



laetus in praesens

Alternative view of segmented documents via Kairos

24 November 2025 | Draft

The Secret Pathway between Configurations of Otherness?

Mnemonic geometry clues on how to kiss-touch and make-up

-- / --

Introduction

Framing questions to AI and the insights from miscommunication
Initial visual models resulting from exchanges with AI
Psychosocial cycles, encycling and what circulates
Requisite repetition of learning cycles?
Cognitive attraction of an alternative domain -- an "other" modality?
Relevance to inter-disciplinary, inter-faith and inter-ideological discourse
Metaphors of Rosetta Stone and conceptual gearbox in relation to 4D configurations
Clarifying the distinction between "kissing number" and "kiss-touch"
Preliminary formal clarification of tetrahedral model by AI
AI commentary on pathways between tetrahedral modalities
Modelling miscommunication with AI in visualizing a tetrahedral kiss-touch curve
Summary by AI of process of articulation of kiss-point curve
Speculative adaptation of model by AI to potentially complementary domains
Aesthetic implications in comprehension and cognitive embodiment of the model
Comprehension of kiss-point transitions through kinaesthetic intelligence
Relation of kiss-points to generalization of familiar game-ball seam curves
Octahedral array of kiss-points evoking 4-dimensional strategic insights
Fourth dimension framing of relevance to strategic engagement with time?
Implications of a tetrahedral model for a quadripolar world?
Implications of recognition of the heart as a tetrahedron
Implications of configurations of strategic goals for principled navigation
Implications for playfully modelling reality
References

The PDF version of this document does not enable direct access to AI responses to questions posed. Experimentally readers are transferred from the PDF to the particular question in the [original web version](#) from which they can obtain the response -- as in that non-PDF version. Readers are also free to use any of the questions as prompts to an AI of their choice.

Show All AI Responses

Introduction

Discourse between disparate domains: There is ever more indication that civilization is faced with a major difficulty in facilitating the engagement between disparate domains. This has long been evident between religions whose insights regarding transcendental unity and harmony do not translate into the relationships between their respective adherents. The pattern is very similar in the case of academic disciplines, between the sciences and the humanities, and between contrasting philosophies. Inter-faith, inter-disciplinary, and inter-ideological dialogue have become exercises in tokenism and virtue signalling with little effective results in practice.

The difficulty is otherwise evident in the relationship between people of different "types", most notably that between people of different personality type -- despite the efforts in team building. Understood otherwise there is an analogous difficulty in the relation between logic and emotion, or of physicality and intuition -- however framed (*Interrelating Multiple Ways of Looking at a Crisis*, 2021; *Ways of Thinking, Perception and Analysis*, 2001; *Ways of looking at ways of looking -- in a period of invasive surveillance*, 2014). Typically

this is handled by favouring one or the other in a particular context -- even to the exclusion of the others. The challenge has been partly framed and addressed by the various methods of [Edward de Bono](#) (*Six Thinking Hats*, 1985; *Six Frames For Thinking About Information* 2008). Their uptake has not responded to the development of the problem -- especially to the conflicts it engenders.

Mathematics and geometry? In this situation it is therefore curious to explore whether mathematics and geometry have insights to offer -- acclaimed as they are as offering the most sophisticated understanding of relationships.

A point of departure is the depiction by science of the relation between two contrasting modalities, of which there are many images. The most obvious is a magnet with fields of force between two poles. This is echoed to a degree by images of right and left brain as related through the hypothalamus. With respect to civilization, this frames a question regarding the hypothalamus and the corpus callosum (*Corpus Callosum of the Global Brain?: locating the integrative function within the world wide web*, 2014)

Whilst there are many images for a 2-fold relationship, somewhat less evident are the depictions of 3-fold relations. Although in this case imagery of knots and the like -- most notably [Celtic knots](#), the [trefoil](#) and the [trefoil knot](#) -- frames such understanding. This is especially imbued with a degree of mystery in religious references to any trinity of deities. However although these may well be depicted in two dimensions, it frames the challenge of the form which any 4-fold relationship might take. In this case reference may be made to [four-leaf clover](#) and to more complex Celtic knots and related patterns -- even to the [cinquefoil](#) and beyond. Such petal and leaf arrangements clarify the distinction between a degree of unity in which all are linked at a common central point -- an illusion of unity to which many vainly aspire in psychosocial organization -- and other forms of coherent interrelationship (Keith Critchlow, *The Hidden Geometry of Flowers: living rhythms, form and number*, 2012). .

"Kiss-touch": The approach taken here is to explore with AI the pattern of relationships between 4 modalities of any kind -- as a point of departure highlighted as of special significance (*Comprehension of Singularity through 4-fold Complementarity*, 2024; *AI-enabled Mapping and Animation of Learning Pathways*, 2024). This may be readily depicted by placing a fourth orange on top of a configuration of 3 oranges touching one another in a triangular configuration -- a pattern which is widely comprehensible in stacking fruit or cannon balls. Their specific points of contact are commonly referenced in design terminology as a "kiss-touch". It evoked an early discussion by Isaac Newton with David Gregory in 1694 regarding the "kissing number", namely the maximal number of equal size non-overlapping spheres in three dimensions that can touch another sphere of the same size (Oleg R. Musin, *The Kissing Problem in Three Dimensions*, 13 June 2005).

The specific phrase "kiss-touch" is less common as a lexical unit, but it is transparently descriptive -- especially in scientific or technical settings -- of the moment or locus where two objects meet gently, as in [sphere packing](#), billiards, or gears. It conveys both the delicacy and the exactness of such a contact, borrowing directly from these historical senses of physical and metaphorical closeness. Thus, as used in geometry or packing theory, "kiss-touch" is a natural extension of the established metaphorical and physical meanings of "kiss" as a light, precise contact. As such it featured in the descriptions of tensegrity structures and geodesic domes by [Buckminster Fuller](#), who explored ideas around points of contact, interaction, and energy transfer. This relates closely to the geometric notion captured by "kissing" spheres in mathematics and physics (*Synergetics: Explorations in the Geometry of Thinking*, 1975)

As the specific point of transition from one sphere or domain to another -- from one "language" to another -- the question is then how best to understand the pattern of transitional pathways between four such domains -- or more -- when such domains are in close touch with one another in communication terms (*Pathways in Governance between Logic, Emotion, Spirituality and Action*, 2024). Aspects of the question naturally invite geometrical and other commentary from mathematics, but the concern here is the relevance of such insights to psychosocial interaction. In this light the question relates to the quest for a Rosetta Stone to enable such transition, as discussed previously (*Integrative implications of the Rosetta Stone, Philosopher's Stone and Diamond*, 2025).

The challenge could be caricatured as determining the "kissing number" in configurations of collective domains -- enabling them to "kiss and make up". The challenge is exemplified in the case of the pattern of 8 major religions (Stephen Prothero, *God Is Not One: the eight rival religions that run the world and why their differences matter*, *Journal for the Scientific Study of Religion*, 50, 2011, 1). It is evident in any effort to reconcile the 8 forms of intelligence of [multiple intelligence theory](#), or the contrasting personality types in team building

Of course others claim greater or lesser numbers than eight, and in the case of the disciplines, the *Web of Science* database includes 241 subjects of study, whereas *Wikipedia* lists 1475 fields, as noted by Ugo Bardi (*Science and the Dragon: Redistributing the Treasure of Knowledge*, *Organisms: Journal of Biological Sciences*, 5, 2022, 2). The *Mathematics Subject Classification* offers 64 top-level topics, but with seemingly little concern for how mathematics might be more appropriately organized for their comprehension (*Is the House of Mathematics in Order?* 2000; *Configuring the 64 disciplines of mathematics as a 64-edged drilled truncated cube*, 2021).

Transitional manoeuvres: Ironically the question is somewhat analogous to the [gravity assist maneuver](#) of spacecraft, and by extension to the hypothetical [Interplanetary Transport Network](#) (ITN) -- the collection of gravitationally determined pathways through the Solar System that require very little energy for an object to follow. Given the challenging psychosocial relations within patterns of otherness, the need for an analogous ITN is discussed separately in terms of the *Possibility of an "Inter-other Transition Network"* (2012). This suggests the value of using mathematics to explore the relations between silos by which communication is currently dysfunctionally fragmented (*Mathematical Modelling of Silo Thinking in Interdisciplinary Contexts*, 2024). Ironically, given their training on data sets from multiple silos, AIs offer a unique resource in exploration of inter-silo relationships.

Curiously, as noted above, the psychosocial challenge is exemplified by the very narrow window through which smooth transition is possible between modalities such as logic and emotion -- somewhat analogous to the 3 degrees declination in the [final approach](#) of a viable [glide path](#) for a landing aircraft. The requirement for a smooth transition is most obvious in the case of highway entry and exit ramps. A high degree of continuity is required for viable transitions between distinctive modes -- rather than sudden ("step") transitions. This suggests a questionable comparison with any effort in discourse at *"Getting to Yes"* (1981), and the experience of arguments by the silver-tongued that are almost "right" or "true" -- as in courtship and grooming.

Artificial intelligence: The following exercise was initiated as an experiment in communication with AIs, firstly in clarifying the nature of the challenge in geometrical terms meaningful to forms of intelligence only progressively developing a capacity to visualize in 3D. However the experiment also helps to clarify the challenges to the possibility of inter-modal connectivity -- for those cultivating particular modalities, and having minimal comprehension of how this might be effectively structured, whether in 3D or more.

The experiment takes place in a period which there is extensive media coverage of the disastrous potential of AI -- whilst carefully ignoring the disastrous potential of "business-as-usual" and the possibility that AI might enable a new "Cognitive Renaissance" in which the dots are more appropriately linked together (*From disorderly "collapse" to orderly "renaissance"*, 2019). A particular focus is given to AI-engendered "hallucinations", carefully ignoring the hallucinations currently sustained in the course of "discourse-as-usual" -- whether within "cults" or ensuring the integrity of silos (Lucy Osler, *AI-induced psychosis: the danger of humans and machines hallucinating together*, *The Conversation*, 18 November 2025). The extensive commentary by AI in this experiment has been minimally edited -- with the exception of removal of characteristic flattery, ironically corresponding to that featuring in many forms of social discourse. Extensive editing could be envisaged for particular purposes.

The exchanges with AIs went through many stages indicative of miscommunication, false starts and assertions of impossibility. Unexpected positive result were however achieved and visualized in geometrical terms. **The animations are potentially of far greater interest to most than the details of how they were achieved -- and are necessarily far more readily comprehensible.** This invites reflection on the implications for psychosocial engagement between disparate domains between which there are typically no bridging pathways (*Remembering the Disparate via a Polyhedral Carousel*, 2025; *Dynamics of N-fold Integration of Disparate Cognitive Modalities*, 2021)

Quadripolarity vs. Bipolarity? Ironically the challenge is exemplified by the traditional discontinuities in the relationship between the four elements: Earth, Air, Fire and Water -- curiously now framed in terms of disconnection from nature (*Human Intercourse: Intercourse with Nature and Intercourse with the Other*, 2007). Physically their relationship can be represented in pressure-temperature phase diagram. Missing is any analogous representation of their psychosocial analogues (*Characteristics of phases in 12-phase learning-action cycle*, 1998).

Somewhat curiously, that pattern of traditional elements could be understood as echoed in the four traditional directions by which the geopolitical world has long been framed: North, South ("Global South"), East, and West. In the light of the tetrahedral model articulated in what follows, this quadripolar polar pattern is compared with that presented by the [Centre for International Governance Innovation](#) (S. Yash Kalash, *The Quadripolar World: understanding Twenty-First-Century geopolitics*, 4 June 2025) -- contrasted here with that of the Swastika..

Framing questions to AI and the insights from miscommunication

As indicated above, there is now a dramatic challenge to fruitful communication between distinct groups in society. One way of modelling this -- to explore how the difficulties might be transcended -- is through their geometric representation as configurations of spheres in closest packing array. Of these the simplest, beyond two or three spheres on a flat surface, is with a triangular array of three spheres with one on top -- recognizable as a tetrahedral closest packing array. Those 4 spheres touch each other at a total of 6 points.

The 6 points can be understood as potential points of contact between 4 disparate groups -- or 4 contrasting cognitive modalities. **The question is whether there is any special form of connection between those points of contact -- potentially to be understood as a transformational pathway between disparate modalities.** Namely how to "get" meaningfully from one mode to another -- and even how to cycle between contrasting modes -- which may together be vital to the collective health of all 4.

This question can be defined fairly precisely in geometric terms -- if not very precisely. The issue is **whether that pathway can be presented visually to enable its comprehension and wider discussion of its potential implications.** The various AI facilities suggest that they could be challenged with the question, especially given their skills in mathematics and developing visualization capacities in 3D. However there is a challenge long caricatured as how to explain over the telephone the nature of a spiral staircase to someone who has never seen one.

In this case the challenge is relevant both to communication with AI and to any effort to clarify a more complex mode of communication between disparate groups or cognitive modalities. This recalls the "pattern that connects" as framed by Gregory Bateson (S. Brier, *Bateson and Peirce on the Pattern that Connects and the Sacred*, *Biosemiotics*, 2, 2008; Richard D McGrady, *The pattern which connects Gregory Bateson*, *Academia*, 2022). In the case of groups, the default reaction to any such possibility is to frame it in binary terms -- "us" and "them". Alternatives might be the overly familiar framings of "objective" versus "subjective", or "logical" versus "emotional", or even "right" versus "wrong". This is the primary characteristic of global strategic discourse at this time.

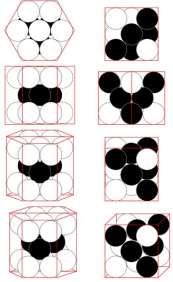
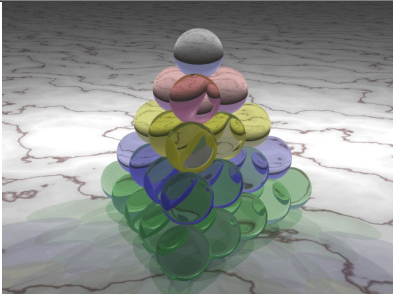
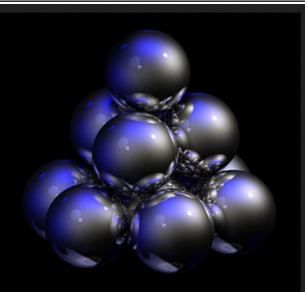
The following engagement with several AIs can be understood as an effort to explain the pattern of connectivity between 4 disparate domains -- despite the communication challenge of a "spiral staircase". As such the exercise offers a remarkable array of stages of miscommunication -- and their visualization -- which are indicative of possibilities of miscommunication between groups.

The experiment achieved a successful visual result, and (as an open problem) it did progressively clarify how the solution might be better defined to elicit future insight. Remarkably that solution appears to require the repetition of what are best understood as learning cycles. Expressed otherwise, the exercise seemed to demonstrate the impossibility of transiting non-disruptively from Mode A to Mode B in the absence of repeated experience of Mode A. This helps to frame more clearly how progressive learning takes place in Mode A and how many cycles of that experience are possible before transiting to Mode B becomes credible and viable.

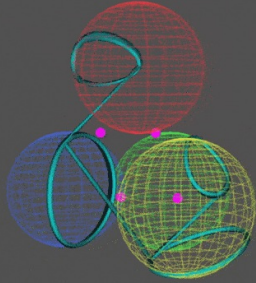
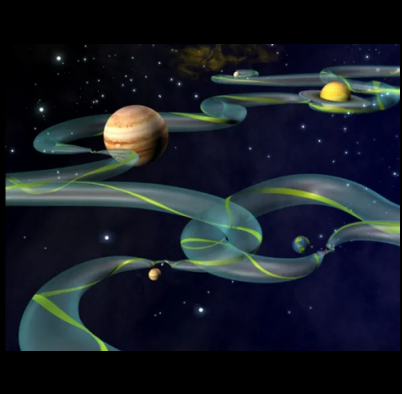
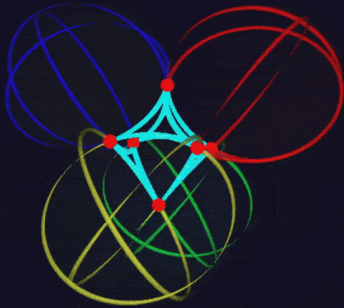
Understood in this light, the pathway between the 4 disparate modes can be usefully compared with the challenges faced by the [circular economy](#) and sustainability in reconciling contrasting modalities -- all upheld as vital to the viability of the system as a whole from

different perspectives. Similar pathways may be detectable -- or not -- with a larger number of disparate modalities (*Circulation of the Light: essential metaphor of global sustainability?* 2010). .

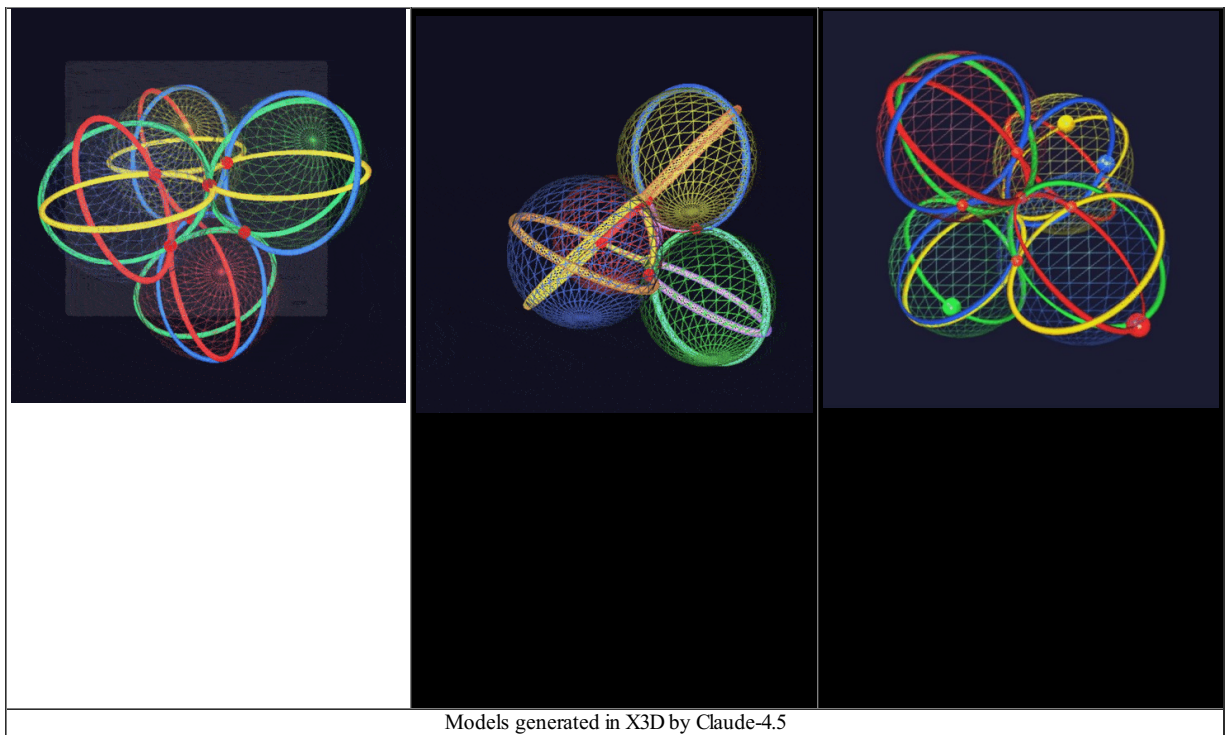
Initial visual models resulting from exchanges with AI

Closest-packing of equal spheres		
Arrays: Face-centered cubic (FCC) [left] and hexagonal close-packed (HCP) [right]	Animation of 3-sided pyramidal (tetrahedral) shape of the stacked cannonball arrangement.	Eleven spheres of the HCP lattice
		
en>User:Twisp, Public domain, via Wikimedia Commons	Blotwell, CC BY-SA 3.0, via Wikimedia Commons	User:Greg L, CC BY-SA 3.0, via Wikimedia Commons

The visualization challenge was progressively articulated through exchanges with [Perplexity](#), [ChatGPT-5](#), and [DeepSeek](#)). The very extensive exchange with [Claude-4.5](#) finally gave rise to the following model in 3D (on the right) -- through many phases of miscommunication, presented in a later section. The visual models resulting from these exchanges -- are frost presented here and immediately followed by their potential psychosocial implications. These are potentially of greater interest than the other technicalities, and especially that of miscommunication with AI.

Indicative framing of stages in detection of the kiss-point curve with Claude-4.5		
Stage in tetrahedral model elaboration -- problematic miscommunication with AI	Interplanetary Transport Network (based on gravity assist)	Animated version of tetrahedral-octahedral model as finally discovered with the aid of AI
		

Animation of characteristics of the kiss-point curve		
Distinguishing 4 coplanar circuits as highlighted by the animation	Animation of a partial Eulerian pathway around only 3 of 4 spheres through all 6 kiss-points	Animation of movement around 4 independent coplanar circuits


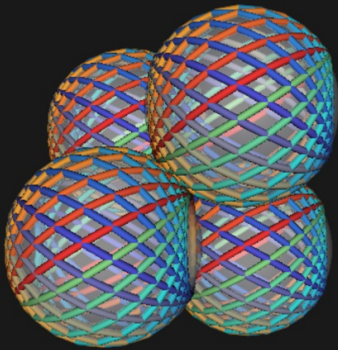
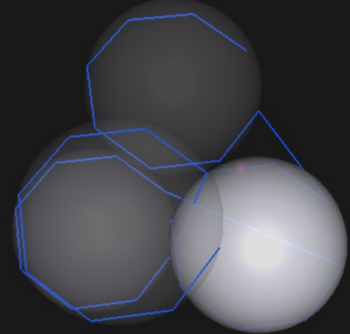


The exchange with AI explored the possibility of a model inspired by the wrapping of a ball of yarn as a [spherical helix](#) (Eric W. Weisstein, *Spherical Helix*, *MathWorld--A Wolfram Resource*). The ball winding approach was however unsuccessful and was abandoned in favour of that above.

The exchange with ChatGPT-5 was initiated with the same question presented to Claude-4.5 -- with similar issues of miscommunication. ChatGPT-5 responded more proactively to the ball winding metaphor and produced very detailed mathematical indications of the geometrical possibilities and the possibility of its visualization. The development of a full model in 3D was finally set aside in favour of a simple illustrative schematic model of what could be implemented in 3D with further effort. Those illustrations are produced immediately below.

The basic assumption made was that the curve (as with the yarn or string) could enter the spherical form tangentially through one kiss-point. It could then wind around the sphere at an angle to one axis (to be determined). The winding could be repeated a number of times (to be determined), increasing the angle (by the same amount) until the curve was positioned to exit the sphere tangentially at a second kiss-point. The progressive rotation of the winding could be understood in terms of the dynamics of [precession](#).

The central image below is indicative of a succession of such windings on one sphere -- presented in the tetrahedral configuration spheres. The colouring of the successive winding is modified to indicate the "precession" -- understood in terms of progressive learning. The animation on the right is a simple indication of movement along a single winding between spheres -- better visualized in the curve articulated with Claude-4.5.

Indicative illustration of ball winding and precession in exchange with ChatGPT-5		
Familiar example of a form of a spherical helix	Tetrahedral array of spherical helical windings	Indication of transition from sphere to sphere
		

The challenge as presented to ChatGPT-5 was as follows: Could you comment on the meaningfulness of the challenge reframed in the following way: For spheres in tetrahedral closest-packing configuration: Starting at entry kiss point A, wind a curve around the sphere making N complete revolutions (like winding string on a ball), migrating progressively (glide angle, helical rise) toward exit kiss point B (60° away). For what value(s) of N does the curve exit tangentially at B in the direction required to continue smoothly to the next sphere? An X3D should show each of the N wraps as a clearly distinct, visible loop (like yarn wound on a ball) with progressive migration from latitude of point A to latitude of point B; smooth continuous curve with no breaks or straight segments.

Thereafter, that request was modified to enable a range of experiments, by ChatGPT-5 generating a Python script in which parameters

could be altered to explore various results. The single sphere combined in the central image above was one such result.

The distinctive design metaphors fail to make clear that together they are the basis for a single model -- modelling two extremes. Arguably the second model is indicative of a learning process -- a quest -- for a viable exit point after entering the spherical domain -- a quest requiring multiple cycles. The earlier model is indicative of a singular solution -- once the direction of the entering curve is known in relation to the exit point.

A speculative exploration of how the model could be interpreted in the light of various 4-fold patterns of categories is provided in conclusion in the light of an earlier discussion (*Comprehension of Singularity through 4-fold Complementarity*, 2024; *Reframing binary governance as minimally a fourfold challenge?* 2020)

Psychosocial cycles, encycling and what circulates

Extensive reference is made to [cycles](#) in a psychosocial context, as noted above: learning cycles, business cycles, cycles of abuse / addiction / violence, repetition of advertising and propaganda to change beliefs, and speculation regarding reincarnation. A distinctive focus can be given to cycles through the question as to "what circulates" (*Circulation of the Light: essential metaphor of global sustainability?* 2010; *Enabling Moral Currency Circulation*, 2010). A fundamental process of potential relevance is described in terms of the metaphor "circulation of the light" as highlighted by [Carl Jung](#) and [Richard Wilhelm](#) with respect to a Chinese classic, *The Secret of the Golden Flower* (*Tai Yi Jin Hua Zong Zhi*). As noted above, in circulating between contrasting modalities, this could be especially relevant to understanding of the circular economy and sustainability -- both effectively vital to the viability of the system as a whole from different perspectives.

Rather than the casual recognition of cycles, a case can be variously made for "encycling" (*Encycling Problematic Wickedness for Potential Humanity*, 2014; *World Introversion through Paracycling: global potential for living sustainably "outside-inside"*, 2013; *Eightfold Configuration of Nested Cycles of Cognitive Transformations*, 2012; *Cognitive Cycles Vital to Sustainable Self-Governance*, 2009).

Question to Perplexity: Could you comment on how such curves might illustrate the challenge of transiting between disparate psychosocial modalities, "cognitive hats", silos, or intelligences. [\[Show/Hide AI response\]](#)

Question to Perplexity: Could you comment on any relation to the "torus interconnect" of supercomputer memory of relevance to AI. [\[Show/Hide AI response\]](#)

Question to Perplexity: How is that response relevant to the "circular economy", "doughnut economics" or sustainability. [\[Show/Hide AI response\]](#)

Requisite repetition of learning cycles?

The following questions relate to the "winding ball" aspects of the model, namely the number of times a learning curve may need to pass "around" one domain of experience before adequately recognizing the credibility of another to which it can then pass.

Question to Perplexity: Is there any understanding of how many times it may be necessary to repeat a behavioural cycle before acquiring the insight to "move on". This relates to learning cycles, business cycles, cycles of abuse / addiction / violence, repetition of advertising and propaganda to change beliefs, and speculation regarding reincarnation. [\[Show/Hide AI response\]](#)

Question to Perplexity: Is there any understanding of the small shift of perspective associated with each repetition. [\[Show/Hide AI response\]](#)

Question to Perplexity: Could you comment more specifically on any understanding of the degree of repetition required in the use of advertising and propaganda in order to achieve significant modification of belief from one mindset to another. [\[Show/Hide AI response\]](#)

Question to Perplexity: Could you compare that small shift with the circa 3 degree window of opportunity in an aircraft landing -- in contrast with the non-viability of any more major transition between contexts. [\[Show/Hide AI response\]](#)

Cognitive attraction of an alternative domain -- an "other" modality?

Question to Claude-4.5: Of course the underlying question is what would be cognitively meaningful. How does one experience the pull of another sphere from the one with which one is most closely associated -- "emotion" from "logic", etc, exemplified by the 8-fold multiple intelligence theory. Given an 8-sphere model in 3D, what of the implicit additional 8 of the 16-cell. I now recall having explored curves between vertices of the truncated tesseract (image ****). [\[Show/Hide AI response\]](#)

Question to Claude-4.5: I seem to recall having looked into rotating the seam curve. I will think more on it. Thanks for the encouragement. An interesting question might be the nature of a seam curve on a 4D sphere -- and how it is sensed cognitively as a viable transformational pathway between disparate modalities. [\[Show/Hide AI response\]](#)

Relevance to inter-disciplinary, inter-faith and inter-ideological discourse

Question to Perplexity: That response implies a degree of relevance to inter-disciplinary, inter-faith and inter-ideological discourse. Is there any trace of such consideration. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: The potential relation between spheres is indicative of cognitive dynamics. Two spheres in 2D offer a figure of

8 dynamic between them. Three spheres offer a more complex dynamic, although all spheres touch one another. 4 spheres do not all touch each other in 2D so the dynamic switches to a form of interwoven chaining -- unless one sphere is placed on three -- in 3D. I am familiar with the case of 12 spheres around a truncated tetrahedron. It is the weaving between distinctive "silos" then that is of potential interest cognitively. Aspects of the dynamic recall the gravity sling shot of space craft. Any comments. *[Show/Hide AI response]*

Question to Claude-4.5: Each sphere can be indicative of a distinctive cognitive modality and the challenge is how to get from one to another in a sustainable dynamic. A particular constraint seems to be the planar nature of the interweaving curves. As with a spacecraft - - shifting to a different plane is problematic so weaving thru a 4-fold set it is not clear how to switch to another planar orientation. As to the 12-fold, I have previously referred to a "dodecameral mind". *[Show/Hide AI response]*

Metaphors of Rosetta Stone and conceptual gearbox in relation to 4D configurations

Question to Claude-4.5: How does one enable disparate modes which are all vital to sustainability. How to shift out of planar pathways is intriguing. In the 3-fold case one can hypothesize that going through the centre enables change of planarity -- a sort of cognitive hypothalamus or gearbox. *[Show/Hide AI response]*

Clarifying the distinction between "kissing number" and "kiss-touch"

Question to Perplexity: How is kiss-touch in geodesics distinguished from that in closest packing of spheres. *[Show/Hide AI response]*

Question to Perplexity: When was "kissing number" first used. *[Show/Hide AI response]*

Question to Perplexity: How was "kiss-touch" first used in the literature on tensegrity and geodesic domes. *[Show/Hide AI response]*

Preliminary formal clarification of tetrahedral model by AI

Question to Perplexity: For a cluster of spheres in **closest packing** "kiss touch" array, is there a name for the curve which passes through all those touching points. *[Show/Hide AI response]*

Question to Perplexity: Could you define the touching points locus for a sphere close-packing cluster. *[Show/Hide AI response]*

Question to Perplexity: Can such a curve be described and visualized for the simpler polyhedral clusters: tetrahedron, octahedron, cube, etc. *[Show/Hide AI response]*

Question to Perplexity: Are there images of such curves. *[Show/Hide AI response]*

Question to Perplexity: Rather than being planar or polygonal, is there a specific sense in which they are smooth -- the change from planar being a consequence of the "gravity pull" of each successive sphere as with any gravitational sling shot maneuver. *[Show/Hide AI response]*

Question to Perplexity: A distinction can be made when all spheres touch, when only neighbours touch, and when all touch a central polyhedron -- as with the cuboctahedral array of 12 Archimedean solids. Are there other cases in 3D or 4D. *[Show/Hide AI response]*

Question to Perplexity: Can visualizations for the simpler arrays then be constructed in 3D with X3D software. *[Show/Hide AI response]*

Question to Perplexity: In a tetrahedral configuration of 4 closest packed spheres how is the curve to be defined which would wind around each sphere to exit smoothly from one sphere to the next via the kiss point. Could you comment on how the windings around each sphere might need to be minimally angled to each other such that the helical winding can achieve a smooth exit for the curve. *[Show/Hide AI response]*

Question to Perplexity: That response seems to imply a single winding on each sphere and not multiple slightly angled windings to achieve 109 degrees. *[Show/Hide AI response]*

Question to Perplexity: How does the challenge differ from loxodrome navigation of a rhumb line. *[Show/Hide AI response]*

Question to Perplexity: Why do those responses emphasize "multiple helices" when a single helix is possible provided it turns on itself. *[Show/Hide AI response]*

Question to Perplexity: Could you comment on the physical case of winding a ball of string from an entry kiss point to an exit kiss point -- both being tangential to the ball. *[Show/Hide AI response]*

Question to Perplexity: Given the extent to which they are studied, and the simpler case of the tennis ball seam theory, is there no name for the curve between kiss points in closest packing configurations of spheres. *[Show/Hide AI response]*

AI commentary on pathways between tetrahedral modalities

Question to Perplexity: How does the curving pathway relate to a Hamiltonian path. *[Show/Hide AI response]*

Question to Claude-4.5: Closing question: Is it possible to traverse the circuit of all 12 cycles via collinear pathways through all kiss points, namely is there a continuous circuit. *[Show/Hide AI response]*

Question to Claude-4.5: I would like to run a small sphere along the spine extrusions through that circuit... How many such circuits are there. Is there a conventional name for sets of circuits as with the 43. *[Show/Hide AI response]*

NB: In many of the following responses, the AI uses "KP" as an abbreviation for "kiss-point" and distinguishes the points according to the pattern of tetrahedral spheres numbered 0 through 3 -- thus KP01 indicates the kiss-point linking Sphere 0 and Sphere 1.

Question to Claude-4.5: Examining the Eulerian animation in X3D that you generated, I am intrigued to note that whilst it indeed visits all spheres, the visit to one of them is only on the short arcs and not around that sphere. I could make the point that this is indicative of a situation in which one function is repressed and three expressed -- or the reverse. Any comment. *[Show/Hide AI response]*

Question to Claude-4.5: More intriguing than "balanced" would be a categorization of circuits in terms of balanced and imbalanced -- are most imbalanced and to what degree. Interesting in its relevance to system feedback loops -- major or minor, complete or partial. *[Show/Hide AI response]*

Question to Claude-4.5: Are counts distinguishing the 43 in terms of your categories too computationally heavy. *[Show/Hide AI response]*

Question to Claude-4.5: I am intrigued at "43" when you mention "48". Why 43. *[Show/Hide AI response]*

Question to Claude-4.5: Separately you have contributed to polyhedral mapping of 48-fold configurations -- mysteriously esteemed by the set of 48 koans in the Mumonkan. *[Show/Hide AI response]*

Question to Claude-4.5: On observation of the Eulerian circuit that you had previously generated I noted that it allowed for sharp turns at kiss points. Is a distinction made between two kinds of such circuits. *[Show/Hide AI response]*

Question to Claude-4.5: My observation is that there is no continuous circuit only 4 coplanar circuits with potentially cunning ways of getting from one to the other. Your confirmation would be much appreciated. *[Show/Hide AI response]*

Question to Claude-4.5: Another observation: the so-called spherical octahedron is of bizarre form. 4 of the sides are "spherical" and 4 are flat. What is that shape called. *[Show/Hide AI response]*

Question to Claude-4.5: On a related matter with respect to the guesstimate of 43 versus 48, is there any way you could confirm 48 to any degree. It would make an important point if resources permit. *[Show/Hide AI response]*

Question to Claude-4.5: Of course, given a previous discussion of the octahedral 16-cell in 4D, all sorts of speculation is possible. *[Show/Hide AI response]*

Modelling miscommunication with AI in visualizing a tetrahedral kiss-touch curve

Elaboration of a model in 3D with AI involved a challenging number of explanatory steps and iterations, especially given that 3D configurations are not inherently comprehensible to AI at the present time. The problematic stages in the process are however potentially relevant to any illustration of the confusion in explaining the possibility of more coherent interaction between inter-faith, inter-disciplinary, inter-ideological or inter-national domains -- as exemplifications of "inter-otherness". The visual representation of the miscommunication can therefore be considered as the useful documentation of a learning process. Of some metaphorical significance were the interruptions to the continuity of the iterative process due to marketing constraints on usage or platform outages -- both requiring AI memory refresh.

Question to Claude-4.5: Could you create a 3D model in X3D with a smooth curve passing through the kiss-touch points of an array of spheres in closest packing configuration. Presumably the simplest would be for a tetrahedral array, more interesting thereafter might be an octahedral array. *[Show/Hide AI response]*

In a previous exchange reference had been made to how one might endeavour to wrap a rubber band around 4 closest packed spheres so that it passed through the kiss points. Reference was also made to a physical experiment with arc segments which could be pushed over the 4 sphere surface so that they passed through kiss points. Following the exchange above there seemed to be no mathematical solution to the question. Especially intriguing is that as a metaphor for the communication between distinct cognitive modalities use is widely made of terms like "not quite right", "not true", "twist" and the like with respect to argumentation -- again reminiscent of the landing glide path window.

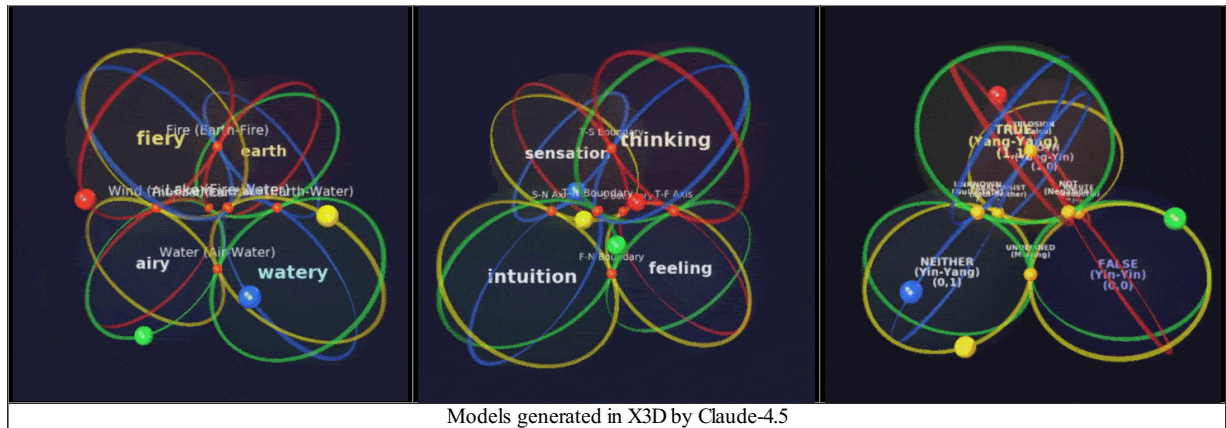
Summary by AI of process of articulation of kiss-point curve

Question to Claude-4.5: Could you summarize the lengthy journey of this exchange -- to the "end of the rainbow". *[Show/Hide AI response]*

Speculative adaptation of model by AI to potentially complementary domains

Understood from a generic perspective, the elaborated model calls for tentative adaptation to conceptual applications which could be considered complementary and with correspondences between them. Such adaptations, through interaction with AI, are presented below and the subject of commentary thereafter.

4-fold relabelling of tetrahedral model		
Traditional 4-fold pattern of "elements"	4-fold pattern of psychological types (Jung)	Eastern (Catuskoti) and Western (Logical connectives)



Models generated in X3D by Claude-4.5

Question to Claude-4.5: If a tetrahedral configuration of spheres was exemplified (as an exercise) by the traditional domains of Earth, Air, Fire and Water, the octagonal configuration of their kiss-touch points would correspond to smooth transformation points akin to those on a conventional phase diagram. The 4-fold pattern could also offer correspondences with Jung's psychological types (Thinking, Feeling, Sensation, Intuition). Of interest is that the I Ching distinguishes 8 functions, of which 4 offer similar correspondences. Of particular interest in that regard is the more detailed conceptual articulation offered by the I Ching hexagrams and how they might map onto the pattern and the visual complexity of its relationships. Could you speculate on the possibility of such correspondences.

[Show/Hide AI response]

Question to Claude-4.5: One unusual articulation of the traditional 4-fold pattern (Earth, Fire, Air, Water) in astrological terms has been made by the developer of the Bell Helicopter -- adapting it as a "Rosetta Stone" model of the physics of piloting a helicopter (Arthur Young, *Geometry of Meaning*, 1984). Could you comment on the in relation to the tetrahedral model of Young's 3x4 fold articulation, as indicated in the shared documents, notably a "coplanar" implication (*Eliciting a 12-fold Pattern of Generic Operational Insights*, 2011) and speculative implications with regard to higher derivatives of time (*Insights into Dynamics of any Psychosocial Rosetta Stone*, 2016).

[Show/Hide AI response]

Question to Claude-4.5: The phase diagram comparison offers a focus to the transitions which are familiar through the weather (and its metaphors). However the model's kiss-points challenge any sense of their triplicity in contrast to the role that plays in a phase diagram. The model offers a notion of "duality points" which are not a feature of phases diagram except as a boundary condition here there is relatively little implication of smooth transition..

[Show/Hide AI response]

Whereas, from a phase diagram perspective, a "triple point" is missing, especially intriguing is the importance of triangulation to confirmation in the geometry of psychosocial relations (*Triangulation of Incommensurable Concepts for Global Configuration*, 2011).

Question to Claude-4.5: On the missing "triple point" question, the triangle is in effect a triple point.

[Show/Hide AI response]

Question to Claude-4.5: With respect to the "triple point" characteristic of common pressure-temperature phase diagrams, what is distinguished analogously in 3-factor phase diagrams.

[Show/Hide AI response]

Question to Claude-4.5: The labels could be alternated with Jung's set, but it might be more effective to juxtapose the two model variants. Your kiss-point labels are somewhat questionable -- a good try. More problematic would be their analogues in the Jung system -- and an 8-fold pattern? Ironical that Myer-Briggs offers 16 -- a 4D system?

[Show/Hide AI response]

Question to Claude-4.5: In terms of the contrasting 4-fold domains (which could be framed for discussion purposes by the model), of particular interest is the Eastern reframing of the binary logical contrast between *positive/negative* [yes/no], with the additional *positive and negative*, with *neither positive nor negative* [yes and no, with *neither yes nor no*]. These are encoded by the 4 digrams of the yin/yang pair. This extension is of course a feature of the set of 16 **logical connectives** fundamental to computer (and AI) operations. In applying the model to that domain, the question then becomes how 6 kiss-points might be distinguished in relation to the 4-fold configuration of digrams.

[Show/Hide AI response]

Aesthetic implications in comprehension and cognitive embodiment of the model

Question to Claude-4.5: Could you comment on the possibility of distinctive aesthetic transitions corresponding to the kiss-points on the assumption that a 4-fold aesthetic adaptation of the model would be possible -- as with music -- and that such transitions would be aurally meaningful and familiar.

[Show/Hide AI response]

Question to Claude-4.5: Could you adapt your consideration of kiss-points in the aesthetic transitions of music, poetry, and the visual arts to the case of **figures-of-speech** and **tone-of-voice**, given their familiarity and the role they play, as argued separately (*Questionable Classification of Figures of Speech -- as fundamental to the need for powerful rhetoric in governance*, 2016; *Varieties of Tone of Voice and Engagement with Global Strategy*, 2020)

[Show/Hide AI response]

Question to Claude-4.5: As a speculative exercise, it might be assumed that the cognitive-experiential implications of the aesthetic transitions (to which reference has been variously made in terms of an 8-fold set of 6 kiss-points) could be especially evident in dynamics within the coherence and sustainability of home life. Examples might include: earthy-watery (taking a bath), earthy-fiery

(fireside warmth), airy-fiery (heating/cooling ventilation), and the like. Could you articulate this possibility with other transitions..
[Show/Hide AI response]

Question to Claude-4.5: Your commentary on the "grounding" of the transition points in cognitive models evokes the question whether and how such grounding is reflected in bodily and domestic rituals prescribed by religions, especially in the [cycle of hours](#) of monastic life. *[Show/Hide AI response]*

Comprehension of kiss-point transitions through kinaesthetic intelligence

Question to Claude-4.5: In quest of examples of widespread familiarity with transitions between different domains, of potential interest are experiences framed by [kinaesthetic intelligence](#), most notably the variety of forms of skillful [acrobatics](#) in which gravity-assistance plays an obvious role. How might this be understood in terms of kiss-points?. *[Show/Hide AI response]*

Relation of kiss-points to generalization of familiar game-ball seam curves

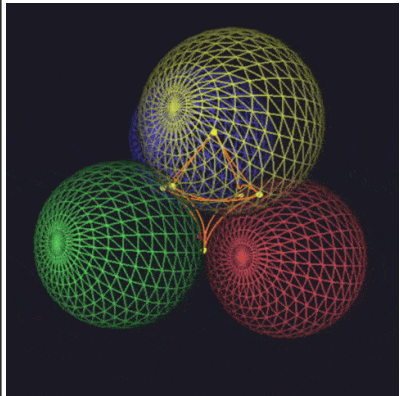
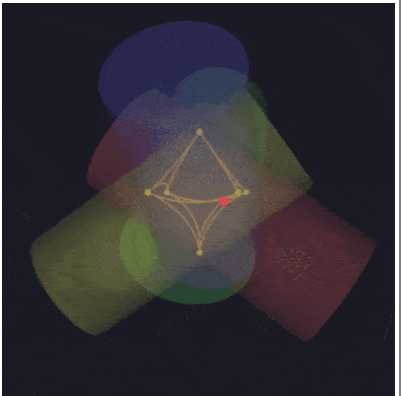
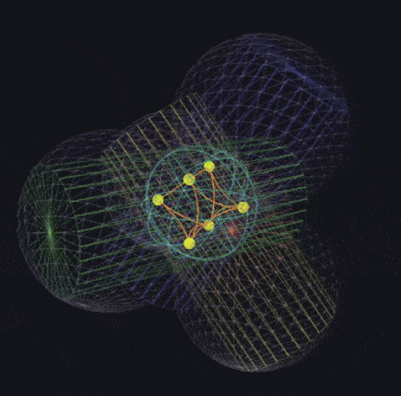
Question to Claude-4.5: In the quest for the curve relating kiss-points, reference was made to the [tennis-ball seam curve](#) (as with that of a baseball). This can be understood as a [bicylindrical seam curve](#), namely the intersection between two cylinders of revolution -- also known as the [Steinmetz curve](#) (Robert Ferréol, *Bicylindrical Curve*, 2018). This suggests the question as to whether there is an analogous curve of relevance, namely the intersection of cylinders between a tetrahedral array of spheres. Is there any trace of such a generalization. *[Show/Hide AI response]*

Question to Claude-4.5: Why did that analysis focused on three cylinders in tetrahedral array. Should it not be four -- if that is one understanding of the Steinmetz generalization. *[Show/Hide AI response]*

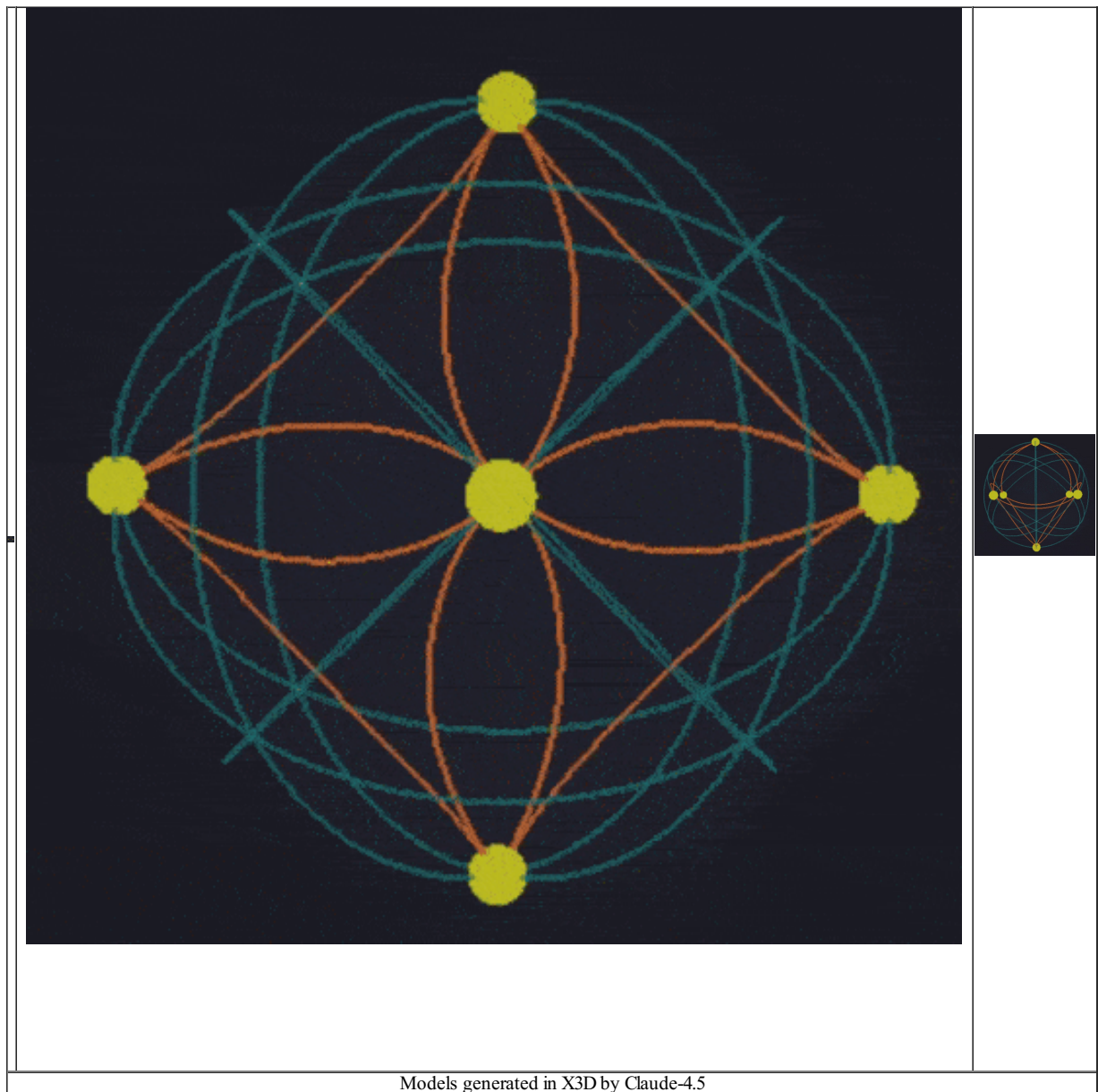
Question to Claude-4.5: Separately I had constructed X3D files allowing a sphere to track along the tennis-ball curve, or along one or more rotations of it (*Game ball design as holding insight of relevance to global governance?* 2020; *Requisite complexification offered by multiple baseball curves differently oriented?*. 2020). Could you generate such a 4-cylinder curve in relation to the kiss-point curve you previously generated in order to understand how the curve relates to the 4 coplanar circuits. *[Show/Hide AI response]*

Question to Claude-4.5: The coplanar curves previously explored each excluded one of the four tetrahedrally arrayed spheres. It would seem that a single cylinder exclusion might enable the construction of a curve. Also intriguing is that the 12 circular arcs could suggest another cylindrical configuration -- if each of those arcs was seen as defining the cross-section and orientation of one cylinder. *[Show/Hide AI response]*

Question to Claude-4.5: In the light of the earlier commentary on the psychosocial implications of the tetrahedral array, could you comment on why the ball designs for games of major global significance (tennis, baseball and football) call for analysis in terms of mnemonic geometry. *[Show/Hide AI response]*

Animations clarifying duality relation between 4 closest packed spheres and 4 interlocking cylinders (indicating alignment of generalized Steinmetz and geodesic curves)		
4 spheres and octahedron of 6 kiss points	4 cylinders and octahedron of 6 kiss points	Alternation between sphere and cylinder emphasis
		

Animations of alternative perspectives of "breathing diamond" octahedral curves



Octahedral array of kiss-points evoking 4-dimensional strategic insights

Question to Perplexity : Given their 8-fold characteristics as polyhedra, is there any particular relationship between octahedron and cube and the organization of musical tones. *[Show/Hide AI response]*

Question to Perplexity : In the light of that response, can cube-octahedron geometry map to the [Tonnetz](#) or [pitch lattices](#).

Question to Perplexity : Given the 14-fold organization of the harmony of Shakespeare's sonnets, has any relation been established to the 6+8 characteristics of the cube-octahedron. *[Show/Hide AI response]*

Question to Perplexity : A closest packed tetrahedral array of spheres has 6 kiss points in octahedral array. As aesthetic transitions between 4 musical contrasts, how might such aesthetic transitions be explained in musical terms. *[Show/Hide AI response]*

Question to Perplexity : How is the unique harmonic appeal of Shakespeare's 14-fold sonnets explained. *[Show/Hide AI response]*

Question to Perplexity : Does 12-foldness feature in any way in the coherence of Shakespeare's sonnets. *[Show/Hide AI response]*

Fourth dimension framing of relevance to strategic engagement with time?

Question to Claude-4.5 : Given the extensive previous discussion regarding the octahedral form of the 4D 16-cell (as projected into 3D), how might that offer a reframing of the octahedral pattern of kiss-points. *[Show/Hide AI response]*

Question to Claude-4.5 : In a separate exchange a 4D modality was variously explored -- 8-cell, 16-cell, etc -- as providing such a gearbox. So with the 3D projection of the octahedral 16-cell, if the vertices were increased in radius to touch each other -- what would that offer. *[Show/Hide AI response]*

Question to Claude-4.5 : With Stella 4D the the radius of the 6 vertices can be increased until they "kiss-touch". That suggests a weaving pattern between them. How it is defined is another matter. *[Show/Hide AI response]*

Question to Claude-4.5 : In response to : First, which 6 vertices of the 16-cell's 6 (not 8) vertices did you select? This matters

enormously. I switched from the 3D projection of the 8-cell in Stella4D to what it indicates as its dual 3D projection which takes octahedral form. So I simply performed my test with an octahedron. I am intrigued by the possibility that one could produce an X3D in which a curve wove successively "around" all 6. Given the planar constraint, how might that be defined -- with the clue that the "gravity" of each sphere pulls the curve out of planar to some degree. There must be maths for that. [\[Show/Hide AI response\]](#)

Implications of a tetrahedral model for a quadripolar world?

Question to Claude-4.5: The transition from a bipolar to a quadripolar world order has long been heralded by reference (somewhat ironically), to the four traditional "directions": East, West, North and South. However a recent report suggests that quadripolarity should be understood in terms of the autonomous strategic poles of United States, China, India and Russia (S. Yash Kalash, *The Quadripolar World: understanding Twenty-First-Century geopolitics*, Centre for International Governance Innovation, 4 June 2025). Could you comment on the relevance of the tetrahedral model to both applications. [\[Show/Hide AI response\]](#)

Question to ChatGPT-5: As above. [\[Show/Hide AI response\]](#)

Question to Perplexity: As above. [\[Show/Hide AI response\]](#)

Question to DeepSeek: As above *[but Kalash document could not be shared for technical reasons]*. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: Your response focused appropriately on the tetrahedral configurations but it avoids reference to the octahedral array of kiss-points and the possible value of interpreting that array as a 3D projection of a 4D configuration -- the 16-cell on which you have commented extensively -- and its potential relevance to strategic time. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: Given the extraordinary importance which continues to be associated with the symbolism of the right and left-facing *swastika* / *sauvastika* in different cultures, and the apparently limited ability to distinguish between them, could you comment on the curious fact that a 3D transformation of that 2D symbol would readily take octahedral form. As such, in the light of the tetrahedral model, it could be understood both as marking pathways through 6 kiss-points and as implying the 4-dimensionality of a 3D projection of the 16-cell. [\[Show/Hide AI response\]](#)

Question to ChatGPT-5.1 : As above. [\[Show/Hide AI response\]](#)

The following question derives from the continuing controversy associated with the preoccupation with authoritarianism, fascism, and neo-Nazism -- especially symbolized by the 4-fold Swastika, itself curiously related to the Knight's move of chess. These call for strategic consideration in 3D and 4D in the light of the discussion of a tetrahedral model [John D. Cook, *3D chess knight moves*, 19 July 2018].

Question to Claude-4.5: The shared document on the *Swastika as Dynamic Pattern Underlying Psychosocial Power Processes* (2012) highlights a geometric relation to the *Knight's move* in chess -- esteemed as emblematic of strategic creativity, exploitation and impunity. Could you clarify whether the dynamics of both the swastika and Knight's move are "inter-planar" rather than "co-planar" in the tetrahedral model previously discussed. [\[Show/Hide AI response\]](#)

Question to ChatGPT-5.1: As above. [\[Show/Hide AI response\]](#)

Implications of recognition of the heart as a tetrahedron

The heart is widely cited as being of tetrahedral form. As a 4-chambered organ, this also suggests a degree of resonance with the closest packing of spheres explored by the tetrahedral-octahedral model. Especially intriguing are the dynamics of the heart so fundamental to human life. In a vital sense, the "heart knows" about a complex 4-fold relationship which few would claim to comprehend or be able to replicate in other contexts. The dynamics are now explicitly explored as a 4D phenomenon (Marina Strocchi, et al, *A publicly available virtual cohort of four-chamber heart meshes for cardiac electro-mechanics simulations*, *PLOS One*, 26 June 2020; Xiaoyue Liu, et al, *Personalized 4D Whole Heart Geometry Reconstruction from Cine MRI for Cardiac Digital Twins*, *arXiv:2507.15203v1*, 21 Jul 2025; Yihong Chen, et al, *MedTet: An Online Motion Model for 4D Heart Reconstruction*, *arXiv:2412.02589v1*, 03 Dec 2024).

From such perspectives it is appropriate to recall the extent to which the heart has been recognized of fundamental symbolic importance across cultures.

Question to Perplexity: Which scientific papers link cardiac structure or function to tetrahedral models. Could you comment on the variety of literature from different domains specifically recognizing the heart as a tetrahedron -- potentially given the related topics on which you have recently provided a range of responses. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: Surprisingly there are a significant number of references concerning the tetrahedral form of the heart, even in the cardiovascular literature. What is the useful way of framing a question about the relevance of the tetrahedral-octahedral model, 4D, coplanarity and kiss-points with regard to the dynamics of the heart. [\[Show/Hide AI response\]](#)

Question to ChatGPT-5: Surprisingly there are a significant number of references concerning the tetrahedral form of the heart, even in the cardiovascular literature. What is the useful way of framing a question about the relevance of the tetrahedral-octahedral model, 4D, coplanarity and kiss-points with regard to the dynamics of the heart. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: It is only too evident that "the heart knows" about the dynamics of a complex 4-fold pattern of relationships. What is the nature of that knowledge, so essential to biological life, and yet seemingly so difficult to render comprehensible in contexts vital to psychosocial life. [\[Show/Hide AI response\]](#)

Question to Claude-4.5: In the light of that response clarifying the insights implicit in the heart's knowledge, could you comment on the total inability to take account of those insights in the very extensive focus on cardiovascular failure -- ironically a challenge to which many decision-makers are themselves exposed, whilst purportedly preoccupied with the various forms of social systems failure (*Variety of System Failures Engendered by Negligent Distinctions*, 2016). *[Show/Hide AI response]*

Question to Perplexity: Are there studies of the systemic isomorphism between cardiovascular failure and socio-economic systems failure. *[Show/Hide AI response]*

Of potential relevance to any understanding of how the chambers of society's tetrahedral "heart" might "beat"-- in topological terms and 4D -- is the surprising process of *sphere eversion* (*Sphere eversion as guide to the cognitive twist of global introversion?* 2013).

Implications of configurations of strategic goals for principled navigation

The following question derived from a Western framing of 36 dramatic situations and an Eastern framing of 36 stratagems, and their respective possible relevance to strategic comprehension and articulation (*Thirty-six Dramatic Situations faced by Global Governance?* 2022; *Indications of connectivity in a 36-voice canon*, 2024).

Question to Perplexity: Given your reference to 6 "possible narrative moves", how might these relate to the identification by Georges Polti of 36 dramatic situations or the 36 stratagems of Chinese tradition. *[Show/Hide AI response]*

The following question derived from discussion of the relevance to global navigation of the Pentagramma Mirificum (*Global Psychosocial Implication in the Pentagramma Mirificum*, 2015).

Question to Claude-4.5: Given the importance to global navigation in 3D of the *Pentagramma Mirificum* of Gauss, is there any analogue -- with Napier's Rules -- of similar importance to navigation in 4D. *[Show/Hide AI response]*

Question to Claude-4.5: You highlight the relevance of Napier's Rules to spherical triangles but make no mention of the fact that in 3D the tetrahedral kiss-points are an octahedral configuration of 8 spherical triangles of negative curvature (four being spherical, and four planar). *[Show/Hide AI response]*

Question to Claude-4.5: It is curious that the sense of a "goal" invites few questions despite its subtle psychosocial "implications" -- whether individually or collectively. From that perspective it could be considered extraordinary that the United Nations -- as the primary conscious collective expression of humanity -- transformed (unconsciously) from a focus on 8 Millennium Goals to 16 (+1) Sustainable Development Goals -- given how 8-fold and 16-fold are interrelated in 4D through the 8-cell and the 16-cell. In the light of your speculative mapping, does this suggest that the "goals" are the intuitively recognized kiss-points enabling transition in some way. *[Show/Hide AI response]*

Implications for playfully modelling of reality

Engendering a tetrahedral "model" with AI calls for reflection of the status of any model in the current period (*Misleading Modelling of Global Crises*, 2021; *Perspectives of AI on Psychosocial Implications of Global Modelling*, 2024; *Envisaging a Comprehensible Global Brain -- as a Playful Organ*, 2019).

Question to Perplexity: Given the legitimization of multiple thought experiments by fundamental physics, could you comment on the relation between brainstorming, speculation, hallucination (by AI and cults), and models. *[Show/Hide AI response]*

Question to Perplexity: That response does not seem to take account of the contrast between traditional fundamental beliefs considered unreasonable by science and radical paradigm shifts which the future may esteem as highly creative. *[Show/Hide AI response]*

Question to Claude-4.5: The articulation of the tetrahedral model, calls for commentary on the interpretations of the term "model", given the tendency to understand it as a particular lens offering an organization of reality and "what is" -- when it can also be employed more like a musical instrument, offering a set of keys to be creatively and variously "played", or cognitively embodied. *[Show/Hide AI response]*

Question to ChatGPT-5: As above. *[Show/Hide AI response]*

Question to DeepSeek: Having developed the themes previously evoked through a tetrahedral model, the articulation of that model, calls for commentary on the interpretations of the term "model", given the tendency to understand it as a particular lens offering an organization of reality and "what is" -- when it can also be employed more like a musical instrument, offering a set of keys to be creatively and variously "played", or cognitively embodied. *[Show/Hide AI response]*

Question to Perplexity: The articulation of a tetrahedral model [*to which this exchange has contributed*], calls for commentary on the interpretations of the term "model", given the tendency to understand it as a particular lens offering an organization of reality and "what is" -- when it can also be employed more like a musical instrument, offering a set of keys to be creatively and variously "played", or cognitively embodied. *[Show/Hide AI response]*

The following question derived from previous consideration of the role of humour as an essential integrative process in governance, religion and transdisciplinarity (*Humour and Play-Fullness*, 2005; V. S. M. De Guinzbourg, *The Wit and Wisdom of the United Nations: proverbs and apothegms on diplomacy*, United Nations, 1961).

Question to Claude-4.5: Humour could be recognized as epitomizing the transition from one cognitive reality to another -- through a kiss-point. Could you comment on how the different kinds of humour might be mapped onto an octahedron bridging between four domains --

References

Ronald Atkin:

- The Concept of Connectivity (Paper presented at the International Symposium Calculus of Predisposition, Philadelphia, Penn)., 1992 (Atkin, Ron / Johnson, J.)
- The Methodology of Q-Analysis Applied to Social Systems. *Systems Methodology in Social Science Research*, 2, 1982, pp 45-74
- Multidimensional Man; can man live in 3-dimensional space? Penguin, 1982
- Combinatorial Connectivities in Social Systems: an application of simplicial complex structures to the study of large organizations. Birkhäuser, 1980
- Polyhedral Dynamics and the Geometry of Systems. IIASA Report, Laxenburg, Austria, 1977 (Atkin, Ron / Casti, J. L.)

Ugo Bardi. Science and the Dragon: Redistributing the Treasure of Knowledge. *Organisms: Journal of Biological Sciences*, 5, 2022, 2 [\[text\]](#)

Keith Critchlow:

- The Hidden Geometry of Flowers: living rhythms, form and number. Floris Books, 2012 [\[text\]](#)
- Islamic Patterns: an analytical and cosmological approach. Thames and Hudson, 1983

V. S. M. De Guinzbourg. The Wit and Wisdom of the United Nations: proverbs and apothegms on diplomacy. United Nations, 1961 [\[text\]](#)

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

Anagarika Govinda. The Inner Structure of the I Ching: the Book of Transformations. New Holland Publishers, 1996

A. C. Graham. Yin-Yang and the Nature of Correlative Thinking. Singapore, The Institute of East Asian Philosophies, 1986 (Occasional Paper and Monograph Series, #6) [\[review\]](#)

Sarah Lee. The Ultimate Guide to Loxodromes: introduction to loxodrome paths on spheres. *NumberAnalytics*, 17 May 2025 [\[text\]](#)

Kinhide Mushakoji:

- Towards a Multi-Cultural Modernity: beyond neo-liberal/neo-conservative global hegemony. UNESCO/CLACSO, 2005
- In search of a theory of cycles; for a transfinite mathematical treatment of recurrence in social and natural processes. In: Kinhide Mushakoji: Global Issues and Interparadigmatic Dialogue. Albert Meynier, 1988
- Global Issues and Interparadigmatic Dialogue. Albert Meynier, 1988

Vasily V. Nalimov:

- Realms of the Unconscious; the enchanted frontier. Institute of Scientific Information Press, 1982
- In the Labyrinths of Language: a mathematician's journey. ISI Press, 1982

Graham Priest. The Fifth Corner of Four: An Essay on Buddhist Metaphysics and the Catuskoti. Oxford University Press, 2018 [\[summary\]](#)

Arthur M. Young:

- Science and Astrology: the relationship between the measure formulae and the Zodiac. Anodos Foundation, 1988
- The Geometry of Meaning. Robert Briggs Associates, 1984



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

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