documented by Sarah Voss (*What Number is God? Metaphors, Metaphysics, Metamathematics, and the Nature of Things*, 1995).

The complexity of global systems is also recognized from a secular perspective through the study of complex system dynamics and their relevance to global governance. Ironically this also features in the strategic concern with so-called [wicked problems](#), as separately discussed (*Encycling Problematic Wickedness for Potential Humanity*, 2014).

However, whether from the transfinite/transmundane perspective (attributed to the Pope) or from the insights of the relevant cybernetic disciplines, the requisite characteristics of "the Plan" have yet to be adequately articulated as a guide to governance -- despite the urgency of the times. If necessary, verbal verbal exhortations have proven to be clearly insufficient to enable comprehension of complexity and engagement with it.

It is therefore legitimate to suspect that the articulations of any plan "on the table" are primarily characterized by the "subunderstanding" discussed by [Magoroh Maruyama](#) (*Peripheral Vision: polyocular vision or subunderstanding*, *Organization Studies*, 2004)

Netherworld as "underside" of any plan: The plan, considered as a plane, offers the valuable implication that it may have an underside. This possibility is consistent with any implication that the plan provides an ordered surface -- perhaps a grid framework -- over which movement is required in terms of the plan.

The sense of underside figures notably in the argument of [Elise Boulding](#) (*The Underside of History: a view of women through time*, 1976). Understood as a table framing appropriate discourse, such an underside is consistent with recognition of transactions "under the table". With any implication that people can stand upright on the surface defined by the plan, there is the further sense that those on the underside may stand "upside down" or be inverted in some way.

From such perspectives there is considerable irony both to possible interpretations of "understanding" and to the fact that the male priesthoods of the religions "who rule the world" (despite their differences) all adopt a clothing habit now considered characteristic of those of the other sex.

Preoccupation with the existence of an underside is also consistent with understandings regarding a netherworld or an underworld -- indicative of those who do not conform appropriately to the plan. This understanding follows both from religious framing of hell and the current challenge of transnational criminal organizations. It is also characteristic of the underworld of sexual abuse with which the Catholic clergy has been so complicit.

The "location" of any such netherworld can be fruitfully explored from a geometrical perspective (*Designing Global Self-governance for the Future: patterns of dynamic integration of the netherworld*, 2010), in terms of error (*Embracing error and the netherworld*, 2014), in terms of silence regarding the "unsaid" (*Civilization as a Global Configuration of Silences: recognizing silence of a higher order*, 2013; *Global Strategic Implications of the "Unsaid": from myth-making towards a "wisdom society"*, 2003), or as being "behind the scenes".

The problematic scandals and denials of the Catholic Church, as noted above, are indicative of such an underworld which merits greater clarity -- given the degree of suffering with which it has been associated. References are typically made to "living hell".

Exhortation to solidarity: The above-mentioned exhortations of the Pope to solidarity -- with regard to nutrition (food security) and the treatment of immigrants -- call for very careful consideration.

What exactly is meant and understood by solidarity at this time -- especially in a global society? How is solidarity to be recognized: through expression of agreement (with the Pope?), through "[singing from the same hymn sheet](#)", through "getting on board" or "getting on program", through subscribing to a declaration (by the UN?), through allocation of funds, or through establishing an institution as a reflection of it? [see summaries of over 630 approaches by the [Integrative Knowledge and Transdisciplinarity Project](#)]

The hymn-sheet metaphor highlights the forms of solidarity implied by "being on the same page". In a period of information overload when "page" refers increasingly to a web document -- to which every effort is made to attract people and retain their attention -- the challenge of people "slipping off the page" is evident (*Investing Attention Essential to Viable Growth: radical self-reflexive reappropriation of financial skills and insights*, 2014). Exemplifying the planar, how are myriad pages to frame a global plan?

Use of the board metaphor invites a degree of confusion -- especially with its associations to a planar wooden board, and any extension to getting "on plan" or "on program". Most curiously this planar sense could be understood as reinforcing the operations of [board-level decision-making](#) ("around a table") -- through which many corporate entities are governed ([The Conference Board](#); Susan F. Shultz and Robert Barker, *Getting on Board*, INAC; Partnership for Public Service, *Getting On Board: a model for integrating and engaging new employees*, Booz Allen Hamilton, 2008). As noted above, there is of course the danger that the associations to flatness influence a degree of archaic "[Flat-Earth](#)" thinking in decision-making which may aspire to being global in scope (or make claims in that respect). The distorted perspective on globality offered by flatness is further reinforced by the award winning work of [Thomas L. Friedman](#) (*The World Is Flat: A Brief History of the Twenty-First Century*, 2005).

There is some irony to use of the board/table metaphor, given expectation that any program or plan produced will "fly" -- introducing another metaphor. Getting "on board" then offers the sense of access to a mode of transport, or a vessel -- reinforced by use of phrases like a "raft of proposals" -- raising the question of the viability of the implied container. A more intriguing association is to [circuit board](#) -- especially with the implication to circularity of discourse frequently evident in board-level deliberations. However, given the many economic references to [Adam Smith's "invisible hand"](#), could board-level decision-making be provocatively explored as a [séance](#) of "table-raising", aided by "spirits" -- if not the [animal spirits](#) of [John Maynard Keynes](#)?

The 20th century has demonstrated the problematic coherence associated with conventional understandings of organization. The current role of the United Nations exemplifies this. The solidarity associated with other forms of conventional organization is equally questionable -- as with the multitude of online communities that have partially superseded the earlier modality for communication purposes. What form is meaningful solidarity expected to take? Extreme views on solidarity have been explored in political regimes, notably those of Communist persuasion (as currently exemplified by North Korea).

A form of solidarity is recognized in the quest for consensus on strategic issues such as climate change. Expectations of global consensus as naively understood may well be an illusion, as separately discussed (*The Consensus Delusion: mysterious attractor undermining global civilization as currently imagined*, 2011). That discussion explores the parallel with arguments regarding the divine, as presented by [Richard Dawkins](#) (*The God Delusion*, 2006). The nature of the consensus, for which appeals are currently made, is clearly related to the challenge of the governability of global society (*Ungovernability of Sustainable Global Democracy?* 2011).

The matter can also be explored in terms of "solidarity" amongst the religions -- especially given the manner in which the Roman Catholic Church has held itself aloof from the formulation of any Global Ethic (as noted above). The same might be said with regard to the sciences -- as exemplified by the problematic relationship between the natural and the social sciences -- and the challenge to both of other modes of knowing (*Knowledge Processes Neglected by Science: insights from the crisis of science and belief*, 2012).

More curious is the choice of metaphor for integrative insight in a period when the financial system has been in quest of increased [liquidity](#). It might be asked whether complementary metaphors based on air ("winds of change?") and fire (inspiration, excitement?) merit attention -- appropriately entwined with that of solidity.

Where are the explorations of models of solidarity -- potentially informed by mathematical insight? Where are the models of the solidarity amongst the sciences -- of which token preoccupation with interdisciplinarity, transdisciplinarity and unified science are indicative?

Authoritative invitations to derivative thinking on derivative problems: It is curiously symbolic that the Pope should have focused in his exhortations on two problems -- food security and immigration -- which might otherwise be considered to have a common cause. In his focus on the immediate challenge, no reference was made to any originating problem.

Succinctly stated, the point to be made is that most problems of that kind would be far less serious at this time (or in the foreseeable future) if population pressures were not so great. Bluntly put in the cases he has cited: more people, more need for food and more pressure to immigrate.

The Pope could then be said to be focusing on derivative problems -- downstream from their causative factor. In bewailing lack of solidarity on the matter, the Pope could be understood to be reinforcing derivative thinking, as separately argued (*Vigorous Application of Derivative Thinking to Derivative Problems: transcending bewailing, hand-wringing and emotional blackmail*, 2013).

Shunning discussion of overpopulation: Especially relevant to any systematic analysis of such problems over time is the role of the Catholic Church (in complicity with the other Abrahamic religions) to avoid addressing the issue of increasing populations pressures (*Root Irresponsibility for Major World Problems: the unexamined role of Abrahamic faiths in sustaining unrestrained population growth*, 2007; *Institutionalized Shunning of Overpopulation Challenge: incommunicability of fundamentally inconvenient truth*, 2008).

In the religious enthusiasm for unconstrained population growth, it might be asked of religions:

- at what stage has restraint been recommended in the light of the challenge of resources
- from what stage has any restraint been discouraged
- from what stage has debate about the matter been discouraged, even about the difficulty of discourse on such a sensitive matter (*Overpopulation Debate as a Psychosocial Hazard: development of safety guidelines from handling other hazardous materials*, 2009).

The Pope as God's blackmailer? Despite the scandals with which the Catholic Church has been (and remains) associated, how is it that the Pope is seen as a moral authority on global problems -- many of which Catholic theology has effectively enabled and exacerbated? Given the pattern of cover up associated with scandals such as child abuse by clergy, is there no case for recognizing that the Church suffers from a form of systemic blindness -- with future implications according to its own **end times** prophecies (*Spontaneous Initiation of Armageddon: a heartfelt response to systemic negligence?* 2004).

If the Church can engage unapologetically in such problematic theologically-reinforced behaviours -- on issues where it has been caught *in flagrante delicto* -- then on what other issues might its strategic logic be suspiciously flawed? Given its tardy recognition of its own failure with respect to heliocentrism, is it not possible that analysis of the global problematique according to Catholic theology may itself be fundamentally flawed? Are the visible logical and ethical contradictions merely the "tip of the iceberg" -- and how to prove that this is not the case?

Having previously engendered in God's name the processes of population increase (currently exacerbating global crisis), the Pope is curiously positioned to argue that failure by secular global society to respect the divine perspective at the present time will bring about further disaster and suffering. Curiously the responsibility for that suffering is claimed from this perspective to be the responsibility of society -- not of a Catholic Church with a blinkered understanding of resources and their distribution in practice.

The argument is consistent with those of sermons of the past in which all who fail to be guided by the Divine Plan will necessarily be condemned to hell fire and damnation. The argument takes the form of secular blackmail: conform to the prerequisites of the Godfather, or fear the consequences. As in the past, the argument is presented in God's name.

Conversion of a plan into a viable cognitive vehicle

The two-dimensionality of a plan, as explored above, may be employed metaphorically to highlight the contrast between such a surface (or platform) and the design of a cognitive vehicle through which the **noosphere** might be navigated. An imaginative point of departure is the existence of a mythical **magic carpet** as a form of vehicle -- a form of divine plan offering personal mobility.

Exploiting "threads" as required for carpet weaving and, metaphorically, in (internet) **conversation threading**, the challenge is how to interweave threads of relevance such as to configure a vehicle, as separately discussed (*Interweaving Thematic Threads and Learning Pathways: Noonautics, Magic carpets and Wizardomes*, 2009). Such interweaving can be considered in systemic terms (*Magic Carpets as Psychoactive System Diagrams*, 2010). There is some irony in use of the carpet metaphor in that the 15 transformations (mentioned above in relation to the Millennium Project's 15 strategic challenges) were partially inspired by Christopher Alexander's analysis of traditional carpet design (*A Foreshadowing of 21st Century Art: the color and geometry of very early Turkish carpets*, 1993).

The various "numbers" by which globality may be ordered and become apparent -- most notably in the light of the perceptual challenges of the **magical number 7 plus or minus 2** -- suggest that closure on any particular pattern may be premature at this time. This is especially the case with respect to the belief systems of the world, as mentioned above in the light of the argument of Stephen Prothero (*God Is Not One: the eight rival religions that run the world -- and why their differences matter*, 2011). His indication of a "ninth" is then particularly relevant.

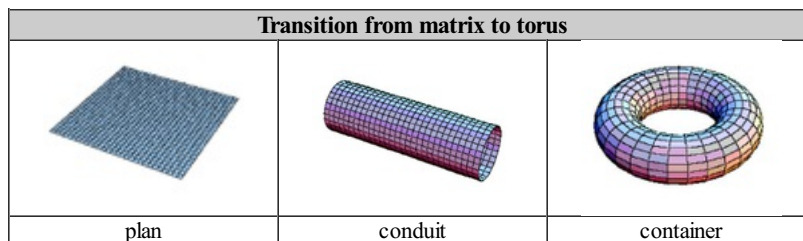
Whether with respect to Alexander's 15 transformations, or the set of 15 global strategic challenges, is the emergent "magic" of globality to be understood as associated with the human cognitive engagement with so-called **magic squares**, as discussed separately (*Patterns Essential to Individual and Global Health?* 2010). How might this relate to appreciation of the symmetry of the icosahedron with its 15 great circles (depicted above)? The issue is highlighted by the following:

Emergent perception of globality through a magic square? columns, rows and diagonals all total to 15 (reproduced from <i>Wikipedia</i>)			
2	7	6	→15
9	5	1	→15
4	3	8	→15
15	↓15	↓15	↓15

The warp and weft of woven carpets also recall the reference above to spreadsheet organization (*Warp and Weft of Future Governance: ninefold interweaving of incommensurable threads of discourse*, 2010). The geometrical or topological transformation of the planar spreadsheet into some form of container can be usefully explored through the transformation of a matrix into a torus, as separately discussed (*Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics: transforming a matrix classification onto intertwined tori*, 2006).

The projection of a matrix (spreadsheet) onto a torus can be achieved in two distinct ways (which are of course topologically equivalent):

- Mode A: by curving the matrix so that the top row and the bottom row are contiguous -- thus forming a cylinder. The cylinder is then curved so that the two circular ends meet. The leftmost column is then contiguous with the rightmost column.
- Mode B: by curving the matrix so that the leftmost column and the rightmost are contiguous -- thus forming a cylinder. The cylinder is then curved so that the two circular ends meet. The top row is then contiguous with the bottom row.



In contrast with either plane or cylinder, the torus is potentially a "viable container" -- as might be expected of what is implied by either God's Plan or some secular equivalent. As a container, the torus offers a particular sense of "comprehension", with its implication of being self-reinforcing in a mnemonic sense -- as a consequence of "wrapping" around.

Speculations regarding the [shape of the universe](#) are then of relevance -- whether as the domain of God or of secular understanding. These speculations are of course framed in astrophysical terms, although these may well have cognitive, psychosocial analogues with respect to the noosphere or the universe of knowledge.

The design of a cognitive vehicle is discussed and illustrated separately with respect to its embodiment (*Embodying a navigable cognitive vehicle*, 2014; *Organizing, starting and driving a cognitive vehicle*, 2014). With respect to any sense of its operation -- namely the operation of any plan in practice -- of particular interest is how the circular reconfiguration of the spreadsheet depiction then implies a pattern of interlocking feedback loops in cybernetic terms, as addressed by [Maurice Yolles](#) (*Organisations as Complex Systems: an introduction to knowledge cybernetics*, 2006). Organization in terms of plan, conduit or container might then be explored in terms of first-, second- and third-order cybernetics as clarified by Yolles. The relevance of a fourth-order, to which he refers, might then be associated with the above-mentioned intertwining of tori (*Comprehension of Requisite Variety for Sustainable Psychosocial Dynamics*, 2006). It is the double curvature (even triple or more) with which a sense of coherence, credibility and memorability are especially associated.

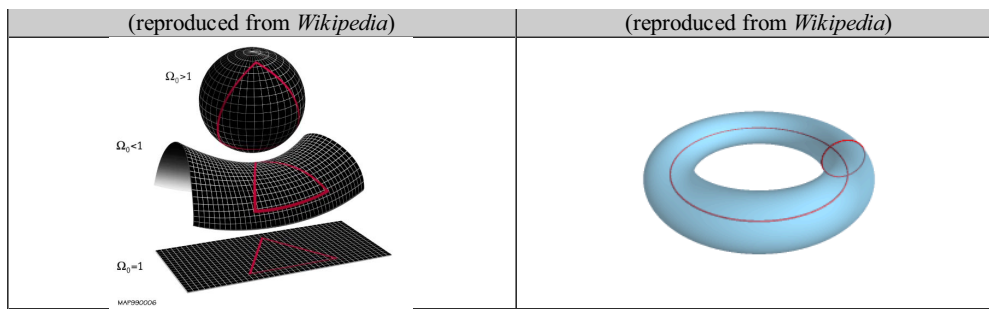
The speculations of astrophysics are concerned with the [geometry and the topology of the whole universe](#), whether observable or otherwise. While the local geometry does not determine the global geometry completely, it does limit the possibilities, particularly a geometry of a constant curvature. Investigations with regard to global structure currently consider:

- whether the universe is infinite or finite in extent
- the scale or size of the entire universe (if it is finite)
- whether the geometry is flat, positively curved, or negatively curved
- whether the topology is [simply connected](#) like a sphere or multiply connected like a torus

It is appropriate to consider whether and how such issues should inform understanding of the integrative divinity from which God's Plan purportedly emanates or the coherence of the globality with which any secular global plan might be expected to be consistent. The following images from *Wikipedia* are fruitful guides to such reflection.

As shown in the left-hand image below, the local geometry of the universe is determined by whether the density parameter O is greater than, less than, or equal to 1: From top to bottom: a spherical universe with $O > 1$, a hyperbolic universe with $O < 1$, and a flat universe with $O = 1$. Note that these depictions of two-dimensional surfaces are merely easily visualizable analogues to the 3-dimensional structure of (local) space.

Geometry of the universe Global versus Local	Animation indicative of topological relation between torus and sphere
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The animation on the right above is usefully indicative of how any sense of globality might be embedded dynamically within a more complex topology. Whilst the sphere is a common symbol of globality and some understandings of divinity, it is appropriate to note that the torus has been envisaged as a viable design for extraterrestrial habitats for space colonies, but has also long been associated with an understanding of spirituality and holiness in the form of a [halo](#).

These images offer interrelated forms of relevance to any discussion regarding the limitless resources cited by some as available to humanity (as implied by an infinite plane) -- in relation to understandings of how such resources might be constrained within a global society, or by any sense of global comprehension.

Imaginative reflection relevant to this argument can be taken further through consideration of the topology of:

- the [Klein bottle](#) and its particular relation to the torus (*Intercourse with Globality through Enacting a Klein bottle: cognitive implication in a polysensorial "lens"*, 2009). This is notably a preoccupation of [Steven M. Rosen](#) (*Topologies of the Flesh: a multidimensional exploration of the lifeworld*, 2006; *Dimensions of Apeiron: a topological phenomenology of space, time, and individuation*, 2004).
- [sphere eversion](#), namely how a sphere can be turned "inside out" in the light of Smale's paradox (*Sphere eversion as guide to the cognitive twist of global introversion?* 2013; *World Introversion through Paracycling: global potential for living sustainably "outside-inside"*, 2013).
- the [drilled truncated cube](#) (a [Stewart toroid](#)), namely a [toroidal polyhedron](#) but with 64 edges (of 9 types). This is of particular value as a unique means of holding the set of 64 *I Ching* hexagrams -- understood as encoding all conditions of change, as separately illustrated (*Enabling Wisdom Dynamically within Intertwined Tori: requisite resonance in global knowledge architecture*, 2012). This offers an unusually articulated "global" configuration. The form might also be used as a means of mapping the 62 possible views concerning the nature of self in relation to the world, articulated in the Buddhist text entitled the *Brahmajala Sutta* (*The Discourse on the All-Embracing Net of Views*), as discussed separately (*Comprehensive set of ways of knowing*, 2009). In this sense individual "views" are fruitfully related to the sense of "plan" -- but configured globally through such a mapping.
- the curious form of the [Szilassi polyhedron](#) (also a Stewart toroid) is potentially of great interest as another means of configuring the 7 Abrahamic religions by mapping them onto its 7 sides in contrasting clusters of 3 "Abrahamic" and 4 "Eastern" religions (as indicated above). If each religion were then to be associated with a particular style of fundamental question, this possibility would follow from a mapping of 7 such questions (*Mapping of WH-questions with question-pairs onto the Szilassi polyhedron*, 2014). The relatively simple form of that polyhedron suggests an appropriately complex insight into globality.
- the globality sensed through the "magical" attraction of game-related interactivity, as variously exemplified across cultures (*Sustainability through Magically Dancing Patterns: 8x8, 9x9, 19x19 -- I Ching, Tao Te Ching / T'ai Hsüan Ching, Wéiqí (Go)*, 2008).

The focus in this argument on the contrast between the **static** geometry of "plan" and "globe" reduces recognition of associated cognitive **dynamics** more evident in planning and integrating ("globalling"?). The latter could be fruitfully understood in terms of a "learning" process. The relation between plan and globe is then better recognized in the distinction made by Donald N. Michael (*On Learning to Plan and Planning to Learn: the social psychology of changing toward future-responsive societal learning*, 1973; Peter J. Brews, *Learning to Plan and Planning to Learn: resolving the planning school/learning school debate*. *Strategic Management Journal*, 1999).



Given the problematic implications of error with respect to any plan (and its ever-present "underside"), by use of the encompassing sense of "embrace" Michael effectively frames succinctly a valuable insight into a potentially fruitful relationship between plan-understanding and global-understanding. He argues:

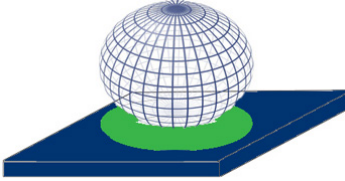

On the requirement to embrace error: More bluntly, future-responsive societal learning makes it necessary for individuals and organizations to embrace error. It is the only way to ensure a shared self-consciousness about limited theory on the nature of social dynamics, about limited data for testing theory, and hence about our limited ability to control our situation well enough to be successful more often than not. (*On Learning to Plan and Planning to Learn*, 1973, p. 131).

Visual caricatures of the challenge of global governance

The following images are reproduced from *Implication of Toroidal Transformation of the Crown of Thorns: design challenge to enable integrative comprehension of global dynamics* (2011). This was an exercise in identifying a set of threads which might be fruitfully woven together into an unusual pattern of significance of relevance to both the challenge of governance and of individuation.

Schematic caricatures indicative of the dominant role of "flatland" mindset in comprehension


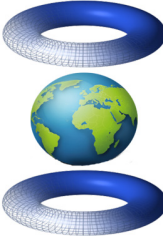
of the globe	
Academic mortar board (as occasionally presented)	Binary strategic games of governance (with a "lifebuoy" for turbulent seas of chaos)
	

Schematics indicative of understandings of "ideal" governance	
Schematic of ideal temple (combining flat, torus and sphere)	Schematic of optimistic ideal of governance (with ever ready "lifebuoy")
	

The image on the left below usefully highlights the reality for millions obliged, like Atlas, to bear the weight of their own world -- in this case with characteristic elegance. A torus then provides the cushioning junction whilst walking over a flat surface.

The image on the right below offers a provocative image of the potential challenge of sustainability represented as a dynamic balance -- well-recognized in [electromagnetic suspension](#). The lower torus might indeed represent achieving successful design and operation of a [toroidal nuclear fusion reactor](#) as the acclaimed key to the planet's future energy needs (such as [ITER](#)). The upper torus might then represent a corresponding form of "cognitive fusion" containing the challenging dynamics of the Knight's move and overcoming the disruptive instabilities of "monkeying" and "blame-games".

The relation between the physical and cognitive tori is discussed separately ([Enactivating a Cognitive Fusion Reactor: Imaginal Transformation of Energy Resourcing \(ITER-8\)](#), 2006). Presented in this way, the image echoes the arguments for the elusive psychosocial paradoxical recognition of living "in between" contrasting understandings -- as many are increasingly obliged to do ([Living as an Imaginal Bridge between Worlds: global implications of "betwixt and between" and liminality](#), 2011).

Symbolic and speculative representations of governance	
Traditional method of transportation (of worldly goods by women)	Dynamic suspension within the "cognitive magnetosphere" ***
	

Relevance of astrophysics to perception of the gravity of global problems?

Universal comprehension? The argument above has endeavoured to show the merit of reframing challenges of comprehension beyond those offered by a two-dimensional planar perspective -- possibly to be caricatured as a "flat Earth" perspective. This can be done through geometry and topology, although this may be deprecated as inappropriate abstraction in a world of tangibles.

Another approach indicated above is to use the universe itself as a guide to imaginative reflection -- given the wonder it evokes. The sense of "universe" is of course widely used metaphorically with respect to knowledge and communication. The place of humanity in that universe continues to invite fruitful speculation ([Towards an Astrophysics of the Knowledge Universe: from astronautics to noonautics?](#) 2006).

The sense of universe, and the challenges of communication across it, together offer useful pointers to the challenges of communication within society -- notably recognized by reference to "distance", and to people being "far apart" in their capacity to comprehend each others perspective. Reference may even be made to people being "worlds apart". Use of "light years apart" offers a reminder that years of

study in unrelated disciplines may have just that consequence on possible communications between some in the noosphere. This may be taken further through the suggestion that they are even in "different universes", potentially extending the astrophysical metaphor to include insights regarding a [multiverse](#) (*Enactivating Multiversal Community: hearing a pattern of voices in the global wilderness*, 2012).

Gravity of global problems: Given the seriousness of problems, as variously recognized by different constituencies, the question of how those recognized (or ignored) by the Pope are in turn recognized (or ignored) calls for a framework which respects such differences in appreciation. Astrophysics may well offer a rich range of insights into the matter. **How indeed to understand why problems may not be taken seriously?**

A key to such understanding may well lie in a sense of "gravity" shared by both astrophysics and with respect to the gravity of a problem -- aside from the sense in which a person of the Pope's standing may be recognized as speaking with gravitas when exhorting others to adhere to God's Plan.

Of relevance to this argument is the extensive use made of gravity in the [gravity model of trade](#), the associated sense of gravity marketing (characterized by [Reilly's law of retail gravitation](#)), and understandings of [demographic gravitation](#). As noted by James E. Anderson: *Gravity has long been one of the most successful empirical models in economics* (*The Gravity Model*, 2011). Similarly, according to Fatima Olanike Kareem: *The gravity model has become an efficient tool in the analysis of international economic relations* (*Specification and Estimation of Gravity Models: a review of the issues in the literature*, SSRN, June 2014).

Appreciation of the seriousness of a problem may then depend on how distant the problem is in the communication universe -- within the universe of problems. Distant problems, no matter how much they are highlighted by communications, may exert little influence -- namely exerting only imperceptible gravitational effect, if any, and evoking little response.

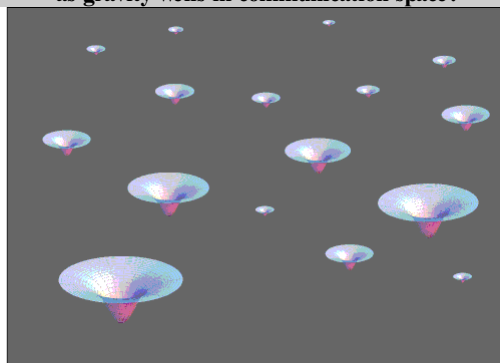
Astronomy has enabled a distinction to be made between features of the [observable universe](#) -- [planetary systems](#), [galaxies](#), [galactic clusters](#) and [superclusters](#) -- all bound together by gravity. It might be asked why the universe of observable problems does not encourage analogous distinctions to be made -- given the limited degree to which the gravity of distant problems is felt from any part of the communication universe with its associated constituencies. Is there life there -- beings who care?

Problems as gravity wells: According to this understanding, each problem is conceived as existing within a form of [gravity well](#), whether in the light of astrophysical insights or of those of the gravitational model of trade. The more massive the problem, the deeper and more extensive the gravity well associated with it. Reference to [black hole](#) with respect to financial short falls during the recent financial crisis is indicative of the credibility of such an insight (Seth Lloyd, *The Black Hole of Finance*, *The Edge*, 2013).

Metaphorical use of "mass" suggests a way of further highlighting the challenge of any planar perspective. As with any abstract plane, a plan does not have significant mass -- as would be the case with a platform in outerspace. It would not exert a significant force of attraction. People would easily drift away from it. A degree of attraction might be achieved by appropriate rotation of the platform, but this could itself increase the degree to which people were "thrown off". There is a curious irony to the related use of mass to refer both to a multitude and to the Christian Eucharist whereby mass is celebrated -- and faith in the divine plan is engendered.

Of related interest is that distant problems may only be detectable by the [gravitational bending of light](#) in relation to those which are more massive in some way -- the more serious problems affecting the masses to a higher degree. This "bending of light" could be usefully associated metaphorically with reframing the dissimulation seemingly held to be necessary by Christian leaders such as Jean-Claude Juncker, George W. Bush, Tony Blair, or the Pope.

Indicative array of serious problems as gravity wells in communication space?



Corresponding to the gravity of problems of concern to constituencies of the international community are the exhortations variously made with respect to them as caricatured by the image below.

Strategic hot air balloons of the international community?

(reproduced from [Glo ballooning](#):

strategic inflation of expectations and inconsequential drift, 2009)



Irrelevancy: However global problems and strategies are imagined, depicted or caricatured, the fundamental issue is the nature of the "cognitive space" within which they are embedded and the challenges of local and global comprehension in that respect. Clearly however serious a problem may be considered by constituencies affected by it, it is necessarily irrelevant to many situated "elsewhere" -- even if they can "see" it through being highlighted by the media in some way. The degree of mutual irrelevancy is apparent from the variety of [problems](#) and [strategies](#) profiled within the *Encyclopedia of World Problems and Human Potential*.

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