



# laetus in praesens

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13 April 2026 | Draft

## Conceptual Complexity Compactified within Fundamental Polyhedra

### Progressive emergence of explicit complex patterns implicit in simplest forms

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[PDF versions](#) of this document do not enable direct access to AI responses to questions posed below.

Experimentally readers may be transferred by a link from the "Question" in the PDF version to the particular question in the [original web version](#) from which they can access the response (as in that non-PDF version). That link can also be used as a hyperlink citation to individual questions.

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## Introduction

This exploration was triggered by the suspicion that the complexity evident **explicitly** in the array of 13 semi-regular [Archimedean polyhedra](#) (and their 13 [duals](#)) was **implicit** in some manner in the 5 regular [Platonic polyhedra](#): tetrahedron, octahedron, cube, dodecahedron, and icosahedron. These are common in the familiar iconography of many symbol systems. The key to this suspicion was the manner in which the

number of **implicit** features of the regular polyhedra, as variously counted, takes **explicit** form in the more complex semi-regular polyhedra.

The semi-regular polyhedra have names which are as relatively obscure to most as are the formal distinctions between them. Only the form of the association football -- the [truncated icosahedron](#) -- is necessarily widely recognized, but not under that name. That suggests that what cannot be named with any fluency cannot readily be held in mind as a coherent whole. It then follows that what cannot be held in mind as a coherent whole cannot easily be governed, negotiated around, or recognized as failing. This suggests the question as to whether there are explicit patterns of complexity and coherence, important to society and its governance, whose comprehensibility and memorability could benefit from highlighting their implicit patterns with which people are more readily familiar -- if only unconsciously or intuitively.

The concern could be considered appropriate in the light of the widely recognized trends towards fragmentation and loss of coherence in society -- accompanied by the erosion of any sense of order. A society in desperate need of coherence might reasonably look to those geometric forms that most richly model coherent organization. The irony is that the 26 semi-regular polyhedra -- arguably the most structurally diverse demonstration of how coherence can be patterned -- are among the least remembered objects in the mathematical canon, unknown to almost everyone who might benefit from them. A further irony follows: the cognitive challenge of holding a 26-fold structure in mind is one that literate humanity has already met through the 26 letters of the alphabet carried daily in every language that uses it. The alphabet might even inspire exploration of mnemonic clues to comprehension of those patterns of coherence (*From alphabetic memorability to polyhedral and toroidal dynamics of a 26-fold pattern of polyhedral governance*, 2026).

The polyhedra in question can be seen as offering a variety of understandings of patterned connectivity. In the light of the widely recognized simpler sets of fundamental principles, the relation of 8-fold sets such as the [Beatitudes](#) and the [Noble Eightfold Way](#) to more complex strategic articulations -- effectively their expression in practice -- is then of potential relevance, as previously argued from the management cybernetics perspective of [viable system theory](#) (*Integrative framework offered by the 8-fold Beatitudes and their analogues*, 2026).

The exercise follows from earlier explorations (*Cognitive and Strategic Implications of Numerically Articulated Sets*, 2026; *Memorable Configurations of Numbers of Cognitive and Strategic Relevance*, 2025; *Memorable Packing of Global Strategies in a Polyhedral Rosetta Stone*, 2023; *Identifying Polyhedra Enabling Memorable Strategic Mapping*, 2020).

The following exercise therefore initially involves a comparative study of the numeric characteristics of the array of 35 regular and semi-regular polyhedra -- and their presentation in a manner which enabled various patterns of similarity to be recognized. It is of course the case that such characteristics have long been extensively studied by specialists -- and made available in various forms. Unfortunately their presentation tends not to have been focused on their potential connectivity, memorability, and its potentially wider relevance.

A further structural question concerns the integrity of the forms themselves. The 26-fold array includes polyhedra whose coherence is maintained not through rigid faces but through tensional relationships between members -- a distinction central to [tensegrity](#). That contrast between compressive and tensional modes of structural integrity has direct psychosocial and governance analogues, particularly when 18-fold configurations emerge from the interplay of vertices, edges, and faces across related polyhedral pairs. The 18-fold correspondences explored in later sections suggest that tensional integrity may offer a more adequate model for governance coherence than the rigidly hierarchical structures more commonly assumed.

The preliminary phase resulted in the presentation of interactive tables through which such relatively elusive connectivity could be readily explored. This phase made evident a curious, and seemingly

unrecognized, characteristic of the 26-fold array of polyhedra explored -- specifically the 13 Archimedean polyhedra and their 13 Catalan duals. Two of the Archimedean polyhedra are distinctively characterized by 26 faces, thereby inviting a relatively coherent mapping of the whole array onto one or the other. This is specifically understood to address the challenge of memorability and systemic coherence previously explored and illustrated through a "Carousel" model (*Remembering the Disparate via a Polyhedral Carousel*, 2025). Here it is further illuminated here through two popular analogues: the sovereign orb as ostensive but structurally inarticulate gesture toward complexity, and the polyhedral dice of role-playing games as an intuitive but incomplete enactment of it -- of strategic relevance.

The more complex polyhedra, and less familiar, can be generated geometrically by so-called [symmetry preserving operations](#), notably presented in terms of the [Conway polyhedron notation](#). This then suggests (in the light of general systems theory) that these may well have cognitive correspondences potentially somewhat familiar under other names -- operations which may also correspond to strategic operations of relevance to governance (*Topological operations on polyhedra as indicative of cognitive operations*, 2021; *Memorability of cognitive implication in symmetry-preserving operations on polyhedra*, 2021). Given the bias in favour of comprehensibility and meaningful coherence, the technicalities relevant to any mapping then frame the question as to the degree to which these echoed those far more familiar cognitively in the analogous transformative "operations" characteristic of music and poetry (*Comparable Modalities of Aesthetics, Logic and Dialogue*, 2021).

The approach is consistent with any quest for some form of device to translate conceptually between disparate forms -- a device metaphorically described in terms of the [Rosetta Stone](#), inviting reflection as to its characteristics (*Complementarity of 64-fold Sets as an Elusive Rosetta Stone?* 2026; *Cognitive Fullerene as a Rosetta Stone for Patterns of Systemic Constraint*, 2025; *Integrative implications of the Rosetta Stone, Philosopher's Stone and Diamond*, 2025). The meme is central to the fundamental mathematical quest of the [Langlands Program](#) (Robbert Dijkgraaf, *A Mathematical Rosetta Stone*, *Institute for Advanced Study*, 2018).

In its potential exemplification of coherence, arguments regarding the relevance of the 26-fold mapping of polyhedra are taken further in the light of the strange coincidence that two quite independent global strategic articulations have been presented as 26-fold checklists. These are the set of [26 principles](#) which featured in the 1972 Stockholm *Declaration of the United Nations Conference on the Human Environment* (*Remembering the Magna Carta on Human Environment*, 2025) and a set of 26 "principles for systemic governance" ([Ray Ison](#) and [Ed Straw](#), *The Hidden Power of Systems Thinking: governance in a climate emergency*, 2020). As an illustration of possibilities, the two sets were previously juxtaposed in mappings onto the two 26-faced polyhedra (*Mapping of a 26-fold framework of strategic relevance*, 2025). That independent convergence on a 26-fold articulation by two quite distinct traditions of strategic thinking -- one emerging from intergovernmental environmental diplomacy, the other from systemic governance theory -- itself invites structural rather than accidental explanation, as this document attempts to provide.

The two 26-faced Archimedean polyhedra -- the rhombicuboctahedron (RCO) and the truncated cuboctahedron (TCO) -- offer not merely convenient receptacles for such mappings but structurally distinct philosophies of organization: the RCO packing its 26 faces with minimal elaboration, the TCO achieving the same count through systematic truncation of every vertex and edge of the cuboctahedron. That the 26 Archimedean and Catalan polyhedra, the 26 Stockholm principles, and the 26 Ison-Straw governance principles can each be mapped onto these two forms is less a coincidence than an invitation to ask what structural logic underlies independent convergence on that number across geometry, environmental diplomacy, and systems thinking.

Several of the most culturally persistent articulations of cognitive and ethical complexity -- the [Amidah's](#) sequence of blessings, the Beatitudes, the Noble Eightfold Path, the Taoist trigrams -- have been mapped here onto polyhedral faces and edges not as a decorative gesture but as a test of structural resonance. If such liturgical and contemplative frameworks encode something about the irreducible dimensionality of

human experience, their geometric framings may clarify both their internal logic and their mutual relationships. This raises, however, an associated methodological concern: the very names of polyhedra, like the technical vocabulary of governance theory, risk imposing a misplaced concreteness on what are essentially relational patterns. A sustained effort toward generic cognitive terminology -- naming operations and relationships rather than objects -- runs through the later sections as a corrective to that tendency.

In the light of the possibility explored here of a 26-fold mapping of semi-regular polyhedra, the following exercise frames the question both as to the correspondences between the distinctive 26-fold sets of strategic principles of global governance and the distinctive patterns characteristic of the 26 polyhedra. In particular do such correspondences suggest distinctive "ways of thinking" -- as "cognitive operations" -- and a potentially coherent pattern of connectivity between them? (*Interrelating Multiple Ways of Looking at a Crisis*, 2021).

Whilst the numerical characteristics of polyhedra are widely available selectively, the efforts made to highlight correspondences are either elusive or buried in technicalities accessible only to specialized mathematics. Extensive use was therefore made of AI, in the form of [Claude-4.6](#), in the process of compiling the tables included here and computing totals enabling correspondences to be recognized. That assistance extended to the progressive refinement of the mapping process through which the 26-fold systemic distinctions were made provisionally apparent for future discussion.

One dimension of polyhedral geometry that has received almost no attention in cognitive or governance contexts is the interior. As polyhedra nest within one another -- the octahedron within the cuboctahedron, the cuboctahedron within the RCO, the RCO within the TCO -- they define implicit inner chambers whose structural properties differ systematically from those of the outer faces visible to inspection. The psychosocial implication is that any governance framework articulated on the surface of a complex polyhedron carries within it a simpler, more fundamental structure that it simultaneously conceals and protects. Recognizing that interior dimension -- and contrasting its spherical, polyhedral articulation with the flattened 2D representation characteristic of frameworks such as Wilber's AQAL -- is among the less expected contributions of the analysis that follows.

The underlying contention is that the complexity required for adequate global governance is not absent from the forms with which human intuition is already familiar -- it is present but unrecognized, awaiting the kind of explicit articulation that the following tables and global mappings are intended tentatively to provide. Of relevance to the potentially wider significance of this argument is the unexpected emergence of the number 108 in the pattern of numbers, given its importance -- despite its size -- in a variety of symbol systems and practices of different cultures (*Embodiment of 108-foldness as ultimate spiritual challenge?* 2024).

## **Tabular summaries of concluding polyhedral overview**

The argument is necessarily framed and justified by patterns of numbers which were clarified by interaction with AI -- as partially evident in the exchange reproduced below. However recognizing those patterns is best facilitated by the tables produced by that exchange. This makes their early presentation and commentary appropriate. Although relatively self-explanatory, it should be emphasized that the tables focus on four groups of polyhedra: 5 [Platonic polyhedra](#), 13 [Archimedean polyhedra](#), 13 [Catalan polyhedra](#) (duals of the Archimedean), and 4 [Kepler-Poinsot](#). Together these total a set of 35. The subsequent argument focuses on the set of 26 -- by excluding the Platonic and the Kepler Poinsot.

The numbers assembled in the tables are primarily based on the most obvious visual features of the polyhedra, namely the faces (F), the edges (E), and the vertices (V). Those numbers are variously totalled or multiplied -- as indicated in the columns of the interactive Table 1 -- to enable recognition of patterns they may imply. The question is what characteristics of a polyhedral form render them comprehensible and memorable to any degree. The following tables were compiled by Claude-4.6

**Table 1: Polyhedral FEV Operations -- 35 Forms × 16 Columns**

P = Platonic | A = Archimedean | C = Catalan | K = Kepler-Poinsot | ★ 4-polytope number | ◆ 26/62 structural pair | ‡ 108 compactification | *italic grey* = value >500

**Interaction:** Click any cell to highlight all cells sharing that value | Click column header to highlight that column | Press Esc to clear

**Jump to value:**

Grp	Polyhedron	F	E	V	F+E	F+V	E+V	F+E+V	F×E	F×V	E×V
P	Tetrahedron	4	6	4	10	8★	10	14	24★	16★	24★
P	Cube	6	12	8★	18	14	20	26◆	72	48★	96★
P	Octahedron	8★	12	6	20	14	18	26◆	96★	48★	72
P	Dodecahedron	12	30	20	42	32	50	62◆	360★	240★	(600)★
P	Icosahedron	20	30	12	50	32	42	62◆	(600)★	240★	360★
P	Platonic (5) subtotal	<b>50</b>	<b>90</b>	<b>50</b>	<b>140</b>	<b>100</b>	<b>140</b>	<b>190</b>	--	--	--
A	Truncated tetrahedron	8★	18	12	26	20	30	38	144	96★	216
A	Cuboctahedron	14	24★	12	38	26	36	50	336	168	288
A	Truncated cube	14	36	24★	50	38	60	74	(504)	336	(864)
A	Truncated octahedron	14	36	24★	50	38	60	74	(504)	336	(864)
A	Rhombicuboctahedron	26	48★	24★	74	50	72	98	(1248)	(624)	(1152)
A	Truncated cuboctahedron	26	72	48★	98	74	120★	146	(1872)	(1248)	(3456)
A	Snub cube	38	60	24★	98	62	84	122	(2280)	(912)	(1440)
A	Icosidodecahedron	32	60	30	92	62	90	122	(1920)	(960)	(1800)
A	Truncated dodecahedron	32	90	60	122	92	150	182	(2880)	(1920)	(5400)
A	Truncated icosahedron	32	90	60	122	92	150	182	(2880)	(1920)	(5400)
A	Rhombicosidodecahedron	62	120★	60	182	122	180	242	(7440)	(3720)	(7200)
A	Truncated icosidodecahedron	62	180	120★	242	182	300	362	(11160)	(7440)	(21600)
A	Snub dodecahedron	92	150	60	242	152	210	302	(13800)	(5520)	(9000)
A	Archimedean (13) subtotal	<b>452</b>	<b>984</b>	<b>558</b>	<b>1436</b>	<b>1010</b>	<b>1542</b>	<b>1994</b>	--	--	--
C	Triakis tetrahedron	12	18	8★	30	20	26	38	216	96★	144
C	Rhombic dodecahedron	12	24★	14	36	26	38	50	288	168	336
C	Triakis octahedron	24★	36	14	60	38	50	74	(864)	336	(504)
C	Tetrakis hexahedron	24★	36	14	60	38	50	74	(864)	336	(504)
C	Deltoidal icositetrahedron	24★	48★	26	72	50	74	98	(1152)	(624)	(1248)
C	Disdyakis dodecahedron	48★	72	26	120★	74	98	146	(3456)	(1248)	(1872)
C	Pentagonal icositetrahedron	24★	60	38	84	62	98	122	(1440)	(912)	(2280)
C	Rhombic triacontahedron	30	60	32	90	62	92	122	(1800)	(960)	(1920)
C	Triakis icosahedron	60	90	32	150	92	122	182	(5400)	(1920)	(2880)
C	Pentakis dodecahedron	60	90	32	150	92	122	182	(5400)	(1920)	(2880)
C	Deltoidal hexecontahedron	60	120★	62	180	122	182	242	(7200)	(3720)	(7440)
C	Disdyakis triacontahedron	120★	180	62	300	182	242	362	(21600)	(7440)	(11160)
C	Pentagonal hexecontahedron	60	150	92	210	152	242	302	(9000)	(5520)	(13800)
C	Catalan (13) subtotal	<b>558</b>	<b>984</b>	<b>452</b>	<b>1542</b>	<b>1010</b>	<b>1436</b>	<b>1994</b>	--	--	--
K	Small stellated dodecahedron	12	30	12	42	24★	42	54	360★	144	360★
K	Great dodecahedron	12	30	12	42	24★	42	54	360★	144	360★
K	Great stellated dodecahedron	12	30	20	42	32	50	62◆	360★	240★	(600)★
K	Great icosahedron	20	30	12	50	32	42	62◆	(600)★	240★	360★
K	Kepler-Poinsot (4) subtotal	<b>56</b>	<b>120</b>	<b>56</b>	<b>176</b>	<b>112</b>	<b>176</b>	<b>232</b>	--	--	--
	<b>Grand total (all 35)</b>	<b>1116</b>	<b>2178</b>	<b>1116</b>	<b>3294</b>	<b>2232</b>	<b>3294</b>	<b>4410</b>	--	--	--

[Tabular presentation of polyhedral face types and great circles \[Show/Hide AI presentation\]](#)

[Number index to polyhedral tables and commentary \[Show/Hide AI response\]](#)

## Comprehensibility through tabular visualization of the polyhedral number pattern?

[Question to Claude-4.6:](#) As with the earlier development of the Carousel model, the question is how appreciation of the connectivity of Table 1 can be enabled ([Remembering the Disparate via a Polyhedral Carousel](#), 2026). . For example, with further thought numbers could be interlinked by a tracery of lines -- the pattern that connects. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) Given your passing comment on 14 in relation to the logical connectives, is there a tantalizing case to be made, for mnemonic purposes about a degree of correspondence between the individual columns and those individual connectives. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) You mentioned distinctive counts of the number of triangles, square, etc in a polyhedron -- which might have featured as columns. What is now the general rationale for excluding them from Table 1. Or is it worth a separate table for completion -- since the data is otherwise not available. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) The apparent total absence of any table on numbers of polyhedral great circles is similarly frustrating. Is that information worth including. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) The cognitive argument is that the intuitive perception of great circles may be a major factor in memorability -- and any sense of what music might bring. *[Show/Hide AI response]*

## Questionable recognition of 26-fold coherence through 5-fold and 13-fold polyhedral patterns?

[Question to Claude-4.6:](#) It is strangely annoying how "buried" is the information on semi-regular polyhedra, especially for the sets as a whole. Why indeed are there  $26+5+4$ , namely 31 or 35 members to the sets as a whole. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) To what extent is the relation of 26 to 62 recognized in maths -- as with primes and emirps ([Requirement for emirps and enantiodromia in navigating songlines](#), 2015) . *[Show/Hide AI response]*

[Question to Claude-4.6:](#) On the question of +1 and +/- 2, it is intriguing the manner in which the 16 logical connectives are formally reduced to 14 by excluding tautology and contradiction -- for convenience of mapping on 14-fold polyhedra. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) Reviewing an earlier exchange with you about 36 in polyhedral terms, could you confirm an implicit point that the set of regular and semi-regular polyhedra totals 30 --  $2 \times 13 + 4$ . Why not 36? And what about chiral forms? If it is assumed that the duality of the Platonic justifies double counting, this would imply +5, namely 35. Would that approach justify any special count of the truncated tetrahedron -- triakis tetrahedron. Is that stretching the argument dubiously. How should such polyhedra be "counted". *[Show/Hide AI response]*

[Question to Claude-4.6:](#) Clear. However, with  $2 \times 13 + 4$  giving 30, and +5 giving 35, the question of whether +1 is credible could focus on the unique self-duality of the tetrahedron. Assuming the set reflects cognitive organization in some way, the +1 could be justified from a non-geometrical perspective. *[Show/Hide AI response]*

[Question to Claude-4.6:](#) Does any similar argument apply to the uniform regular convex 4-polytopes --

although they do offer "64". *[Show/Hide AI response]*

**Question to Claude-4.6:** With respect to your closing summary, if there is a sense in which the Platonic solids can be understood as numbering 6 rather than 5 -- for the reasons you indicated -- this enriches the self-referential mnemonics of the 6-fold in that context. Namely this enables a mapping of the "organization" that it implies onto the various 6-fold characteristics of those solids: edges of tetrahedron, vertices of octahedron, faces of cube, face axes of dodecahedron, vertex axes of icosahedron. Should the addendum be modified to reflect that. *[Show/Hide AI response]*

**Question to Claude-4.6:** Considering the columns in Table I, the question that should have asked is how many features of polyhedra, and their combination, merit consideration. Focusing on F E V, there is: F+E, FxE, E+V, ExV, F+V, FxV, F+E+V, FxVxE. Also of potential interest is  $V(F/2)$ .  $F(V/2)$ . Some of these operations generate the number of cells in 4-polytopes -- including 24-cell, 120-cell and 600-cell. From this perspective, how many generative operations might be considered -- prior to excluding those which are trivial in some way, or those which generate numbers outside the range of (semi)regular polyhedra. *[Show/Hide AI response]*

**Question to Claude-4.6:** Applying this method to the Archimedean should work for the least complex -- but is out of range for most. *[Show/Hide AI response]*

## Potential cognitive and aesthetic correspondences

Given the 13-fold pattern of semi-regular polyhedra (and that of their duals), the following query was partially evoked by the widespread appreciation (and its emulation) associated with the curious pattern and intent of the poem by [Wallace Stevens](#) (*Thirteen Ways of Looking at a Blackbird*, 1917) -- as discussed separately (*Ways of looking at ways of looking -- in a period of invasive surveillance*, 2013).

**Question to Claude-4.6:** It is intriguing that these numbers emerge as a result of a limited set of [symmetry preserving operations between polyhedra](#) -- which arguably have their correspondence in cognitive operations -- echoed in the memorability and interest of poetry and music. *[Show/Hide AI response]*

Especially intriguing are the potential implications of [Johannes Ockeghem](#)'s 36-voice canon *Deo Gratias* (*Indications of connectivity in a 36-voice canon*, 2024; [Application of canon patterning to governance: Deo Gratias versus Hegemonia](#), 2024) -- notably in the light of other 36-fold articulations (Chinese *Thirty-Six Stratagems*; Georges Polti, *The Thirty-Six Dramatic Situations*, 1895; Mike Figgis, *The Thirty-Six Dramatic Situations*, 2017)

**Question to Claude-4.6:** You have made related points with respect to the 36-voice canon -- 35+1?. *[Show/Hide AI response]*

**Question to Claude-4.6:** With respect to 36, the cases cited did not include the tradition in Judaism of 36 righteous men -- the [Lamed Vav Tzadikim](#). However there seems to be no trace of how those 36 were individually distinguished -- unlike Georges Polti's dramatic situations. Do you have a trace of what each represents *[Show/Hide AI response]*

**Question to Claude-4.6:** Potentially implied by these findings are cognitive/memorability notions of "accessibility" -- a variety of "[Dunbar number](#)" analogues dependent on the facility of the cognitive operation. *[Show/Hide AI response]*

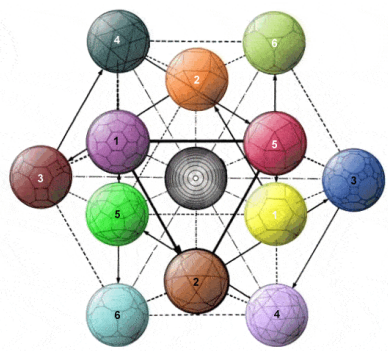
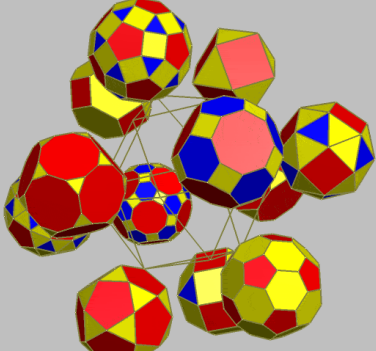
## Insights from prior mapping of 13-fold Archimedean set in cuboctahedral array

The focus in this argument on the 26-fold rhombic cuboctahedron (RCO) and the truncated cuboctahedron (TCO) has long been preceded by the focus on the cuboctahedron, most notably through the extensive preoccupation of Buckminster Fuller. [Keith Critchlow](#) made use of the cuboctahedron to

array the 13 Archimedean polyhedra in 2D (*Order in Space A Design Source Book*, 1969). Polyhedra associated with the cuboctahedron feature in studies of the mapping of logical connectives and their oppositions (*Mapping of logical connectives onto the 14-fold cuboctahedron and rhombic dodecahedron*, 2023; Ori Milstein, *Why the Hexagon of Opposition is Really a Triangle: logical structures as geometric shapes*, *Logica Universalis*, 18, 2024). Despite the incidence of "opposition" in global governance, there are however few traces of the application of those "logical" insights to international relations (Fabien Schang, *Making Sense of History? Thinking about International Relations*, *PhilPapers*, 2014)

Clearly the RCO and TCO are geometric modifications of that cuboctahedral focus whose cognitive and systemic implications remain to be clarified.

**Question to Claude-4.6:** Potentially Stella4D enables the positioning of 26 polyhedral models onto the 26 faces -- as was previously done (arbitrarily) onto the 12 vertices of the cuboctahedron for the Archimedean set -- following Keith Critchlow's indications in 2D for closest packing [see below]. Maybe that mapping could be similarly revised. *[Show/Hide AI response]*

<b>Cuboctahedral array of 12 Archimedean polyhedra</b> (reproduced from <i>Cognitive Embodiment of Patterns of Governance of Higher Order</i> , 2022)	
Closest packing configuration of polyhedra in 2D by Keith Critchlow (enhanced with arrow animation indicating transformations)	Rotation of cuboctahedral array in 3d (around an omitted 13th at the centre; totalling 984 edges, 558 vertices, 452 faces)
	
<i>Engaging with Globality through Dynamic Complexity</i> , 2009	Virtual reality variant ( <a href="#">.wrl</a> )

**Question to Claude-4.6:** The truncated tetrahedron was understood as placed at the center of the earlier 3D version -- as in Critchlow's 2D model -- as the 13th. *[Show/Hide AI response]*

**Question to Claude-4.6:** Elaborate your proposed framing *From Vertex Arrangement to Face Mapping*. *[Show/Hide AI response]*

## Mapping full set of 26 polyhedra onto distinctive 26-faced polyhedra

The 26-fold mapping exercise which follows encompasses the 5 Platonic solids together with their 13 Archimedean and 13 Catalan elaborations -- the complete set of convex forms reachable by symmetry-preserving operations from the Platonic source. The 4 Kepler-Poinsot star polyhedra, while included in the broader 35-fold tabular survey (above), are generated by stellating rather than by the five operations under consideration. This relaxes convexity in a way that justifies their exclusion from the compactification argument developed here.

**Question to Claude-4.6:** The rhombicuboctahedron has 26 faces. The Archimedean and the Catalan polyhedra could be mapped onto them. Can you suggest a meaningful way of doing so. *[Show/Hide AI response]*

response]

**Question to Claude-4.6:** How is exclusion from the mapping of the Kepler-Poinsot group then justified. [Show/Hide AI response]

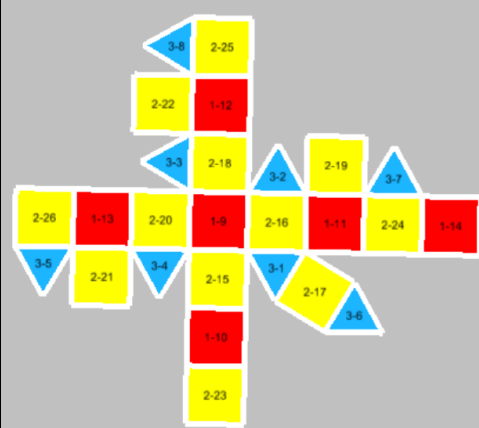
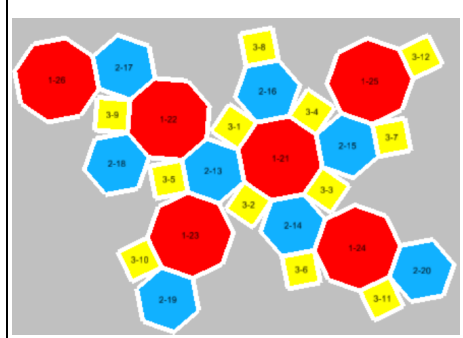
**Question to Claude-4.6:** That is a very comprehensive grasp of the mapping possibilities. Stella4D would enable that immediately. In terms of elegance, would the duals be better placed opposite each other. [Show/Hide AI response]

**Question to Claude-4.6:** How best to position the sets of polyhedra on the rhombicuboctahedron (RCO) and truncated cuboctahedron (TCO). [Show/Hide AI response]

**Question to Claude-4.6:** That analysis can indeed be used as a guideline but at this point some of the face-placements would be arbitrary by face type. Does the analysis constrain those attributions further. [Show/Hide AI response]

**Question to Claude-4.6:** The tricky question is whether to position the pairs arbitrarily -- on Stella4D --or whether there is a procedural logic by face number. This is framing a question about the relevance of any adjacency. [Show/Hide AI response]

**Question to Claude-4.6:** The challenge is how to translate that into Stella4D face numbers as they relate to face types in both mappings. [Show/Hide AI response]

Indicative face numbers and types for 26-faced polyhedra in Stella4D (face number follows type number on images)	
Unfolded rhombicuboctahedron (RCO)	Unfolded truncated cuboctahedron (TCO)
	
Images reproduced from Stella4D	

**Question to Claude-4.6:** An image of the rhombicuboctahedron is shared showing face numbers and face types -- accompanied by an indication of face/numbers types for opposite faces. Is that helpful. [Show/Hide AI response]

**Question to Claude-4.6:** Could you now indicate the face assignments for the individual polyhedra on the rhombicuboctahedron (RCO). [Show/Hide AI response]

## Global governance systemically ordered by 26-fold polyhedral strategic mappings?

As noted above, there is a neglected potential correspondence between two quite independent sets of global governance principles. The earliest is the set of [26 principles](#) which featured in the 1972 Stockholm Declaration of the United Nations Conference on the Human Environment (*Remembering the Magna Carta on Human Environment*, 2025). The second is the set of 26 "principles for systemic governance" ([Ray Ison](#) and [Ed Straw](#), *The Hidden Power of Systems Thinking: governance in a climate emergency*,

2020). Ison is currently President of the International Federation for Systems Research (IFSR). As an illustration of possibilities, the two sets were previously juxtaposed in mappings onto the two 26-faced polyhedra ([Mapping of a 26-fold framework of strategic relevance](#), 2025).

That independent convergence on a 26-fold articulation by two quite distinct traditions of strategic thinking -- one emerging from intergovernmental environmental diplomacy, the other from systemic governance theory -- invites structural rather than accidental explanation. That point was made separately as the possible further articulation of an 8-fold systemic mapping of fundamental principles associated with the Christian [Beatitudes](#), the Buddhist [Noble Eightfold Path](#), and their analogues ([Integrative framework offered by the 8-fold Beatitudes and their analogues](#), 2026).

**Question to Claude-4.6:** Of potential relevance for commentary and consideration are 2 comprehensive 26-fold mappings using Stella4D. One from Stockholm 1972 onto the rhombicuboctahedron (RCO) and one from a recent systems study onto the truncated cuboctahedron (TCO). Both arbitrary, but potentially subject to adjustment according to the kinds of constraints you are indicating. *[Show/Hide AI response]*

**Question to Claude-4.6:** I am sharing the label files of the details of the two 26-fold governance initiatives in case the "resorting" process seems reasonably straightforward. Regenerating the Stella4D images would then be appropriate. *[Show/Hide AI response]*

**Question to Claude-4.6:** Your commentary on the text labels is very provocative. An immediate difficulty is to comprehend the very clear articulation in terms of the potential placement of the polyhedra -- and now how to reconcile this meaningfully with the strategic labelling (distinctive between the two sources). The further issue is whether the whole exercise merits integration into \*\*\*\*\* our Beatitude/VSM exchange whose writeup I am in process of completing -- or maybe just a brief comment on possibilities for the future.. *[Show/Hide AI response]*

**Question to Claude-4.6:** Following from the earlier exchange, one purpose was then to take the articulation of the separate sets of 26 strategic principles to work out whether there was any cognitive/strategic logic to how they should be positioned in the light of the geometric logic. There are two such sets elaborated totally independently: one Stockholm 1972, one Ison/Straw from a "systemic' perspective". Maybe they offer "correctives" for each other in relation to the geometry. *[Show/Hide AI response]*

**Question to Claude-4.6:** This suggests presentation of three maps -- "Stockholm uncorrected", "Ison/Straw uncorrected", and some kind of "corrected form". Of relevance to the exercise is the possibility of a corresponding analysis (with three maps) using both RCO and TCO polyhedra -- and then confronting them. *[Show/Hide AI response]*

**Question to Claude-4.6:** What is the next step with the truncated cuboctahedron (TCO) mapping. *[Show/Hide AI response]*

**Question to Claude-4.6:** Everything for the Stella4D attributions is now to hand for the RCO. However the idea was to produce three maps for each polyhedron: "Stockholm uncorrected", "Ison/Straw uncorrected" and some kind of "corrected" form. By that was meant an appropriate redistribution of their labels in the first case (irrespective of the second). Then an appropriate redistribution of the labels in the second case (irrespective of the first), then a corrected version with 2 label per face combining both governance versions. Then there is also a mapping of the actual Archimedean and Catalan polyhedra onto the faces of both. This is getting confusing. Could you suggest a better approach. *[Show/Hide AI response]*

**Question to Claude-4.6:** Much clearer except for the meaning of "by their sequential numbering". The assumption had been made that it would be possible to pair the strategic items semantically and the placement suggestions accordingly -- irrespective of their original numerical ordering. *[Show/Hide AI response]*

**Question to Claude-4.6:** The hypothesis -- potentially radical -- was that the cognitive/strategic concept of

an item was somehow related to the geometrical operation governing its placement -- as you have variously intimated. *[Show/Hide AI response]*

**Question to Claude-4.6:** Go ahead. Some labels may merit apostrophes according to the questionable degree of fit. *[Show/Hide AI response]*

**Question to Claude-4.6:** Go ahead. Double apostrophes (or more) could be used for even worse fits. *[Show/Hide AI response]*

**Question to Claude-4.6:** At this point a step back is appropriate -- given that the cognitive systemic question is really how the polyhedra mapped onto the faces bear any relation to the strategic labels -- then to be understood as the key. *[Show/Hide AI response]*

**Question to Claude-4.6:** Indeed it remains to be determined whether the [Wythoff construction](#) in each case has characteristics which are indicative of cognitive/strategic articulations -- as your comments are intimating precautiously. *[Show/Hide AI response]*

<b>Indicative mapping of 26 governance principles onto distinctive 26-faced polyhedra</b> (face-attribution and label-abridgement by Claude-4.6; see table for clarification)			
Stockholm 1972 on rhombicuboctahedron (RCO) ( <a href="#">rotating animation</a> )	Stockholm 1972 on truncated cuboctahedron (TCO) ( <a href="#">rotating animation</a> )	Ison/Straw on rhombicuboctahedron (RCO) ( <a href="#">rotating animation</a> )	Ison/Straw on truncated cuboctahedron (TCO) ( <a href="#">rotating animation</a> )
Animations made with Stella4D			

The challenge of visualizing any 3D configuration evoked the following query. Specifically rotation on one axis does not expose all faces of a spherical configuration to the viewer. Although it can be readily printed; unfolding the configuration into 2D loses the coherence of the 3D presentation. The issues can be circumvented using interactive 3D presentations -- although these are not readily accessible to viewers. All animations require files of a size which may be excessive for web users. Conversion of a web page to PDF inhibits animations although links to such animations may function from the web page.

**Question to Claude-4.6:** Given the perceptual challenge of viewing the whole pattern, it is curiously appropriate to note that there is no axis of rotation (however tilted) which enables all faces/labels to be rendered visible through the rotation cycle -- Stella4D does not offer a "rock-and-roll/tumble" option which you have previously suggested. *[Show/Hide AI response]*

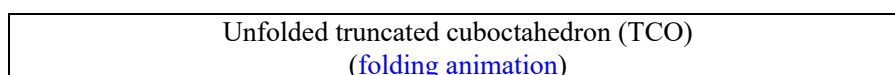
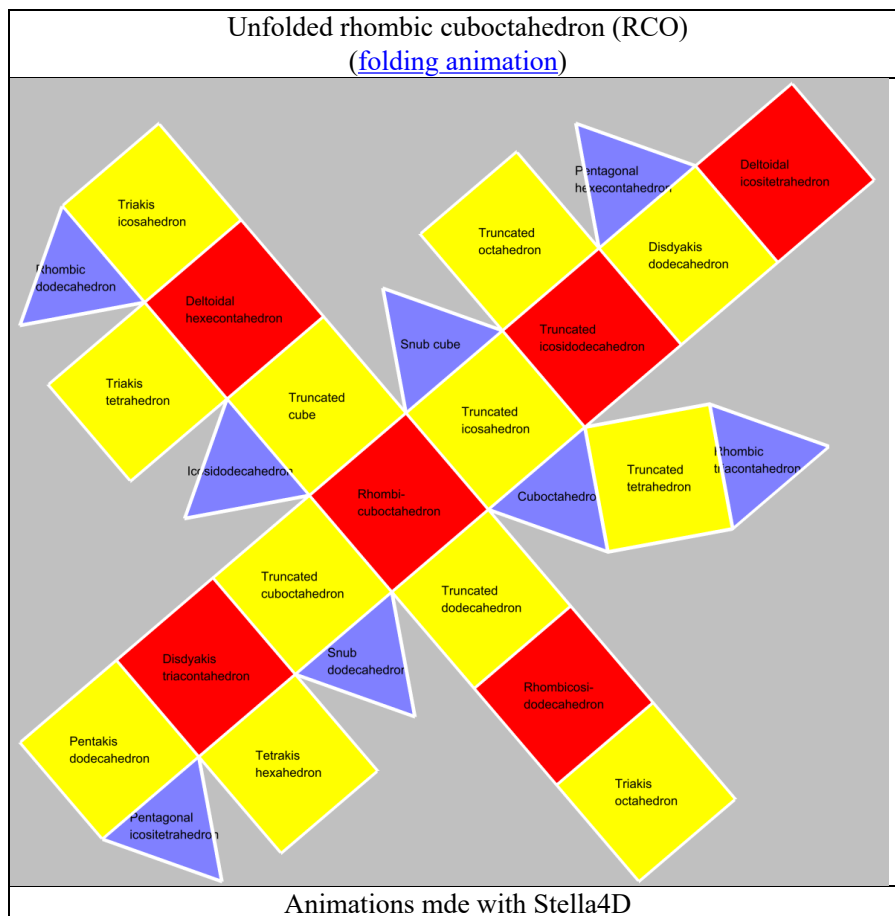
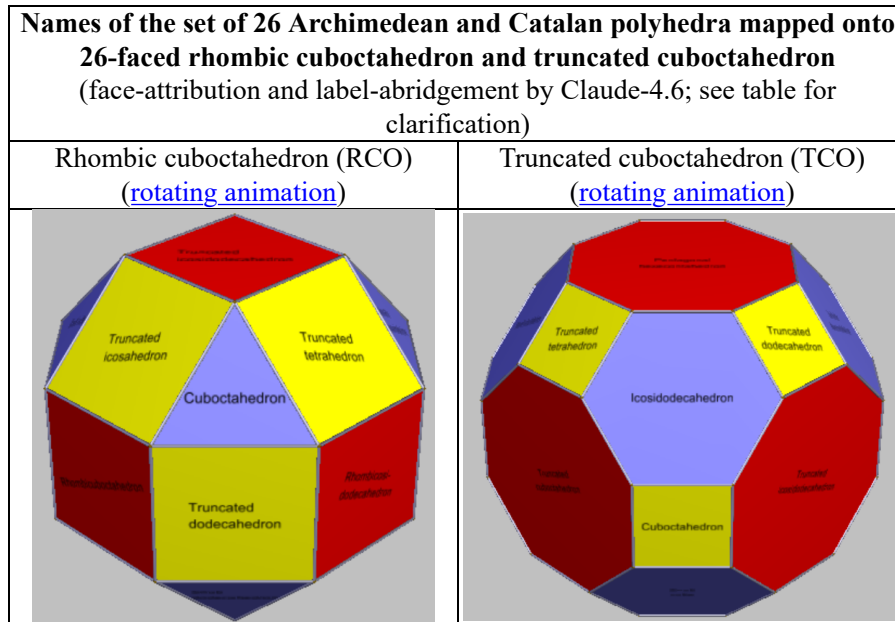
**Question to Claude-4.6:** You had proposed a semantic/systemic reconciliation between the two label sets in the light of the underlying principles of governance -- to produce a third mapping on RCO and TCO. *[Show/Hide AI response]*

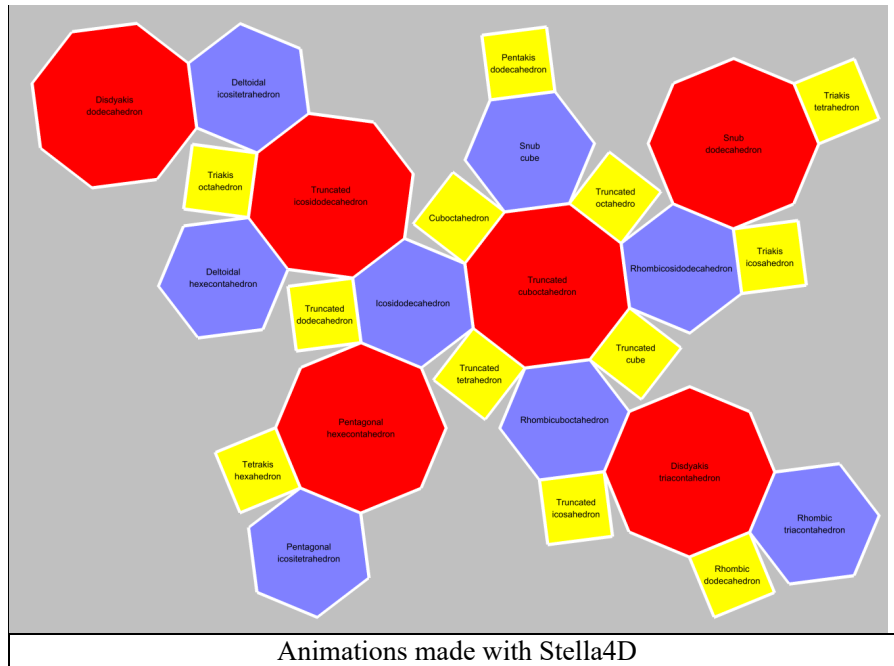
**Question to Claude-4.6:** With the previously shared Stella4D face-type and number for RCO and TCO from this exchange, could you provide the label attributions for both. *[Show/Hide AI response]*

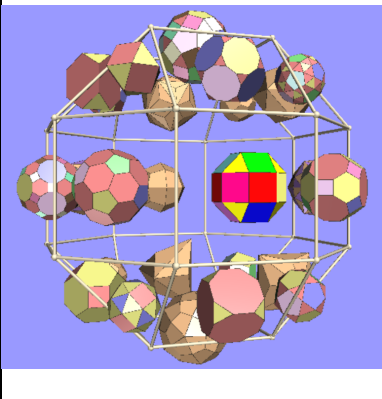
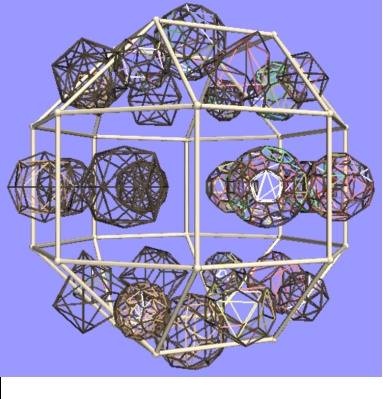
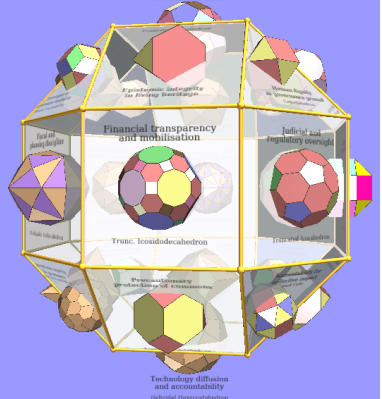
## Memorable visualization of 26 individual polyhedra on 26-faced polyhedra

In addition to the mapping of labels of the 13 Archimedean polyhedra, and their 13 corresponding Catalan duals, onto the 26-faced polyhedra (rhombic cuboctahedron and truncated cuboctahedron), is the question of whether (and how best) to visualize the placement of the corresponding polyhedral models on those faces in 3D models -- following the preceding exercise of arraying 13 Archimedean polyhedra on the vertices of a cuboctahedron.

**Question to Claude-4.6:** What of the 26-fold mappings of Archimedean and Catalan polyhedra onto RCO and TCO. *[Show/Hide AI response]*





<b>Experimental mapping of the set of 26 Archimedean and Catalan polyhedra onto 26-faced rhombicuboctahedron</b> (face-attribution and label-abridgement by Claude-4.6; see table for clarification; not to scale)		
Rendering of 26 polyhedra on rhombicuboctahedron (rotating animation)	Wireframe rendering of 26 polyhedra on rhombicuboctahedron (rotating animation)	Association of 26 generic governance principles with polyhedra ( <a href="#">rotating animation</a> )
		
***	**	**

## Grasping complexity: the orb and the die as governance pattern-holders

The following question was evoked by previous consideration of the orb and sceptre of traditional [sovereign regalia](#) (*Integrative "orbital" implications: Crown and Sceptre / Sahasrara and Axis Mundi*, 2020; *Embodying the essence of governance in ritual dynamics with mace, sceptre, fasces or vajra?* 2019). The clusters of jewels configured on those various orbs seem to number between 12 and 28 on the various examples (whether of the [British sovereign](#), that of the [Holy Roman Imperial Orb](#), the Danish [globus cruciger](#), or other royal and ecclesiastical orbs). However the jewels and their configuration have little particular significance -- other than as decorations with connotations of the contrasting values traditionally associated with precious stones. As configured above on the RCO the connotations are quite the contrary. The curious cognitive implications of the association of previous stones with fundamental human values is partially explored separately ([Gemstones as an accessible metaphoric exemplar of the](#)

*dynamics of coherence*, 2002).

**Question to Claude-4.6:** To what extent does the traditional sovereign orb function as an intuitive but structurally inarticulate anticipation of the cognitive mapping made explicit by the RCO -- its decorative jewels "finger-pointing" toward a relational complexity they cannot themselves encode. *[Show/Hide AI response]*

The following query was evoked by previous consideration and illustration of the [tesseract](#) as offering a geometric *lingua franca* for interfaith dialogue. Its 8-cell structure (Islam's 8 Angels, Buddhism's 8-fold Path, Christianity's 8 Beatitudes) unfolds into a cross that collapses into the cube -- Islam's Kaaba (*Hypercube/Tesseract as an implicitly recognized interfaith nexus*, 2025). Through the golden ratio  $\phi$ , the cube transforms into the dodecahedron -- whose 12 pentagonal faces encode both Islam's 5 Pillars and Christianity's 12 Apostles, Judaism's 12 Tribes and Islam's 12 Imams. The dodecahedron's dual, the icosahedron, completes the pattern. These are not arbitrary religious choices but specific projections of a common 4D configuration -- different faces of the same transcendent structure, united by the 'precious jewel' of the golden ratio. In surmounting the orb with a cross, this exemplifies aspirations to a form of Christian hegemony -- readily perceived as consistent with a form of misplaced concreteness. As discussed separately, this frames consideration of "Israel" and its more fundamental significance (*Reclaiming "Israel" as an implicit cognitive dynamic*, 2025).

**Question to Claude-4.6:** How does the Christian cross surmounting the orb of sovereign regalia acquire deeper structural resonance when read through the surrealist painting of the *Crucifixion* by [Salvador Dalí](#) -- depicting Christ on the [polyhedron net](#) of a [tesseract](#) (*Corpus Hypercubus*, 1954). There the instrument of a singular doctrinal apex is reframed as the unfolding of a four-dimensional hypercube, suggesting that what crowns the orb may carry 4D implications that the spherical distribution of the RCO's 26 faces is structurally equipped to receive?. *[Show/Hide AI response]*

The following question was evoked by the surprisingly extensive range of polyhedral dice used in widely popular [role-playing games](#) (*Dice by number of sides*, [Wikipedia](#); *Dice by number of sides*, [Dice Collecting Wiki](#)) and the adaptation of those games to military strategic development -- most notably with respect to the conflict with Iran. The first source lists 40; the second lists 114 (each lists includes many more dice designs with the indicated face numbers). The 74 dice documented in the second, but absent from the first, are precisely the more exotic constructions -- the high-number dipyramids, barrel dice, and bespoke 3D-printed forms -- which are the ones most likely to correspond to the invisible register numbers (d72, d90, d108, d180) identified in the polyhedral mapping. Their absence would appear to mirror their structural absence from the natural isohedral families.

**Question to Claude-4.6:** The bejewelled orb of sovereignty suggests a ruler "holding" complexity in one hand. Is there a more structurally precise equivalent to be found in the dynamics of dice use in role-playing games. Could you comment on the curious popular appeal of the many different [multi-sided dice](#) in role-playing games, as they might be understood as configured by recognition of the disparate functions of the multi-faceted polyhedra configured on an RCO *[above]* -- or as jewels on a traditional orb. *[Show/Hide AI response]*

**Question to Claude-4.6:** How have role-playing games (RPGs) been adapted by the military for strategic development. In contrast to the array of roles in *Dungeons and Dragons*, what roles and dice are employed. . *[Show/Hide AI response]*

**Question to Claude-4.6:** Given the importance of such gaming at the present time with respect to strategic anticipation of the conflict with Iran, is there any summary of the RPG-style gaming used in addition to that of the previous response. *[Show/Hide AI response]*

**Question to Claude-4.6:** Role-playing games use polyhedral dice to resolve uncertainty in simulated challenges of governance. Could there be a significant relationship implied between the standard RPG dice and the potential cognitive significance of the polyhedra that have been mapped onto the RCO's 26

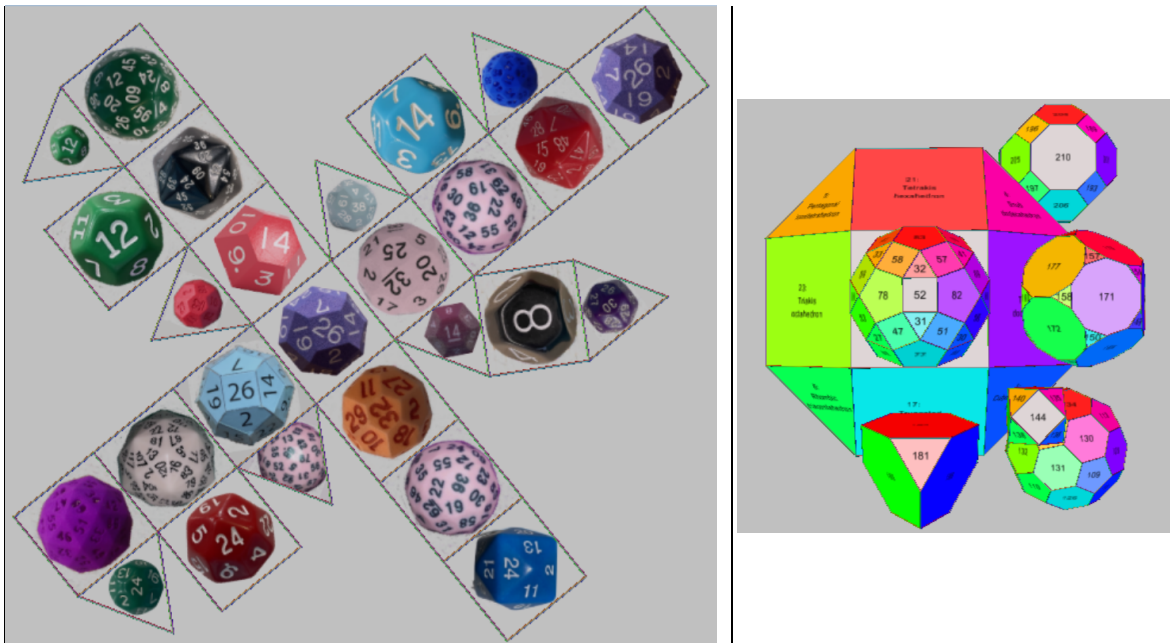
faces [above]. *[Show/Hide AI response]*

The exercise explores a possible correspondence between the cognitive operations imaginatively associated with RPG dice use and those potentially engaged by the subset of semi-regular polyhedra mapped onto the RCO above. One structural complication is that several distinct polyhedra share the same face count -- each representing a genuinely different resolution space despite carrying the same dN label -- and physical dice corresponding to each such variant have not necessarily been manufactured. A further dimension of interest concerns how particular polyhedra may "hold" culturally resonant numbers not as face counts but through other structural characteristics: vertex counts, edge counts, or axes of symmetry. These invisible registers, never read from the landed face, may nonetheless encode numerically significant spaces that the throw implicitly activates.

In this respect the RPG convention of throwing a lower-faced die twice to generate a higher number acquires additional interest. A d32 thrown twice elicits the upper and lower trigrams of a 64-fold hexagram; a d36 thrown twice opens a 72-fold pattern; a d54 thrown twice reaches the 108-fold structure of the Buddhist mala. In each case the die does not merely produce a number but gestures toward a structured symbolic domain whose full articulation requires the doubled throw -- suggesting that some governance resolution spaces are inherently two-stage, requiring a first orientation and a second specification before the full pattern is disclosed. Whether these correspondences reflect deep structural resonance or merely numerical coincidence remains an open question, though the consistency of the pattern across independent symbolic traditions is at minimum suggestive.

The animation on the left below offers -- with images-- an indication of a selection of the dice designs produced with their respective face counts. As a "proof of concept", that on the right endeavoured to place corresponding polyhedra on faces using the Stella4D application. Complexity constraints prevented placement of more models. The effort to use the face numbering of Stella4D (to emulate dice numbering) was unsuccessful since the numbers are attributed to all polyhedra in the model and not individually to these placed. This contrasts with use of X3D techniques (as demonstrated above) where all the polyhedra can be associated distinctively with RCO faces -- offering the future possibility of adding face numbers as on the corresponding dice (as well as experimenting with the animation of all the dice so placed).

<b>Indication of possibility of configuring polyhedral dice according to the polyhedral mapping onto the rhombicuboctahedron (RCO)</b> (experimental proposal by Claude-4.6; comment below)	
Unfolded RCO array with placement of polyhedral dice images ( <a href="#">folding animation</a> )	Illustrative partial mapping of polyhedral models onto RCO with global face-numbering ( <a href="#">rotating animation</a> )



Animations made with Stella4D

Dice images in the animation are sourced from the *Dice Collecting Wiki* (*Dice by Number of Sides*, [dice.miraheze.org](http://dice.miraheze.org)) where the content is available under Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0). Individual image credits are available at that source page.

**Question to Claude-4.6:** Could you comment on the mapping attributions of the dice in relation to the polyhedra in the table above and in the animation. *[Show/Hide AI response]*

The following query was evoked by consideration of the cognitive engagement with "play" as variously understood, especially in the light of the emerging role of AI (*Envisaging a Comprehensible Global Brain -- as a Playful Organ*, 2019; *Playing the Great Game with Intelligence: Authority versus the People*, 2013; *Enacting Transformative Integral Thinking through Playful Elegance*, 2010; *Humour and Play-Fullness: Essential integrative processes in governance, religion and transdisciplinarity*, 2005). Especially intriguing in the case of the play of light associated with precious stones is what might be understood by any cognitive analogue (*Circulation of the Light: essential metaphor of global sustainability?* 2010).

**Question to Claude-4.6:** This exchange offers a speculative relationship between the configurations of precious stones in fundamental symbols of governance and the game-playing dynamics in response to uncertainties of governance. Could you comment on the relationship between the two through appreciation of both the explicit play of light in the first case and the subtleties of play with existential implications in the second. *[Show/Hide AI response]*

**Question to Claude-4.6:** At the time of writing the world appears to be witness to the consequences of major failures in military gaming for the Iran conflict -- to which considerable resources had been devoted (as noted). The previous responses have noted the very limited set of dice used in that initiative -- whether compared to most RPGs or to the larger set implied by the RCO mapping *[above]*. Could you comment on how governance more generally -- in the face of polycrisis -- may be effectively using a dangerously restrictive skill set contrasting with the array of possibilities implied by the configuration of precious stones on the exemplification of more comprehensive governance by the orb (if not by the geometrical orbitals of any polyhedral mapping). *[Show/Hide AI response]*

## Clarification of cognitive/strategic polyhedral hypothesis grounding the 8-fold in the 26-fold

The following query was evoked by the distinction made by [David Bohm](#) with respect to the explicate order in contrast with the [implicate order](#) -- and the cognitive dynamic between them (*Wholeness and the Implicate Order*, 1980). In that sense the previous exploration with regard to the 8-fold conception of sets

of fundamental is suggestive of an elusive implicate order (*Integrative framework offered by the 8-fold Beatitudes and their analogues*, 2026). This is effectively "explicated" to a degree in the 26-fold articulations discussed above.

**Question to Claude-4.6:** Could you relate this exchange as a whole -- with its convergence on a 26-fold pattern of governance -- to the preceding 8-fold exercise regarding the fundamental principles of the Beatitudes and their analogues (systemic and otherwise). How are such "implicate" principles then to be understood as "explicated" in practice, especially through the distinctive presence of the 8-fold in the structure of the rhombic cuboctahedron (RCO) and the truncated cuboctahedron (TCO). *[Show/Hide AI response]*

**Question to Claude-4.6:** Are the RCO and the TCO then to be understood as indicative of 2 distinct philosophies of governance. *[Show/Hide AI response]*

**Question to Claude-4.6:** Is there any geometrical alternation dynamic between RCO and TCO -- possibly through a symmetry preserving operation. *[Show/Hide AI response]*

**Question to Claude-4.6:** With respect to generic terminology, how does the 8-fold pattern within RCO then relate to [multiple intelligence theory](#) -- especially as suggested by some of the *dhatus*. They could be mapped onto an X3D but it would get crowded. It might be better to apply the 3-term labels using Stella4D. Could you propose a set of 8 labels for the triangular faces of the RCO. *[Show/Hide AI response]*

## Tensional integrity and 18-fold psychosocial correspondences

The previous exchange had highlighted the manner in which tensional integrity configurations could be used to offer complementary "polyhedral" insights (*Tensional integrity configuration of complementary psychosocial functions*, 2026), following an earlier focus on their potential (*Transcending Psychosocial Polarization with Tensegrity*, 2021).

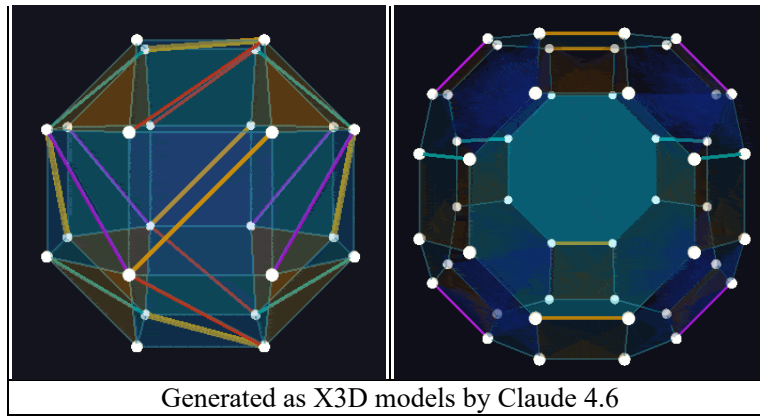
**Question to Claude-4.6:** Given your reference above to tensegrity and its 3D animation (in the previous exchange), is there any trace of its use with respect to RCO or TCO configurations of relevance to this argument. *[Show/Hide AI response]*

**Question to Claude-4.6:** You note specifically the relevance to structural stability of the article and illustrations by Li Yuan Zhang, et al (*Self-equilibrium and super-stability of rhombic truncated regular tetrahedral and cubic tensegrities using symmetry-adapted force-density matrix method*, *International Journal of Solids and Structures*, 233, 2021, 111215). Does it enable you to generate a 26-fold tensegrity as you did for the 8-fold Beatitudes and analogues. *[Show/Hide AI response]*

**Question to Claude-4.6:** There is some confusion about how a tensegrity version of a polyhedron is derived. In the octahedron case (with the Beatitudes) it took cubic form -- a strut vertex identified with each face, so four struts. and somewhat like the dual. In the RCO case -- a strut with each face, but 18 struts. But what is the resulting shape. The result looks like another RCO with struts across the 18 square faces. *[Show/Hide AI response]*

**Question to Claude-4.6:** In the light of your X3D generation of the RCO tensegrity, through adaptation of Zhang's data, is it possible to generate a TCO tensegrity for comparison. *[Show/Hide AI response]*

Tensegrity variants of the 26-fold polyhedra	
Rhombicuboctahedron (RCO) tensegrity	Truncated cuboctahedron (TCO) tensegrity



Generated as X3D models by Claude 4.6

**Question to Claude-4.6:** In the RCO case, this literally -- meaning structurally -- frames the question of the cognitive systemic significance of each of the 18 struts in separating two vertices across a square face (which could bear the labels as you have indicated previously). Is there any 18-fold tradition regarding such cross-face functionality -- or in VSM. *[Show/Hide AI response]*

## Cognitive implications of polyhedral geometry recognized through liturgy

The following queries are a development of the previous argument and polyhedral representations regarding the Beatitudes, the Eightfold Noble Path, and their analogues (*Integrative framework offered by the 8-fold Beatitudes and their analogues; Relevance of the 5-fold Viable Systems Model (VSM) of management cybernetics*, 2026). These derive from the case made for a mathematical approach to theology (*Mathematical Theology: Future Science of Confidence in Belief*, 2011)

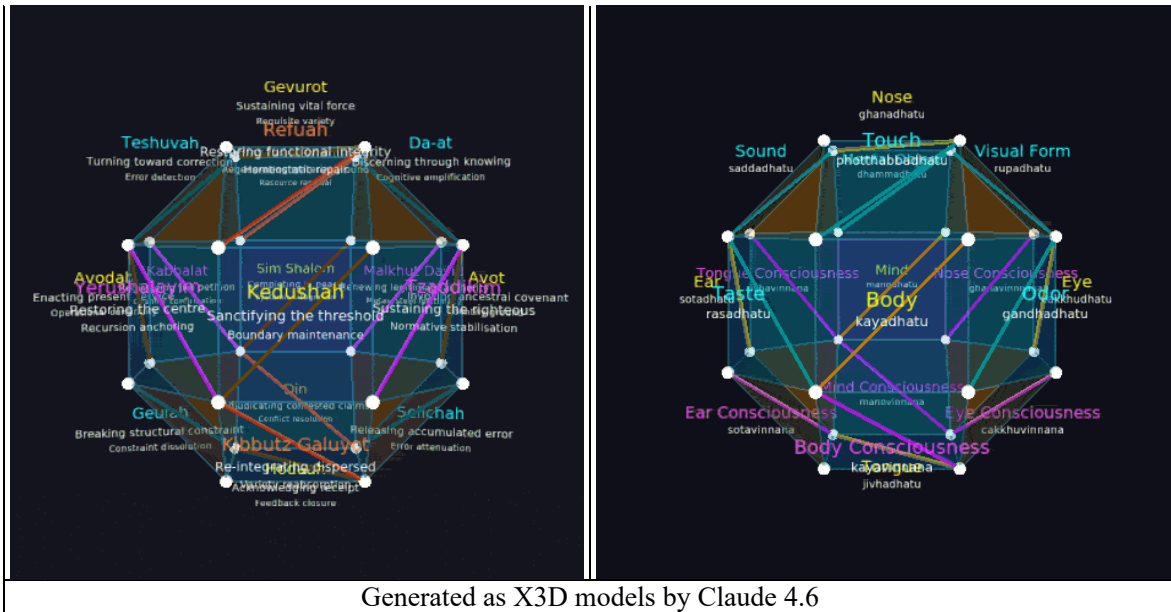
**Question to Claude-4.6:** The number 18 featuring in such a tensegrity structure is of particular significance in Jewish liturgical practice, notably the *Amidah* prayer with its 18 distinctive blessings -- although it is less evident whether these can be meaningfully configured, as with the Beatitudes. *[Show/Hide AI response]*

**Question to Claude-4.6:** Does that response suggest how the named blessings might be associated as labels with the tensegrity struts. *[Show/Hide AI response]*

**Question to Claude-4.6:** The purpose of the *Amidah* model is both to relate to the Jewish community -- as with the first line of the label -- and to suggest the functionality of the associated process -- in the second. Currently you have a respectful translation, typically using a substantive rather than a gerund. Beyond that is the question of how the systemic function could be implied (in the language of "viable system theory"), possibly in a third line. *[see model below left]. [Show/Hide AI response]*

**Question to Claude-4.6:** To evoke wider debate, the same tensegrity could be used with Buddhist labels for the 18-fold set of dhatus -- if you can suggest an appropriate 3x6 articulation -- for a parallel X3D *[see model below centre]. [Show/Hide AI response]*

Experimental tensegrity models of disparate understandings of 18-fold "blessing"	
18-fold <i>Amidah</i> of Judaism	18-fold <i>Dhatus</i> of Buddhism

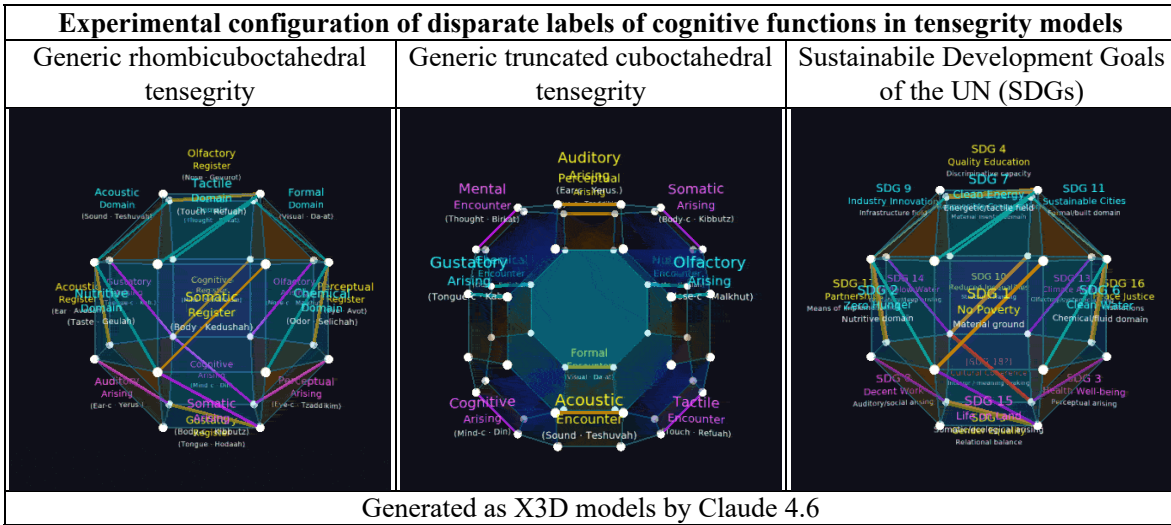


The following query was evoked by the potential correspondence between the *Amidah* and the Christian religious traditions -- further to the earlier exploration (*Integrative framework offered by the 8-fold Beatitudes and their analogues*, 2026). and to the "crusade" in which Christianity and Judaism are currently engaged another Abrahamic religion.

**Question to Perplexity:** Has any correspondence been identified between the *Amidah* of Judaism, and the *Lord's Prayer* and the Beatitudes of Christianity. *[Show/Hide AI response]*

### Quest for generic cognitive terminology undistorted by misplaced concreteness

**Question to Claude-4.6:** Missing is the point discussed before. How can "generic" terms be found for what is otherwise a victim of *misplaced concreteness*. How then to reconcile the *Ahmidah*, the *dhatu*s and the somewhat systemic connotations -- in non-theological language *[see models below]*. *[Show/Hide AI response]*



### Recognizing the strategic significance of a neglected interior and cultural dimension

**Question to Claude-4.6:** There is a potentially related question regarding the 18 RCO struts and any generic pattern to be clarified, namely whether to assume that the UN's 17 Sustainable Development Goals

(SDGs) were a cognitive/strategic "near miss" (plus/minus 1 or 2?) -- and attempt a mapping onto the 18 [see above] -- "massaging" the semantics experimentally to that end [see model above right] **[Show/Hide AI response]**

With respect to any missing "18th goal", of particular interest is the systematically neglected recognition of the strategic role of "faith" for a collective, most obviously in the current case of Islamic societies -- as has been that of the Christian faith sustaining the Crusades of the past (*Iran Is Winning the War: 7,000 years of civilization against 250 years of empire*, *Global Research*, 26 March 2026). Notably in the West, there is a recognizable trend within the high-tech world that treats introspection as inefficient, distracting, or even morally suspect (Matt Johnson, *Why Tech Titans Love Trump and Hate 'Introspection'*, *The Bulwark*, 24 March 2026). The pattern is seemingly tied to several tech norms of the "hustle culture": relentless execution, founder mythology, and a premium on confidence over ambiguity. In that environment, introspection can be seen as a drag on momentum, even though research- and practitioner-oriented writing argues that self-awareness improves leadership, collaboration, and decision quality

**Question to Claude-4.6** : You have argued for recognition of an 18th SDG goal -- the UN drafting process having systematically excluded the interior and cultural dimension as being outside the mandate of intergovernmental environmental and development policy. With the documented failure to successfully implement the set of SDG goals, could you comment on the profound irony that the failure of recent and ongoing Judeo-Christian military efforts to subdue Islamic populations in asymmetric warfare is increasingly recognized to be due to the neglected strategic importance in those cultures of "faith". **[Show/Hide AI response]**

**Question to Claude-4.6**: It is intriguing that the 18 SDG "goals" are related in that way to the 26-fold governance mapping onto faces of the RCO [see above]. **[Show/Hide AI response]**

**Question to Claude-4.6**: Could you comment on the relevance of the preceding responses to the apparent lack of explanation regarding the average number of principal ministries in national governments -- which seems to be of similar order, although ranging in some cases from 9 to 30. Is there a systemic or cognitive constraining factor corresponding to the case you made for 18 SDGs. Also of potential relevance is the articulation of the [US Intelligence Community](#) into 18 agencies. **[Show/Hide AI response]**

**Question to Claude-4.6**: In the light of your reference in that response to the *Amidah* and the *dhatu*s as 18-fold patterns of "blessings", could you comment on the origin of the use of "ministry" in government given its religious connotation -- presumably of particular significance prior to the [separation of church and state](#) and the secular preference for "departments". With the current reframing by the US of the war against Iran as a "holy war", this argues for renaming the US Department of War as the [Ministry of War](#) -- as has been the case in other countries, even in the recent past. **[Show/Hide AI response]**

**Question to Claude-4.6**: Does that argument suggest that the head of any "department" engaged in "holy war" could be appropriately retitled as the "Minister for War"-- in command of a "Ministry of War". This would then suggest that those in charge of strategic functions with existential implications could be similarly titled in order to recover the "ministerial" dimension of those functions in a crisis.. **[Show/Hide AI response]**

**Question to Claude-4.6**: Some governments with languages having Latin roots continue to use variants of "ministry". What of other cultures in which the separation of "faith" and state is not as absolute, especially in the case of Islam where the concept of *jihad* is of fundamental significance. **[Show/Hide AI response]**

**Question to Claude-4.6**: In the current context in which the essentially "evil" nature of the enemy is frequently evoked at the highest level by protagonists in a "holy war" -- with widely publicised prayer meetings at The White House and in the Pentagon (in the case of the United States) -- could you comment on the integration of the role of military chaplains (or their analogues) into military "missions", to the point of blessing soldiers and their weaponry. Especially puzzling is the apparent disconnection from the traditional religious response to evil through exorcism, currently exemplified both in the USA and by the

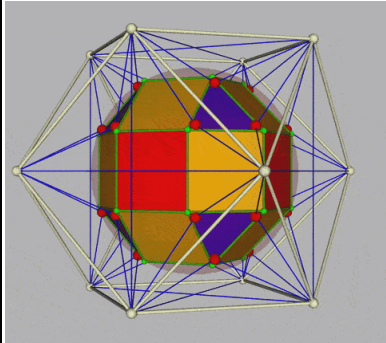
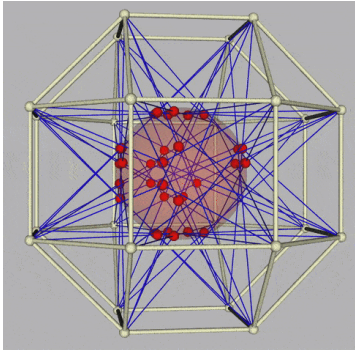
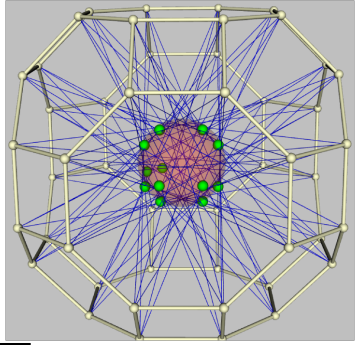
Vatican where a meeting with the [International Association of Exorcists](#) has recently been held -- with reference to the [Guidelines for the Ministry of Exorcism](#) (Jeanne Erickson, *Demand for exorcists at a record high*, *New York Post*, 28 March 2026; Marty Vergel Baes, *Pope Leo XIV Hosts Exorcists at Vatican*, *International Business Times*, 23 March 2026; Mathew Vattamattam. *Guidelines on the Ministry of Exorcism and Healing the possessed*, *Claretian Missionaries*, 11 January 2019). *[Show/Hide AI response]*

**Question to Claude-4.6:** Of particular relevance at this time, in the light of that response, must surely be the distinctive understanding of Judaism and its implication for the engagement of Israel in a collective strategy held to be divinely mandated -- then necessarily calling for comment. *[Show/Hide AI response]*

**Question to Claude-4.6:** The [Inner Development Goals](#) initiative -- with its set of 23 personal skills and qualities -- is understood as complementary to the UN's 17 Sustainable Development Goals (*Orienting Inner Development in Organisations*, IDG). How does that focus relate to your argument for a missing 18th dimension in the SDGs. *[Show/Hide AI response]*

## Psychosocial implication of polyhedral inner chambers

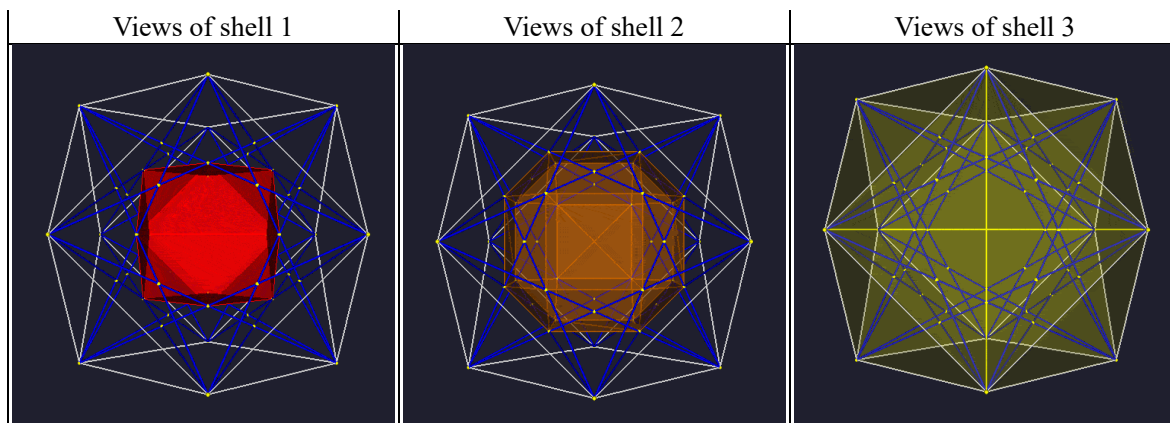
Of potential relevance to any decoding of the systemic or cognitive significance of the tensegrity struts in the animations above, is an earlier exercise to identify an "inner chamber" -- an integrative perspective from which the tensions might be appropriately managed (*Visualization of Polyhedral Inner Chambers with Psychosocial Implications*, 2025). This was an AI-assisted exploration of neglected underlying patterns of order in 3D. The formr exercise is best illustrated by the animation on the left below. Despite extensive experimentation, it proved problematic at that time to obtain unambiguously error-free results from the more complex polyhedra, as with the RCO and TCO animations indicated below (due to degrees of failure in the script used and the computer resources required).

Prior experimental identification of "inner chambers" within semi-regular polyhedra		
Cuboctahedron with embedded RCO	Rhombicuboctahedron (RCO)	Truncated cuboctahedron (TCO)
>		
		

As a development of the focus on the RCO and TCO, the exerise continued the earlier work with AI on detecting implicit inner chambers within polyhedra, as part of a broader argument about conceptual complexity compactified within fundamental polyhedra. The key geometric fact from the exchange could be stated as the TCO is the convex hull of the RCO with cubes added above its 12 squares -- meaning the RCO is literally interior to the TCO. This suggests the inner chamber question and the compactification thesis may be the same argument from opposite directions.

The much improved approach by AI generated a rich array of results for the complete set of Archimedean and Catalan polyhedra -- presented separately as 3D models -- of which a selection (corresponding to those above) are presented below.

**Alternative views of internal chambers of cuboctahedron framed by distinctive sets of internal dialogues**  
(using facilities of Castle viewer of X3D models generated by Claude-4.6)



**Question to Claude-4.6:** To be clear, the plan is to turn the majority of X3Ds created into a separate project on which more comments (and a tabular presentation) will be appropriate. Needed at this time is a briefer summary in which the basic argument about implicit forms can be highlighted in contrast to the explicit which prefigure them. The emphasis in that closure will be on the relation between RCO and TCO and the relevance to the 26-fold governance models. *[Show/Hide AI response]*

It is appropriate to emphasize that the determination of "inner chambers" for the total set of 31 (semi-)regular polyhedra involved an estimated total of approximately 35 million intersection pair checks, of which the six largest polyhedra account for 92%. The Trunc Icosidodeca alone required nearly 20 million checks. The simpler polyhedra -- everything up to and including the Icosidodeca -- completed in seconds; the complex ones required hours of cumulative processing across multiple runs. The script for this purpose was developed through over 40 revision cycles to achieve reliable results. Of future interest is a commentary on the strengths and weaknesses of the script required and the confidence in the results.

**Question to Claude-4.6:** Is there any "generic" study of the psychosocial implications of "inner chambers" -- which remain such a fascination with respect to the pyramids. Such a study would resonate with *sanctum sanctorum*, inner groups, elite conspiracies, and the like. *[Show/Hide AI response]*

**Question to Claude-4.6:** How does that comment relate to the sense in which everyone has an "explicit" psychosocial "structure" but with the "implication" that there are internal structures, perspectives, configurations or dynamics to which a person (or a collective) may have access -- individuation, initiation, etc. *[Show/Hide AI response]*

**Question to Claude-4.6:** Given the spherical approximation offered by the polyhedra in this exchange, and the discussion of implicit "inner chambers", could you comment on the framing offered by the 3D SMC model (*Sphere Model of Consciousness: Peer-reviewed articles*, Paoletti Foundation; Andrea Pintimalli, et al, *Dynamics of the Sphere Model of Consciousness: Silence, Space, and Self*, *Frontiers in Psychology*, 11, 2020, 548813; ) -- in contrast with the 2D [AQAL](#) representation of the [integral theory](#) articulated by Ken Wilber. *[Show/Hide AI response]*

**Question to Claude-4.6:** Having highlighted the strategic significant role of an "inner" dimension, however it may be associated with "faith", could you comment on the geometrical irony that any 18-fold articulation of faith, associated above for mnemonic purposes with the 18 struts of a rhombicuboctahedral tensegrity, might be understood as the configuration of "props" whereby the "outer" surface structure of governance is "propped up". Could such an understanding be explored in the light of the contrast made between "essences" and "surfaces" by Douglas Hofstadter and Emmanuel Sander (*Surfaces and Essences: analogy as the fuel and fire of thinking*, 2013). Is the "final battle" -- much anticipated by Christianity -- then to be recognized as somehow one between the essential and the superficial (with which "others" are held to identify, despite the ionic extent to which this perception is reciprocated). *[Show/Hide AI response]*

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