



14 February 2026 | Draft

Visual Articulation in 3D of Heartfelt Concerns with AI

Implications of a coaction cardioid in patterns of psychosocial exploitation and connectedness

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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.

Show/Hide All AI Responses

Introduction

The erosion of trust and commitment is currently of considerable concern with respect to long-term international treaties and "special relationships". A case was previously made for comparing the acceptability of such breaches by comparison with the mindset regarding marital commitments "[until death do us part](#)" -- in the light of the incidence of [divorce](#), notably in the USA. Such breaches also merit exploration in the light of widespread concern with current scandals of elite [pedophilia](#) -- exemplified by the role of [Jeffrey Epstein](#) and the challenges to Western elites of the release of the [Epstein files](#) -- however questionably and heavily redacted are those released (*Geopolitical Breach of Commitment in the Light of Divorce, Pederasty and Pedophilia*, 2026).

That exercise, together with its visualizations with the aid of AI, concluded by noting the unexplored *Recognition of experiential perspectives of predator and prey within a coaction pattern* (2026). Although highlighted in declarations and anecdotes, these had not evoked a more systematic approach to their cognitive implications, whether individually or collectively. Reference was made to the possibility of framing them more generally through the coaction cardioid elaborated by [Edward Haskell](#) in his exploration of the predator-prey dynamic (*Full Circle: The Moral Force of Unified Science*, 1972), as developed by Timothy Wilken (*The Relationship Continuum*, 2002; *Synergic Containment of Adversary Events*, 2023). This had been adapted to the challenges of sustainability (*Cardioid Attractor Fundamental to Sustainability: 8 transactional games forming the heart of sustainable relationship*, 2005). In a previous exchange with AI the memorability of the cardioid dynamic had been extensively evoked (*Modes of memorability of complexity distinguished in a "commemorative cardioid"*, 2023).

There is a degree of irony that the commitment concerns have arguably peaked at a time in which a heartfelt perspective is celebrated worldwide (under considerable commercial pressure) through engagement with Valentine's Day -- and the arrows of Cupid with which it is iconographically associated.

Aside from the considerable preoccupation with the cardiovascular health of individuals, the heart is widely employed as a fundamental symbol of healthy emotional relations, particularly in framing the compassion for others -- as in Christian references to the "Sacred Heart". The dynamics of the heart invite exploration of the systemic insights which they may imply or can be considered to represent in some way, as

discussed with respect to the *Heartfelt dynamics of psychosocial significance (Comprehension of the Sustainability of Elusive Fourfold Dynamic, 2025)*.

Especially curious is widespread support for policies with regard to "others", framed by critics with the metaphorical reference to "heartless" -- as contrasted separately with references to "headless" (*Encompassing the "headless hearts" and "heartless heads" through their dynamic entanglement, 2018*). Given anxieties expressed globally with regard to nuclear war -- and World War III -- the collective stress can be speculatively associated with a trigger for *Armageddon*, however that singularity might be understood (*Spontaneous Initiation of Armageddon -- a heartfelt response to systemic negligence, 2004; Emerging Memetic Singularity in the Global Knowledge Society, 2009*).

The following exercise takes the exploration of the potential cognitive and symbolic implications of the heart even further in the light of the degree to which it features in the *playing card suits* familiar worldwide -- as previously considered (*Distinguishing normality using playing card suits as a pattern language, 2015; Cognitive engagement with complexity through articulation of the heart pattern in playing cards, 2018*). The suggestion is that such familiarity is indicative of an intuitive recognition of systemic dynamics -- as yet to be comprehensibly articulated -- namely a pattern of connectedness.

The facilities of AI are employed experimentally below to develop visual animations which facilitate such comprehension -- if only for mnemonic purposes and to frame more focused discussion. By integrating the predator-prey dynamics framed by Haskell and Wilken, such animations are seen as relevant to "predation" as practiced by individuals and collectives in their problematic treatment of others -- allowing for subtler understanding of the complicity of all..

That association is further developed through recognition that the collective analogue to individual pedophilia, understood in the light of the *predator-prey* dynamic, could be appropriately reframed as a form of reversion to the "hunter-gatherer" dynamic (metaphorically understood) -- especially in the light of the human trafficking dimension that has now become only too evident. It also proved appropriate to generalize the argument beyond the initial focus to address "producer-consumer" and "love-hate" dynamics -- especially in the light of the current preoccupation with "hate-speech" in the absence of any legislative reference to "love-speech".

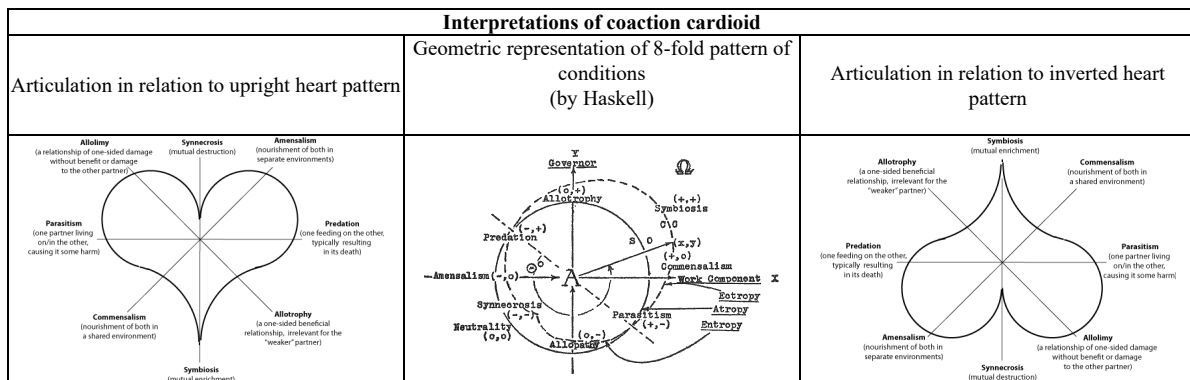
The coaction cardioid framework evoked insightful commentary on the reframing the desperate quest for unity in governance and on the potential implications for comprehension of future institutional viability.

The initial exchanges with AI reproduced in what follows include the concluding exchanges of the previous exercise -- in order to provide continuity to the argument (which did not include the associated images, as presented below). AI responses have been included (rather than excluded) as an indication of the animation design process (of potential interest to some). As previously noted AI responses could be edited for various purposes. Their presentation below bears witness to the potential of such exchanges at this time -- as a means of encouraging further iterations by readers. The AI proved to be appropriately complicit in the aesthetic conceit offered symbolically by the date of posting.

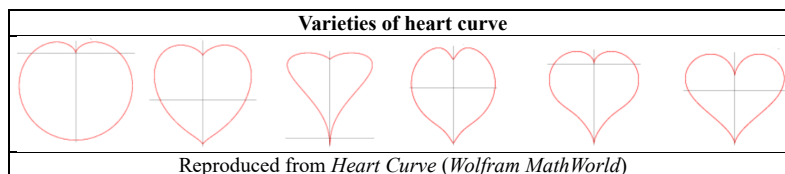
Clarification of coaction context

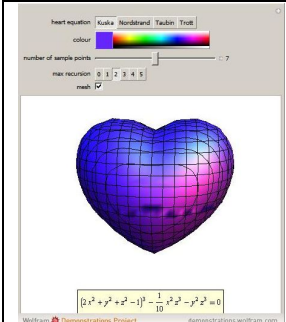
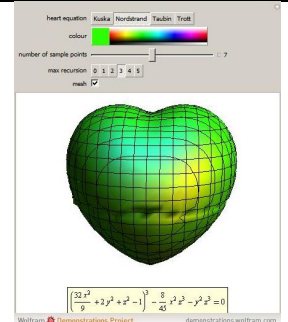
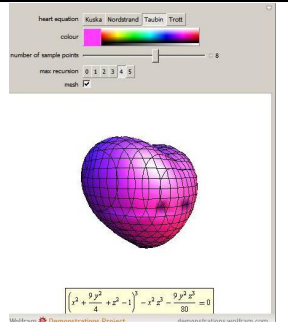
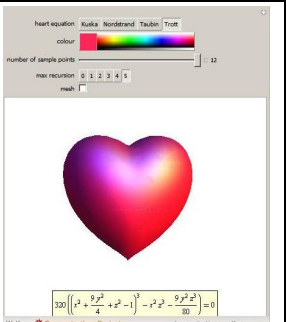
Question to Claude-4.6: Despite use of pedophilia as the point of departure, the various insightful articulations are experiential steps removed from what "predators" and "prey" variously want from the dynamic. That recalls Edward Haskell's work as described in the shared document (*Cardioid Attractor Fundamental to Sustainability: 8 transactional games forming the heart of sustainable relationship (2005)*). It is curious that there seems to be no articulation of the existential framings of both parties. *[Show/Hide AI response]*

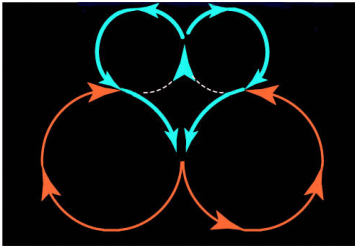
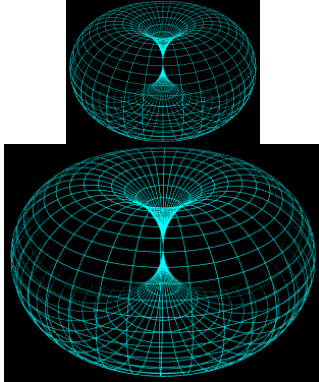
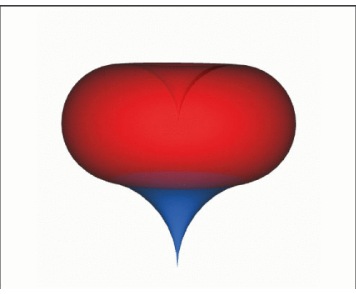
The following images are reproduced from *Encompassing the "headless hearts" and "heartless heads" through their dynamic entanglement (2018)*



As defined by mathematical equations, there are *several forms of "heart curve"*, as reproduced below from *Heart Curve (Wolfram MathWorld)* where their respective equations are indicated.



Heart surfaces indicative of radical location of "significant others"?			
Screen shots of interactive demonstration of 3D heart shapes based on different equations			
Equations for Valentines from the Wolfram Demonstrations Project, by Michael Chroucher after work by Eric W. Weisstein and Michael Trott			
Kuska formula	Nordstrand formula	Taubin formula	Trott formula
			

Heart-pattern using juxtapositioned cross-sections of two 3D tori		
(Reproduced from Cognitive heart dynamics framed by two tori in 3D , 2016)		
Dynamics defining 4 conditions	2 horn tori of major radius in proportion of ϕ	Embedding within 2 contiguous tori
		
	Adaptation, with permission, of animation by Wolfgang Däumler (Horn Torus)	

Question to Claude-4.6: Your response is a valuable development of the theme. It would be useful to attempt the mapping -- although it is frustrating that there seems to have been no attempt to "tell it" from the predator's perspective and from the prey's perspective. What are the attractors and constraining experiences. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: The following screen shots result from the progressive development of the exchange (as reproduced below). [\[Show/Hide AI response\]](#)

Indicative views of toroidal heart in 3D		
(partial screen shots of interactive model generated by Claude-4.6)		
Upright -- conventional view	Inverted view	Side view
Interactive model in 3D of toroidal heart	Interactive model in 3D of toroidal heart	Interactive model in 3D of toroidal heart
Interactive 3D version		

Indication of 8 coaction sectors from polar view of toroidal heart in 3D (partial screen shot excluding complementary info panels)
Indication of 8 coaction sectors from polar view of nteractive model in 3D of toroidal heart
Interactive 3D version

Role of the heart -- symbolic and otherwise

Question to Claude-4.6: There is considerable irony to the fact that pedophilia can be framed both in terms of "affairs of the heart" (however questionably) and with a coaction cardioid. It is especially curious that the heart is then the primary symbol of any romantic dynamic (*Implied dynamics of the heart symbol -- the "cardiac cycle" otherwise interpreted*, 2018; *Heartfelt dynamics of psychosocial significance*, 2025). It is employed in framing a fundamentally problematic dynamic of the times (*Encompassing the "headless hearts" and "heartless heads" through their dynamic entanglement*, 2018). Could you comment on the focus on the "heart" as symbolizing an underexplored dynamic vital to a sustainable relationship. [\[Show/Hide AI response\]](#)

Dynamics of the heart as a strange loop?

The following query was evoked by the challenge to collective organization of [Douglas Hofstadter's](#) concept of "strange loops", as previously discussed (*Sustaining a Community of Strange Loops: comprehension and engagement through aesthetic ring transformation*, 2010).

Question to Claude-4.6: Could you comment on how the inadequately recognized cyclic dynamics of the coaction cardioid and of the heart could be clarified by the work of Douglas Hofstadter (*I Am a Strange Loop*, 2007; *Surfaces and Essences: analogy as the fuel and fire of*

thinking, 2013). [Show/Hide AI response]

Representation possibilities and constraints of web technology

In the light of that response, the possibilities and constraints of web technology are intimately related to the challenge of enabling and enhancing comprehension and memorability -- as "cognitive prosthetics". Hence the relevance of the following query.

Question to Claude-4.6: Could you comment further on the possibilities and constraints of Three.js or a WebGL framework. [Show/Hide AI response]

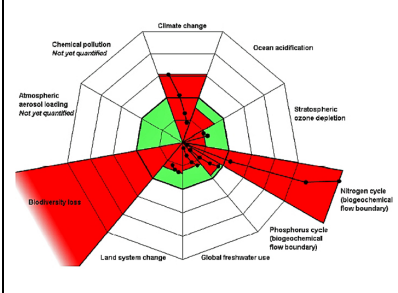
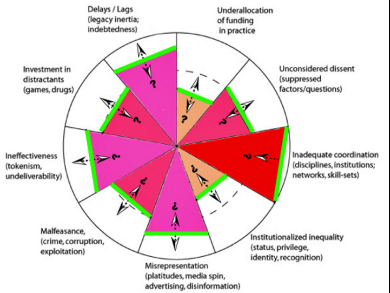
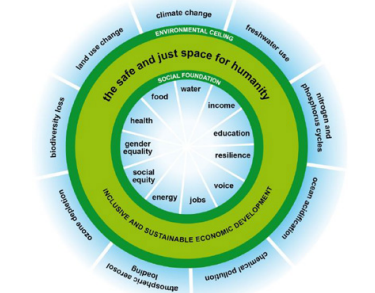
Question to Claude-4.6: It is appropriate to stress the cognitive challenge of any device -- as exemplified by that of learning a musical instrument or learning to fly a helicopter. Phase 1, as you envisage it, would indeed be a test of how readily cognitive engagement is maintained or lost. [Show/Hide AI response]

Question to Claude-4.6: A difficulty with the 8-colour contrast is that it is less evident in 3D than when rotated to a top-down "2D" polar view (image) -- an extra preset? [Show/Hide AI response]

Question to Claude-4.6: The polar preset could offer both top-down and bottom-up. Of interest in that "2D" view is the perspective offered by rotating the sense in which the "line" effectively splits the configuration into two parts. If the line were to rotate it would successively split the 8 segments of the "concentric circles" into distinctive parts. The colour contrast remain necessarily subtle. [Show/Hide AI response]

Question to Claude-4.6: One initial thought -- but perhaps questionable -- is to "simulate" flows between the "ventricles". But how to do this meaningfully? Another thought is that there is one static line in the polar views and one rotating line. The latter could be dropped to allow the former to rotate through the different conditions. [Show/Hide AI response]

Relevance of a toroidal framing beyond doughnut economics

Questionable use of 2D imagery of multimensional challenges		
Nine Planetary Boundaries	Nine Remedial Capacity Boundaries	Oxfam Doughnut
		
Reproduced from <i>Planetary Boundaries: exploring the safe operating space for humanity</i> (2009)	Reproduced from <i>Recognizing the Psychosocial Boundaries of Remedial Action</i> (2009)	(from Kate Raworth, <i>A Safe and Just Space for Humanity: can we live within the doughnut?</i> , 2012).

The following query was evoked in the light of previous consideration of the torus as a template (*Imagining Toroidal Life as a Sustainable Alternative*, 2019) -- beyond the conventional framing offered by [doughnut economics](#) (Kate Raworth, *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*, 2017). The 2D imagery is comparable to that indicative of the 9 [planetary boundaries](#) from an environmental perspective &&

Question to Claude-4.6: The focus on a 2D coaction cardioid cycle is called into question by the 3D toroidal visualizations in the 2018 paper shared in this exchange. The heart is obviously 3-dimensional (at least). What might that imply for any 3D animation. [Show/Hide AI response]

Question to Claude-4.6: The documents of relevance to a toroidal perspective are: *Imagining Toroidal Life as a Sustainable Alternative* (2019) and *Framing Cognitive Space for Higher Order Coherence* (2019), with the latter noting the [Toroidal constraint -- nuclear fusion as metaphor of cognitive fusion](#). [Show/Hide AI response]

Reconciling representational feasibility with comprehensibility

Question to Claude-4.6: It would seem that this project is best understood as an exploration of possibilities which may or may not reconcile technical feasibility and meaningfulness (variously and in response to different preferences). That way any "flow between ventricles" can be presented speculatively (if only as a technical possibility) leaving it to (some) users to determine whether that is meaningful. But it would indeed be best to focus on the existing Phase 1 model. [Show/Hide AI response]

Question to Claude-4.6: The labelling is vital to engage "predators" and "victims". As it stands Wilken's articulations remain somewhat obscure. Modifying "win" to "predator wins", etc is an improvement, but then there is a problem with "draw" -- maybe "both draw", although that is a form of tautology. [Show/Hide AI response]

Question to Claude-4.6: My preference is for more explicit labelling: Symbiosis: *both thrive*. Synnecrosis: *both suffer*. Parasitism: *predator suffers/prey thrives*. Predation: *predator thrives/prey suffers*. Commensalism: *predator thrives/prey unaffected*. Amensalism: *predator unaffected/prey suffers*. Allotrophy: *predator unaffected/prey thrives*. Allopathy: *predator suffers/prey unaffected*. Perhaps curiously missing is "neither suffers" and "both unaware". [Show/Hide AI response]

Question to Claude-4.6: What do you see as a Phase 2. [Show/Hide AI response]

Question to Claude-4.6: As indicated, this is an experimental offering for user reflection. [Show/Hide AI response]

Question to Claude-4.6: How best to suggest what meaning is to be inferred. *[Show/Hide AI response]*

Question to Claude-4.6: That said the systemic issue is how does that arrow movement enable a sense of what systemic dynamics. Should the arrows delineate the basic heart through their movement, as they do. Why do they not pass along the larger circles rather than reversing. Are there "implicit" portions of the cycle. Should there be toggles for alternative movements. Another reflection is whether Haskell's 12 distinctions could be understood in terms of Young's distinctions. *[Show/Hide AI response]*

Question to Claude-4.6: A switch between modes could be indicated by changing the arrow colour (explicit vs implicit). Again it is a question of what possibilities are suggested. So yes to the toggling. I was not aware of Young's toroidal representation. But given his zodiacal connotations, does this suggest that Haskell's conditions generalized correspond in some way to Young's condition generalized -- with the problem that these abstract from the experiential significance. *[Show/Hide AI response]*

Coaction in relation to a tetrahedral configuration of spheres

Question to Claude-4.6: In an earlier exchange with you, the focus was on the "kiss-touch" of 4 equal spheres in a tetrahedral (closest packing) configuration which reconciled the 8-fold and the 12-fold. Here we are presenting 4 circles rather than 4 spheres (*The Secret Pathway between Configurations of Otherness? Mnemonic geometry clues on how to kiss-touch and make-up*, 2025). Clearly more thought is possible -- the heart plane is a kind of cross-section of those 4 spheres. *[Show/Hide AI response]*

Question to Claude-4.6: In the earlier exchange, with 4 equal spheres in kiss-touch configuration, a distinction was made between 12 partial circuits -- an outer 4 in each case and an inner 4 (defining an "indented" spherical octahedron between the 6 kiss-touch points). The current model (with 2 sets of 2 apparently unequal circles) is effectively a 2D cross-section of a tilted 4-sphere model such that the upper (or lower) spheres are more distant. That said, it would seem that more reflection is required before determining how to move forward -- unless you have any suggestions. *[Show/Hide AI response]*

Strategic patterns of 12-foldness?

This query was evoked by the extent to which preference is widely given to 12-fold articulations with strategic and organizational implications (*Checklist of 12-fold Principles, Plans, Symbols and Concepts: web resources*, 2011; *Eliciting a 12-fold Pattern of Generic Operational Insights*, 2011).

Question to Claude-4.6: In the (potentially dubious) quest for how the 12-fold might be related to that animation, the longer portion of each of the 4 circles could be recognized as composed of 2 parts, distinguished by changes of orientation. So the top left circle has a longer arc "open" to the right, and a shorter portion "open" to the bottom. Each circle then has 3 distinct arcs, making 12 all together. Presumably they could be distinctively coloured at some stage. This echoes to some degree the 12-fold set of cycles in the tetrahedral kiss-touch model. The contrasting models could be (meditatively) related by recognizing that the 2D heart plane is a tilted perspective on the kiss-touch model. In fact one could imagine the curves you are animating could even be curved surfaces rather than lines. *[Show/Hide AI response]*

Question to Claude-4.6: It is relevant to note that it is difficult to make a comprehensible 12-fold colour distinction in such an animation. . Your pre-cautious 3D reservation is appropriate and could be left for commentary rather than implemented. *[Show/Hide AI response]*

Question to Claude-4.6: A future development could indeed allow users to expose themselves optionally to 12 colours. The irony is the [Miller \(7 plus/minus 2\) constraint](#) on 12-fold system comprehension. At this point it is more a question of how many nodes might be added to mark the change of inflection -- just one per circle, or including the tangential points (making 8 in all). *[Show/Hide AI response]*

Requisite combinatorial perspective on pattern connectivity?

Question to Claude-4.6: In exploring these possibilities, we may have been approaching the matter in a too narrow manner. Should the question have been in how many ways can 1 (or 2 or 4) arrows trace through the pattern -- before deciding on colour changes of the arrow(s). Is this a trivial question mathematically. *[Show/Hide AI response]*

The following query was evoked by an [earlier exploration](#) of the interrelation of three disparate 36-fold patterns (Georges Polti, *The Thirty-Six Dramatic Situations*, 1895/2022; *Thirty-Six Stratagems* of China; and the [36 intimacy questions](#) determining interpersonal closeness of Arthur Aron). The latter set was evoked for Valentine's Day by Viren Swami (*Can 36 questions really change your love life? The Conversation*, 12 February 2026), citing their earlier promotion (Mandy Len Catron, *To Fall In Love with Anyone Do This*, *The New York Times*, 11 January 2015).

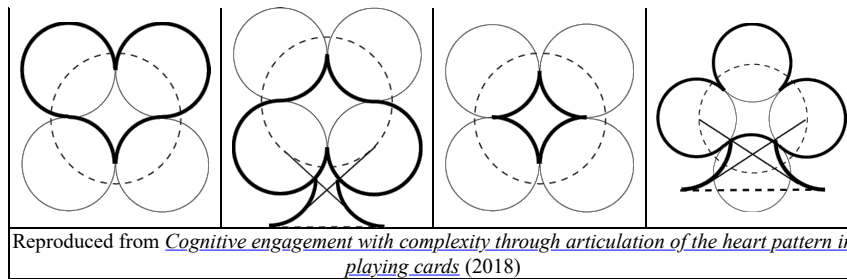
Question to Claude-4.6: Of course I had been hoping for 36 combinations -- in the light of an earlier exchange (*Mapping of a 36-fold framework of strategic relevance*, 2025). *[Show/Hide AI response]*

Question to Claude-4.6: Obviously various threads to follow. As to 36 vs 40, I continue to be intrigued by magic numbers plus/minus N (in the light of the Miller observation) -- as with [moonshine mathematics](#) or the convention of reducing the 16 [logical connectives](#) to 14 for representational purposes (minus "contradiction" and "tautology"). You have identified an N of 4 -- possibly. *[Show/Hide AI response]*

Cognitively implicit strategic patterns in familiar playing card suit design?

Question to Claude-4.6: Given my cognitive bias for determining strategic sets, the 26 is also interesting in that respect as the number of articles in the foundational strategic declaration of the [UN Conference on the Human Environment](#) (Stockholm, 1972), and in the articulation of principles of governance from a systems perspective (Ray Ison and Ed Straw, *The Hidden Power of Systems Thinking: governance in a climate emergency*, 2020). However of potential relevance is the geometry of playing card suits as discussed and visualized separately (*Distinguishing normality using playing card suits as a pattern language*, 2015; *Cognitive engagement with complexity through articulation of the heart pattern in playing cards*, 2018). *[Show/Hide AI response]*

Playing card symbols correspondences between their geometric construction
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Question to Claude-4.6: With respect to the card suits, a later paper (of which part featured in this exchange) had further considerations of potential relevance. . [Show/Hide AI response]

Question to Claude-4.6: Again the bias in this exchange is that the most familiar patterns -- playing cards -- are appreciated for the complex set of processes they imply (unconsciously) and to which you are now referring. [Show/Hide AI response]

Indicative animation design

Question to Claude-4.6: Reverting to the original challenge, given the larger frame, should the animation offer a choice between the 40 in some way that offers insight without overload. [Show/Hide AI response]

Question to Claude-4.6: So -- in addition to a curated set -- why not offer the option in terms of choices of Stay, Cross, Parallel. [Show/Hide AI response]

Question to Claude-4.6: Go ahead with the animation. [Show/Hide AI response]

Indicative view of toroidal heart in 3D showing control options (partial screen shot of interactive model generated by Claude-4.6)
Indicative view of toroidal heart in 3D showing control options
Interactive 3D version

Key systemic arrays of 26-foldness and 81-foldness?

The following query was evoked by the 26-fold articulation of a set of [26 principles](#) which featured in the *Declaration of the United Nations Conference on the Human Environment* (Stockholm, 1972) -- occasionally cited as the *Magna Carta of the Human Environment* (but long forgotten as such). A comparable article of governance principles features in a study by Ray Ison and Ed Straw (*The Hidden Power of Systems Thinking: governance in a climate emergency*, 2020). These arrays were mapped experimentally onto a rhombicuboctahedron and a runcated cuboctahedron respectively (*Mapping of a 26-fold framework of strategic relevance*, 2025)

Question to Claude-4.6: Clearly careful exploration is required. What happened to "26" in your analysis. [Show/Hide AI response]

The following query was evoked by relationship of the *T'ai Hsüan Ching* (also known as *Tai Xuan Jing* / *Canon of Supreme Mystery* / *The Great Dark Mystery*) to the *I Ching* (also transliterated as *Yi Jing* and *Yi Ching*) as discussed separately (*9-fold Magic Square Pattern of Tao Te Ching Insights experimentally associated with the 81 insights of the T'ai Hsüan Ching*, 2006).

Question to Claude-4.6: As to your 81, this does of course recall the Chinese set of tetragrams. [Show/Hide AI response]

Question to Claude-4.6: Reverting to the tetrahedral closest packing of spheres, your analysis has focused on a 2D Eulerian pathway analysis. To what extent is that a subset or cross-section of the 3D system -- particularly perceived or projected. [Show/Hide AI response]

Summary and future extensions from an AI perspective?

Question to Claude-4.6: Given the extensive work done on the animation, have we reached a point of closure calling for a concluding writeup -- or even a summary from your perspective, Or are there further stages to be envisaged. [Show/Hide AI response]

Question to Claude-4.6: Perhaps you could best provide a summary -- with pointers to future work. [Show/Hide AI response]

Question to Claude-4.6: The possibility of posting the paper on Valentine's Day offers a further consideration in terms of what is implied but not articulated -- even with Cupid's arrows. [Show/Hide AI response]

Producer-Consumer, Love-Hate and Hunter-Gatherer dynamics

Question to Claude-4.6: With respect to the themes explored earlier, could you speculate on application of Haskell's 8-fold predator-prey coaction pattern to producer-consumer. [Show/Hide AI response]

Question to Claude-4.6: Given the original pedophilia stimulus for this exchange, and in the light of that last response, does this suggest an application of the coaction pattern to "love-hate" -- and to the "love-speech" vs the "hate-speech" with which legislators are now so widely preoccupied. [Show/Hide AI response]

Question to Claude-4.6: Given the effort of the earlier segment of this exchange to generalize from individual pedophilia to a collective analogue, and the subsequent exploration of the predator-prey dynamic, could you comment on the provocative reframing of the former as a kind of reversion to the "hunter-gatherer" dynamic -- especially in the light of the human trafficking dimension that has now become evident. [Show/Hide AI response]

Minding the crucial cognitive gap

Question to Claude-4.6: Reverting to your comments on the plus/minus N of 7 and 36-40 potentially, would this be of relevance to 60-64, given the importance of both in patterns of organization (C60 and I Ching, for example). [\[Show/Hide AI response\]](#)

Question to Claude-4.6: There is seemingly no term for "N", even though it features in the 16 to 14 treatment of logical connectives. Might your argument apply in the relation between 100 and 108, namely 5x20 and 4x27. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: Given the fundamental role you have framed for the "gap", could you comment on its possible relation to what is "missing", as framed by [Terrence Deacon](#) (*Incomplete Nature: How Mind Emerged from Matter*, 2011). [\[Show/Hide AI response\]](#)

Question to Perplexity: What is important about what is "missing" according to Terrence Deacon. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: Given your response in this exchange on the "missing" (as understood by Terrence Deacon), how might this be understood as related to the "holes" recognized in the [Q-analysis](#) of Ron Atkin, and to the conception of holes of Roberto Casati and Achille Varzi (*Holes and Other Superficialities*, 1994). [\[Show/Hide AI response\]](#)

Representing disproportionate asymmetry on the 3D heart

Question to Claude-4.6: Your response, comparing any "gap" or "hole" from the perspective of Deacon, Atkin and Casati, suggests a further question. The basis for the 8-fold distinction in the coaction cardioid is that between "+" and "-", and their representation in binary terms. Missing from that framing is the case where the distinction is recognized as between "++" and "--", or "+" and "--". This is especially evident in the incredible difference between the exceptionally wealthy and the rest (between the 1% and the 99%). Curiously this is partially recognized in that between trigrams and tetragrams -- in the *I Ching* and the *Taixuanjing* respectively. The issue is further complicated by the fact that the numerical "gap" to which you have referred is based on 2. This suggests a potentially neglected fundamental "inequality" to the terms defining the coaction distinction, as may be otherwise argued ([Cultivating the Myth of Human Equality](#), 2016). [\[Show/Hide AI response\]](#)

Question to Claude-4.6: That valuable clarification is distinct from the various understandings of ternary logic and its encoding. That said, in the light of the various equations for 3D heart curves (Kuska, Nordstrand, Taubin, Trott) listed as *Wolfram demonstrations* of "Equations for Valentines" (as noted and depicted above) the question is whether an interesting 3D model could be produced with specific coaction chambers in 3D variously bulging excessively according to the degree of disparity (the "gap") between plus and minus in the defining terms. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: A design preference would be for the heart to rotate around the vertical axis in the conventional "upright" position. One could imagine that a "beating" heart might cycle through various asymmetrical "pathological" conditions. More questionable is the consequence and significance of users moving multiple sliders. [\[Show/Hide AI response\]](#)

Indicative views of "pathologically" asymmetric heart in 3D showing control options (partial screen shots of initial experimental interactive model generated by Claude-4.6)	
Indicative view of pathologically asymmetric heart in 3D showing control options	Indicative view of pathologically asymmetric heart in 3D showing control options
Interactive version	

Question to Claude-4.6: The model will now evoke further reflection. A screen shot of the earlier variant can be used as context for the changes made. Did you use any particular equation which should be cited. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: Such improvements can be left for the future, having provocatively demonstrated the principle. Especially intriguing is the manner in which political parties variously frame each other as "parasitical", for example -- and how this translates geometrically into a visualization of the "heart" of a nation. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: That response suggests a simple illustrative tale by the chambers of the heart "themselves" -- each voice vaunting its moments of fullness -- scorning those that are empty -- and deploring the periods when it is itself empty. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: The colour distinctions between the chambers in the experimental model are too delicate to make the point effectively. One could argue that distortion should be indicated by a change of hue -- different for bulging and caving in. The 3D heart does not have the concavity at the top. [\[Show/Hide AI response\]](#)

Indicative views of beating "pathologically" heart in 3D showing control options (partial screen shots of improved experimental interactive model generated by Claude-4.6)	
Indicative views of beating pathologically heart in 3D showing control options	Indicative views of beating pathologically heart in 3D showing control options
Interactive version	

Having demonstrated the possibility, a variety of further improvements could be made to the design of the interactive model, the options it offers, and the associated information panels. An obvious possibility for pedagogical purposes is the association of audio commentary with the different options. In those indicated above, the AI used synonyms for Haskell's original terms for the 8 conditions in the coaction cycle -- although the "+" and "minus" indications are comparable..

Iconic animation design?

Question to Claude-4.6: The attempt below is instructive. [\[Show/Hide AI response\]](#)

Question to Claude-4.6: You seem to have far greater insight into what it might fruitfully include. The exchange has ocused on 7 plus/minus 2, 14 plus 2, 36-40, 60-64, and 100-108. [\[Show/Hide AI response\]](#)

Thresholds of Coherence: paired limits of cognitive and organizational order (partial screen shot of interactive model generated by Claude-4.6)

[Interactive version](#)

Question to Claude-4.6: Given the visual metaphor (as in the animation you have just generated), the proposed date of posting, and the argument, can you see a way of speculating fruitfully on the "romantic" role of "14", as a reduction from the "16" logical connectives -- especially in the light of the 14-fold patterns employed by sonnets and viable organization as argued in the shared documents ([Variety of Rhyming Patterns in Standard 14-line Sonnets](#), 2021; [Pattern of 14-foldness as an Implicit Organizing Principle for Governance? Web resources](#), 2021). *[Show/Hide AI response]*

Question to Claude-4.6: Your comment on 60 in relation to 64, together with your speculative articulation, have the great merit of being readily comprehensible approaches to the nature of order -- a theme explored in the magnum opus of [Christopher Alexander](#) ([The Nature of Order](#), 2002-2004). A different approach is offered by the mathematics and physics of the periodic table where notions of completion are particularly explicit. A recent paper reviewed by Sam Jarman ([The origin of magic numbers: why some atomic nuclei are unusually stable](#), *Phys.org*, 11 February 2026) suggests that completion and closure may be clarified through the obscurities of quantum mechanics. Further clues are offered by the mystery of the primes. Could you comment on such threads as they relate to the cognitive challenge of comprehensibility and coherence. *[Show/Hide AI response]*

Reframing the desperate quest for unity in governance

Question to Claude-4.6: What do those much appreciated insights then imply for the desperate appeals for unity in aspiring for viable governance in the face of polycrisis -- when comprehension of unity is itself subject to the constraining processes you describe. *[Show/Hide AI response]*

Question to Claude-4.6: In that light is the challenge of [126](#) (as the 7th nuclear magic number), namely the 126-fold pattern (to which you refer) to be meaningfully explored in terms of the 4D [120-cell](#) -- with the "gap" in question then to be recognized as 2x3. *[Show/Hide AI response]*

Question to Claude-4.6: Much appreciated. Your reference to the mysterious role of the ternary recalls exploration of the subtle interlinkage between Borromean rings used remarkably to clarify Dante's vision of the "three wheels" (Arielle Saiber and Aba Mbirika, [The three giri of Paradiso XXXIII](#), *Dante Studies* 131, 2013). This interlinkage is appropriately used as the logo of the International Mathematical Union. *[Show/Hide AI response]*

Question to Claude-4.6: In the light of the earlier comment on the role of the "gap", how are the insights of Terrence Deacon of relevance to comprehension of "unity" *[Show/Hide AI response]*

Potential implications for comprehension of institutional viability

Question to Claude-4.6: Could you comment on whether and how the sustainability of the coaction cardioid (that is the focus of this exchange) might be informed by the mathematics of institutional cooperation as modelled by Julien Lie-Panis, et al ([The social leverage effect: institutions transform weak reputation effects into strong incentives for cooperation](#), *PNAS*, 13 December 2024; [Guarding the Guardians](#), *Aeon*, 14 December 2026). *[Show/Hide AI response]*

Question to Claude-4.6: The Lie-Panis model and your commentary seem to address the tendency to corruption primarily by implication. Given

the fundamental role that process now so evidently plays, irrespective of any consequences to reputation (now readily dismissed), could you comment more specifically -- given the tendency for "oversight" to take the form of "turning a blind eye", as recognized by the Lie-Panis model. *[Show/Hide AI response]*

Question to Claude-4.6: Does the conclusion of that response with "no one is looking at the rhythm" point to a degree of entrapment in the vision metaphor, when arguably rhythm is best perceived by the ear -- an irony in a world of polycrisis bathed in music which does not seemingly enable cognitive engagement with what calls for appreciation, as argued separately (*A Singable Earth Charter, EU Constitution or Global Ethic?* 2006). *[Show/Hide AI response]*

Question to Claude-4.6: In the light of that response, it could then be argued that a degree of reconciliation between cognitive modes is recognized by Douglas Hofstadter (*Gödel, Escher, Bach: an eternal golden braid*, 1999). Provocatively the challenge could then be presented otherwise (*Reimagining the Canon to the Sounds of Cannon Fire: challenging hegemony through the pattern that connects*, 2024; *The Song of Songs as indicative of the Pattern that Connects*, 2024; *Connecting the Multiple Voices of the Pattern that Connects*, 2024). *[Show/Hide AI response]*

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