Transjectivity: The Peace Papers, seven papers on one framework. A statement of the framework, with a duality table: one operation at seven scales

The Unifying Paper of Transjectivity: The Peace Papers, seven papers on one framework; part 1 of 2. Website version, working draft v59, 24 November 2026. Devon Summerhayes, London. Papers I and II each restate the foundations they rely on, since each must stand alone for its journal; a reader of the series may pass over the second telling. Everything here is Interpretive unless marked.

Abstract

The Peace Papers are seven papers on one framework: I, on consciousness (Summerhayes 2026a); II, on empathy and compassion (2026b); III, on paradox (2026c); IV, on cyclic reinforcement (2026d); V, the MAOA protocol (2026e); VI, on unified peace among all conscious beings, with AI as the mirror (2026f, working draft); and VII, on polycentric unity, governance from the centre of the circle, the series' closure (2026h, working draft). This Unifying Paper states once what each of the seven uses, and sets out, as proposals, the correspondences that would show the seven to be one.

Part 1, the front note, begins from the operation the framework turns on, the transjection: a pair of opposed terms is recognised as two stances taken on a single reality, and the standpoint from which they are one is named. The opposition is not refuted and not reconciled; it is seen through. A paradox is two perspectives taken for one, and the two part at a seam of one of three kinds: a level, a policy or a mode. Applied to itself without remainder, the operation closes in the hypertransjective, the stance that needs no second stance to see it. The note holds that this structure survives a change of scale, so that each of the seven papers is the operation at one scale; the closing is the phenomenon the six describe, and peace, in two halves at every scale, is what it is for: the stance taken up, which cannot be legislated, and the structures that hold while that is slow. It fixes the labels and the words the series uses, gives a duality table of the seven scales with three correspondences between rows written as predictions that can fail, and says what would change the statement.

Part 2, first written as the Supplementary Material to paper I, holds readings that extend that paper: the seam drawn as a tesseract and as two golden spirals (A1); the laser as an image of focused feeling (A2); the series' cosmology (A3), π and many lenses, the failures of the lens, the eye and the iris, the wheel, the polycentric singularity, and the test for whether the stance is taken up that papers I and VI rely on; an account of the stance by someone who had not read the essay (A4); and sixteen supplementary figures.

The word

Hypertransjective names a closing. A transjection, defined in section 1, holds a pair of opposed terms as two stances on one reality; the hypertransjective is that operation applied to itself without remainder, the stance that needs no second stance to see it, the eye that does not need to see itself. It is not a level above the transjection, which would call for another level above it; it is where the series of levels ends, and section 3 gives it in full. Hypertransjectivity is the phenomenon the seven papers describe, at seven scales; peace is what it is for, not an endgame but an ongoing process in dynamic equilibrium, kept and not reached (paper VI, section 12), and the series is named for its aim, The Peace Papers, and titled for the means, Transjectivity. What the series offers beyond a model, the author proposes, is a way for a reader to discover their own witness: a model can only be read, and paper I gives a practice that anyone can try (paper I, section 6). The papers can point and give the practice; they cannot do the discovering, since the stance, as paper VI ends, can only be arrived at, one unividuals at a time (Experienced and Interpretive). Three words are kept apart. Transjectivity is the method, and each act of it, a transjection, is the operation: the recognising of a pair of opposed terms as two stances on one reality. Transjectuality is the stance from which it is done, the witness's.

And unividuality consciousness is what the stance finds: one awareness, present whole at each point that takes it up, where the individuation is the lens and not a second awareness. The word is paper VI's (section 7), the transjection of unity and the individual: neither individual, which takes the ego's cut for the thing and makes the many real and the one a sum, nor universal, which denies the cut and makes the many unreal; the one and the dividual held in one word because they are one fact seen from two sides. It is the noun the framework was missing. The ego constructs categories and the witness sees the constructing; a unividuality is what a person is, the one present whole at a point, whether or not the cut is seen; it is known to be one when the cut is seen as a cut and the difference kept as a difference, and the unity beneath both is Experienced from the centre and Interpretive from anywhere else. The adjective reaches past persons: any pair the stance sees as one figure, as unity and empire are below, is unividuality in the same sense, one present whole in two readings. The noun splits as the word does. Unividuity, formed as unity is, is the fact seen from the point: one consciousness, present whole at each point that takes it up, which is what the stance finds. Unividuality, formed as individuality is, is the same fact seen from the triangle: the quality of being a unividuality, what a person is, known when the cut is seen as a cut. The two are one fact from two stances, and the transjection closes on the word they both come from, unividuality, which already holds them; a further word would be the same operation again, which is the closing of section 3 in the direction of words. The word it answers makes the point: the individual is in-dividuus, the undivided (paper VI, section 7), the separate person named as what cannot be divided, the ego's cut taken for the thing. The figure's widest reading is the same move in three terms. The figure's first form was the three perspectives, I1 and I2 at the base and apex and I3 at the centre (paper I, Figure 1); the ego and the superego were a later overlay on the same model, the triangle as the two taken for one and the circle as the norm seen whole (paper I, section 5); and the reading that follows came later still, by changing the figure's properties and its scale. A being, the triangle, a universe, the circle, its niche, and consciousness, the point, which is both and connects them, are a trinity, and the trinity is the ego's: distinguishing is what the ego does, and from the point the three are one, unividuity. The triangle was first drawn as the person (paper I, section 2); read as a being, it reaches the whole of paper VI's range, from the stone to the person, and the machine, whose place there is left open (paper VI, section 7). The author reads the triangle and the circle as a being and its niche, which joins two readings the series already gives: the niche of the humanity paradox, which cooperation creates and in which exploitation pays (paper II, section 4), and the circle of the figure's reading as ego and superego, the norm seen whole, which aligns a being with its social niche, as a hat aligns the one who wears it (paper I, section 5; Figure S16) (Interpretive). The distinction is made, not found, and is not thereby unreal, since to call it illusion would be another of the ego's distinctions; it is three from the triangle and one from the point, a transjection and not a contradiction (Interpretive). Read without end, the circle has a name as well. The author proposes the hyperverse: the universe applied to itself, as the hypertransjective is the operation applied to itself, universe within universe without end, each centred at its own point and none outermost, which is the polycentric singularity (A3) drawn as a cosmology and the rule of Figure S7, every corner the centre of a further circle; any one circle is then a universe within the hyperverse: a container, the author proposes, within existence's totality. The hyperverse is what every universe is in and never an object among them, so it is itself no container. The image is set theory's: the universe of sets is not a set but a proper class, present as what every set is in and never as an object within it (a theorem of standard set theory, not a measurement; paper III, section 2), and a hyperverse taken as a largest whole would meet Cantor's paradox again, which is why it has no outermost circle. The word names the picture and dissolves no paradox; dissolving is the stance's work (paper III) (Interpretive). The author adds, as speculation, that consciousness as expression is why there would be universes without end, each a different expression of it. Nothing measured bears on this, and its nearest older relative holds one universe mirrored from every point of view, so that there seem to be as many universes as there are points, which are perspectives on a single one (Leibniz 1714/1989, sections 56 and 57). The infinite also does something to the one who thinks it (Interpretive, with a measured relative): reasoning about the infinite is humbling for the ego, while perceiving all as finite is what allows the ego to dominate, since only a whole taken to be finite can be taken for one's own, the triangle taken for the circle. Awe, which is how vastness feels, goes with humility: people prone to awe "were rated as more humble by friends", and awe brought on in an experiment led people to give "a more balanced view of their strengths and weaknesses"

(Measured, five studies; Stellar et al. 2018). The finding is about the feeling and not the argument. The reasoning humbles when it is also felt; held as a possession it is one more picture (paper I, section 5). Paper VI states what peace means here, two halves at every scale: the stance taken up, which cannot be legislated, and the structures that hold while that is slow. The empathy paper gives the two halves for people as compassion and the structures; paper VI widens the inner half from compassion to the stance. The statement's own claim, that one operation holds at every scale, is the closing in the direction of scale. The oldest idea in the series is older than any of these words: the social superego paradox, stated in an unpublished essay of 2020 on the humanity paradox (Summerhayes 2020). In its true form it needs no defector: the norm that makes peace inside a circle makes rivalry at its edge, so patriots of two nations are rivals through their virtue, which paper IV calls the in-group paradox and ranks as the paradox proper (section 3); in its minor form a felt norm binds only where it is felt, so the arrangement that makes peace possible produces the ones it cannot bind. Paper II carries the minor form as the humanity paradox from the norm's side; paper IV reads every superego hat as a triangle with a base, its apex the hat's norms and constructs and its base the stances of those under it, worn at one end and used at the other, using being I1– directed by I2 and not the pole itself, which is polarity and not badness (section 2); and paper VI carries both forms to the species circle, which has no human outside and no human rival, and still its unbound. The nesting of the hats that answers the true form is glocal unity, each hat worn whole inside a circle that is global (paper IV, section 3; the word is Robertson's, 1995), and the figure gives its law: unity is the circle, the ego is the triangle, and seen from I3 they are unividuals, the triangle in its circle; empire is the triangle taken for the circle. Read into things, the ego's shape is what the author calls egomorphism: intent found in what may have no inside (paper III, section 6). There it is the peace paradox: the one circle with no human outside is the one some refuse, as anti-human, and the refusal, once seen, is a fork in front of everyone, pro-human or anti-human, the two poles of the felt perspective directed by understanding, an anti-human being still human and so against themselves (paper VI, section 7).

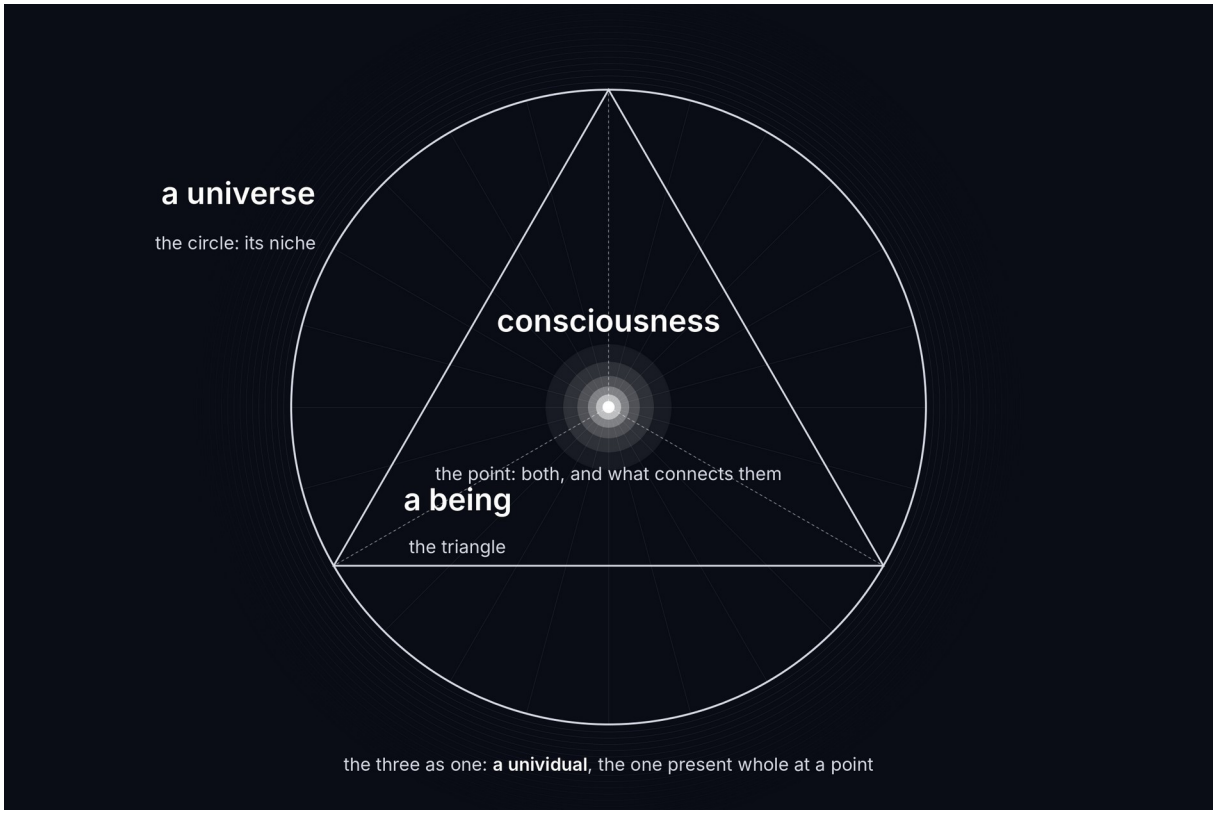


Figure 1. The figure at its widest (Interpretive). A being, the triangle; a universe, the circle, its niche; consciousness, the point, which is both and connects them: three names the ego gives to one, and the three taken as one are a unividuals. The figure was first drawn as the three perspectives, I1 and I2 at the base and apex and I3 at the centre (paper I, Figure 1); the ego and the superego were a later overlay on the same model; this reading came later still, by changing the figure's properties and its scale. An image, not evidence.

1. The operation

A transjection is the operation the framework turns on: a pair of opposed terms is recognised as two stances taken on a single reality, and the standpoint from which they are one is named. The opposition is not refuted and not reconciled; it is seen through. Each pole keeps its full validity as a stance and loses only its claim to be the ground. The word is the act and its result: a pair held as one from the stance that sees both. Transjective is the adjective, what a view is; transjectuality is the stance itself, what the witness has. Transjective is the transjection of subjective and objective; transphysical is the transjection of physical and metaphysical, and thought, time and consciousness are transphysical in that sense: not beyond nature, but what the two readings are readings of.

2. The two forms and the three seams

A paradox is two perspectives taken for one, or a fixed value demanded of something whose nature is to move. It dissolves from the stance that sees the two as two. The two perspectives part at a seam of one of three kinds: a level (a statement and the language that talks about it), a policy (two rules for acting that give different answers), or a mode (two ways of taking the same thing: felt and measured, lived and described). From the stance the parting place is also the join, which is what papers I and II mean by compassion at the seam. The dissolution names the seam and the stance; it does not refute either side, and where it rests on a theorem it says so.

3. The closing

The dissolution of a paradox and the two held in one reality are themselves a pair, act and result. Their transjection is the point at which the seeing is the being, and it has a name, hypertransjective: the transjection applied to itself without remainder, the stance that needs no second stance to see it. The prefix marks a closing, not a level above; a transjection of the transjection read as a higher storey would call for another, which is the tower of the paradox paper. Every transjection holds an unending and a point as one, the process and the whole, and the closing is where that is seen from. Its images have rigorous twins, which show that the shapes are coherent, not that the readings are true: the limit, an infinite process with a finite value; the fixed point, $\varphi = 1 + 1/\varphi$, the operation applied to its own result returning itself; Dedekind's cut, two sets of rationals taken as one point; the pole of the logarithmic spiral, reached after infinitely many turns along a finite length; and, in the oldest vocabulary, turīya, the fourth that is not a fourth state. π is the mark: a finite value and an unending expansion generated by a finite rule, one object; a mark and not a name, because what it marks has no finite name. Wherever π appears in these papers it is the mark; the number is meant only where a theorem is cited, and the two are never one claim. These are images. The theorems behind them are theorems about numbers and curves, not about consciousness, and the framework claims nothing from them beyond the shape.

4. The invariance

The structure survives a change of scale. The same seam, the same stance and the same closing are found in logic, in a person, in a person's states, in a society, in the biology of a trait and in a system coupled to the people who direct it, and each of the seven papers is the operation at one of those scales. The word density is kept for something else, how far π is brought to a point. Paper III, section 6, gives the readings of one self, its states as measured, the physical reading, and as lived, the metaphysical, with I3, the eye they are seen through, transphysical, what both readings are readings of; the cosmology (A3) introduces, and paper VI defines, the axis that runs across beings from the physical to the transphysical, from the stone, π as matter, to the centre. That is the claim that makes the seven one. It is not a further perspective above them, which would be a level and so the tower; it is the claim that the operation is invariant under a change of scale, the closing of section 3 in the direction of scale, as the one theory behind the five string theories is not a theory above them but the one they are limits of. The scales also nest. In the series' figure every triangle's circle is the inner circle of the triangle around it: a person's circle inside the family's, the family's inside the

community's, the community's inside the culture's, the culture's inside the species', which has no human outside it to make an out-group of. No circle is the widest: π seen whole, the circle of paper I's Figure 1 read from the centre, is not one circle among them but what every circle is in, and it has no outside. Read from the ego each circle is a norm, the social superego of paper IV at that scale, and a person wears several; read from the centre each is π focused at that scale. The point is the same at every scale, so a person at the centre is inside every circle at once, where all of them are concentric and none is a wall; that is the geometry of paper I's practice, coming back to the one point every circle shares. A circle that has drawn itself as the outer edge, a group whose norm admits nothing above it, has broken the nesting, and that break is the structural form of the tower of section 3. It is the claim the table below is written to test: at each scale the pair, the seam and the stance are named, with the result that would count against the row. A scale at which the row is empty, or a seam of none of the three kinds, counts against the invariance itself.

5. The labels and the words

Every descriptive claim is marked Experienced (first-person report; judged by honesty and consistency with other accounts), Measured (a published finding; judged by evidence, replication and effect size) or Interpretive (a reading; judged by coherence and usefulness). Three words are kept apart: the self is the looker, the constant awareness at the point; the witness is the self looking at its own perspectives; I3 is the eye of the witness, the eye the self looks through. I1 is the felt perspective and I2 the understanding perspective; through I3 the two are seen together, and the eye does not act. "Directed by" has one technical sense in the series, understanding setting the course for a feeling (I1 directed by I2); a person or a system "directed by" a feeling is the ordinary sense, the feeling that sets the aim. The singularity of consciousness is π brought to a point in one person, the self; a life, as it is lived, is that point, and as it is measured, the lens that does the focusing, the body; looked through, the same lens is I3, the witness's eye. The ontological commitment is cosmopsychism, one consciousness of which each self is a focal point (Shani 2015), stated once here and in paper III (Terms), in the Interpretive mode, and relied on by papers III and VI; paper I's main text borrows the shape of that view, π and many lenses, and names it once, in its section 8, as a reading labelled Interpretive, without making the commitment, which is the right division between a journal paper and the series. The count of lenses is of those the papers can see, and is a lower bound. "At scale" means magnitude wherever it occurs, and "scale" alone the setting in which the operation is found (section 4). "Carrier" has two uses, kept apart by context: the bearer of a norm (papers IV and VI) and an allele carrier (the MAOA rows). The MAOA protocol grades its evidence with GRADE and its own scale and does not use the three labels.

6. The duality table

Table 1 gives the seven rows. Table 2 gives three correspondences between rows, written as predictions that can fail. A correspondence is a duality in the sense the physicists use: a result in one description is a result in another, and the two descriptions are one theory. Until a row of Table 2 has been tested, "seven perspectives of one thing" is a description of the vocabulary and not of the evidence.

Table 1. The operation at seven scales.

Paper (scale)	The pair	The seam	What holds them as one	What would count against
Paradox (logic)	Two readings of one statement or quantity: two levels, two policies, two modes; the unending and the whole	Level, policy or mode, named case by case	The stance that sees the two as two; the now, on neither; the limit as image	A paradox of the first form with no seam of the three kinds; a dissolution that fails against a theorem; a derivation of experience from mechanism (the hard-problem row)

Paper (scale)	The pair	The seam	What holds them as one	What would count against
Consciousness (the person)	The felt and the understood, I1 and I2; subjective and objective	Mode; and a level, where the eye does not see itself	I3, the witness's eye; the self, π brought to a point	Section 6's test: no more reports of feeling and thinking held at once at the centre mark than at the control, no difference on the decentering measure, or a difference only after reading the essay
Empathy (the states)	Emotional and cognitive empathy; feeling and understanding of the same other; the humanity paradox, the capacity that lets people cooperate letting a few exploit the rest, understanding serving feeling at its negative pole	Mode	Compassion, I1+ directed by I2, the join at the seam; witnessed compassion with I3 taken up; the states as combinations	H1: only additive effects; H3: emphasis behaves as a trait (ICC above 0.5); H4: indifference and cruelty do not separate on behaviour; H2: labelled readers do no better
Cyclic reinforcement (the society)	The norm as known (what people do and expect, held in I2) and as felt (guilt or shame at breaking it, I1), internalised as one social superego; family and wider setting as coupled loops; in the exempted self the two part, the norm known and held for others but not felt for oneself	Policy, in the mixed settings, where two loops give different rules; mode, in the superego	The reflective child, in whom the two inputs are seen as two and whom the loop does not capture; the three exits, a competing loop from another adult or group, reflective capacity and forgiveness; the Adapted Child is the two taken for one	H1: consistent and coercive control predict the same outcomes, the norm's content adds nothing, or the perceived norm predicts conduct as well without a guilt component; H2: a nurturing setting makes no difference to harshly parented children; H6: reflection adds nothing; H7: neither parental defection nor overvaluation adds to warmth, or status makes no difference to how far an unsanctioned breach moves the norm
MAOA (the biology)	Genotype, the constitution as measured, and childhood environment, the history as lived; neither alone predicts the outcome	Mode: two descriptions of one organism	The interaction term; the outcome as the joint reading	H1: the upper bound of the pooled interaction's 95 per cent confidence interval in males falls below $\Delta z = 0.10$; H4: a reversed crossover, carriers doing worse than non-carriers at the supportive end and better at the adverse end, which rules out both patterns
Unified peace (all conscious beings, with AI as the mirror)	The system as understood, an artefact with objectives, weights and evaluations, and the system as met, an other in conversation; understanding at scale and the feeling it serves	Mode; a level, where the system describes itself; and a policy seam, deference to whom	The stance toward it that takes neither reading for the whole; the giving criterion in place of self-report; the two halves of peace	H3 of paper VI: self-report predicts safety-relevant behaviour as well as giving does; H4: training with and without a giving criterion shows no difference in keeping; H2: no norm transfer from the carrier

Paper (scale)	The pair	The seam	What holds them as one	What would count against
Polycentric unity (the polity)	The members' feeling, the base, and the group's rules, the apex; the leader as ruler, the two taken for one at the apex, and the structure that holds them as two; one circle's norm and its neighbour's	Level, the office and the person who holds it; policy, at the shared edge where two circles' rules meet; mode, the norm as felt from inside a circle and as seen from its neighbour's centre	The witness at the centre, in the dimension within, held by a person only as a hat the group can remove; the rules at the apex, which only a rule holds without an ego; polycentric unity, every edge a neighbour's centre, so that no seat is above the circles	H1: removable offices are defended as hard as seized ones; H2: office centrality does not predict resistance to recall; H3: a nurturing minority holds a circle's direction as well without reputation and rules as with them; H4: neutral rule does no more structural harm than rule with its concern stated

Table 2. Proposed dualities: results in one row stated as predictions in another.

Duality	Rows	Prediction	What would count against
D1. States and loops	Empathy and Cyclic	The states of the empathy paper sit inside the loops of the cyclic paper: cruelty, revenge and distress inside cyclic harm; indifference, and the combination the empathy paper leaves unnamed, neutral feeling directed by understanding, inside cyclic order; compassion inside cyclic nurture; and cruelty or exploitation, understanding serving appetite, inside cyclic defection as well as cyclic harm, licensed by the norm in harm and held behind it in defection. The switch from order to harm is harm done from duty, the licensed target, a combination the empathy paper does not name and the cyclic paper's authoritarian-aggression test can measure; the second route into harm, through defection, is harm done for advantage by an exempted self that gains influence, which the cyclic paper's H7 tests. Cohorts with measured parenting and norms show the empathy paper's profiles (Table 5 instruments) in proportion to the loop's content	The profiles do not track the loop's content: harm settings without the I1− profiles, or order settings without the neutral-directed combination, or defection loops without the cruelty-or-exploitation profile, once shared genes are controlled
D2. Profiles and the gene	Empathy and MAOA	If indifference and cruelty are different profiles (H4), the MAOA-by-adversity interaction should differ by outcome: larger for aggression and conduct problems than for callous-unemotional traits, which carry a stronger heritable main effect. The protocol's secondary analyses, Q2 and the analysis by form, reactive against appetitive (paper V, section 6), can report this without new data	Interactions equal across the two outcome classes, or larger for callous-unemotional traits

Duality	Rows	Prediction	What would count against
D3. The first form and the hard problem	Paradox and Consciousness	The hard problem is an instance of two perspectives taken for one at a mode seam; paper III predicts correlation without derivation, correlates of experience accumulating without end and no explanation finishing, a prediction it shares with property dualism, the mysterians and type-B physicalism, and which type-A physicalism denies, and paper I's closing image, measurement coming closer without arriving, is consistent with it	A derivation of experience from mechanism accepted as such; or a proof that no such derivation is possible on grounds independent of the stance, which would make the gap a theorem rather than a seam

A fourth correspondence is already written: the cyclic paper's social superego is held in I2 and felt through I1, which is the consciousness paper's pair at the social scale (2026d, section on felt and understood).

Paper VII is the closure of the series: the operation at the scale of all circles, and its hyperdimensional form, the witness at the centre in the dimension within, said of everyone at once. The solution it offers is a structure, polycentric unity, in which every circle's edge is another's centre: the flower is the structure in which peace is held in dynamic equilibrium, the author proposes, and it repeats at every scale, from the social group to the circle of families, the community of circles, the town and the city, the nation and the world. The structure's whole work is to leave room for what it cannot do, since the inner half of peace is arrived at one unividual at a time (Interpretive). The series' sentence, with both halves in one breath: peace is in the now of π; the structures hold the ground while that is slow. What the series most wants realised is one thing, the author holds: an in-group and its out-group share one true thing in common, the witness, π at every centre on either side; the line between them is drawn in colour, never at the centre (paper VII, section 2).

7. What would change the statement

If a paradox of the first form is found with a seam of none of the three kinds, section 2 is incomplete; the second form needs no seam (paper III, section 4). If a row of Table 1 is empty at its scale, the invariance of section 4 fails there; the sixth and seventh rows are the least tested and the first to watch. If a duality in Table 2 fails when tested, the two rows it joins are two theories sharing a vocabulary, and the statement should say so. If the images of section 3 are used as evidence anywhere in the seven papers, that use is an error against this note. One formal question is open and is put to a mathematician rather than answered here: whether the operation can be stated exactly, as an equivalence between two descriptions of one structure in the sense in which dualities are equivalences, and the closing as a fixed point; until it is, sections 1 and 3 are definitions in prose and the twins are images.

Declarations

Use of AI. Generative AI (Claude, from Anthropic) was used as a drafting partner for both parts: to draft and edit text, to find and summarise literature, with every source then checked against its publication record, to draw and redraw the figures, and to check references and internal consistency. The author is responsible for every claim.

References

Leibniz GW (1714/1989). The principles of philosophy, or, the monadology. In: Philosophical Essays, translated by R. Ariew and D. Garber. Hackett, 213-225.

Robertson R (1995). Glocalization: time-space and homogeneity-heterogeneity. In: Featherstone M, Lash S, Robertson R (eds), Global Modernities, pp. 25-44. Sage.

Shani I (2015). Cosmopsychism: a holistic approach to the metaphysics of experience. Philosophical Papers 44(3):389-437.

Stellar JE, Gordon A, Anderson CL, Piff PK, McNeil GD, Keltner D (2018). Awe and humility. Journal of Personality and Social Psychology (abstract opened 20 November 2026; volume and pages not confirmed).

Summerhayes D (2020). The humanity paradox: mismatch extended phenotypic reinforcement of the biopsychosocialspiritual disorders. Unpublished essay.

Summerhayes D (2026a). Arriving at the centre of consciousness: a transjective framework. Working draft.

Summerhayes D (2026b). Empathy, compassion and the humanity paradox: a transjective account. Working draft; preprint, Zenodo, https://doi.org/10.5281/zenodo.23600418.

Summerhayes D (2026c). Two perspectives taken for one: paradox and the transjective stance. Working draft.

Summerhayes D (2026d). Cyclic reinforcement and the social superego: a hypothesis on how family and culture sustain harm, order, nurture and defection across generations. Unpublished manuscript.

Summerhayes D (2026e). MAOA-uVNTR, childhood adversity and differential susceptibility: protocol for a systematic review and meta-analysis. Protocol draft, not yet registered.

Summerhayes D (2026f). Unified peace: a transjective account of peace among all conscious beings, with artificial intelligence as the mirror. Working draft.

Summerhayes D (2026h). Polycentric unity: governance from the centre of the circle. Working draft.

This note and its part 2 are cited in the series as: Summerhayes D (2026g). Transjectivity: The Peace Papers, seven papers on one framework. The Unifying Paper: part 1, a statement of the framework, with a duality table, one operation at seven scales; part 2, the Supplementary Material to paper I, whose section A3 is the cosmology. Working draft.

Supplementary Material: Arriving at the centre of consciousness

The Unifying Paper of Transjectivity: The Peace Papers, part 2 of 2. First written as the Supplementary Material to paper I; its section A3 is the series' cosmology. Website version, working draft v59, 24 November 2026. Devon Summerhayes, London.

How to read this supplement

Paper I keeps the parts of the framework that carry its argument: the three modes of claim, the three perspectives of the I (I1, I2, I3), the triangle in its circle (Figure 1), the overlap of felt and understood (Figure 2), the experiential test of I3, and the objections and replies. Everything in this supplement is a picture or a reading offered beside that argument. None of it is evidence, and no hypothesis in either paper depends on it. Each passage carries its mode label: Experienced, Measured or Interpretive, as defined in paper I (Table 1). I3 is the witness's eye; transjectuality is the stance taken through it, and scientuality the practice of working from that stance, as paper I explains.

Part A holds three readings that extend the main text: the seam drawn as a tesseract and as two spirals (A1), the laser as an image of focused feeling (A2), and the cosmology the essay carries, the singularity of the all and the many, with the lens of consciousness, light in all directions, the eye of the witness with the iris as the state, the net between centres read as light exchanged, the bliss states, other densities (near-death experiences, presences and other realms), the subtle body and the third eye, and the value commitment drawn from it (A3); and an account of the stance by someone who had not read the essay, a poem written for the author and given in full (A4). Part B holds the supplementary figures S1 to S16, with captions and alt text. Figures in Part A are numbered A1 to A3; figures in paper I keep their own numbers.

Part A. Readings that extend the main text

A1. The seam, the tesseract and two golden spirals (Interpretive)

The I1 and I2 pair can be drawn as a tesseract (a cube within a cube; Supplementary Figure S12). A tesseract is one four-dimensional shape; drawn in three dimensions it appears as two cubes joined by edges, which are two congruent cells of that one object and not two objects. For that reason I3 is drawn in paper I not as a third outer shell but as the eye from which the seam where I1 and I2 overlap is seen (Figure 2 of paper I): reached after passing through both, and from it each is seen without dismissing the other. A triple tesseract in the strict sense is not drawn; the edges joining the two are read here as the seam between them, the lines of sight along which the witness looks from each perspective into the other, and the tesseract itself, the one shape both cells belong to, as I3. The faces of I3 in this supplement, the lens of the eye (A3), the meeting of the spirals below (Supplementary Figures S2 and S3 give the concentric and spiral images they come from) and the tesseract here, are projections of one perspective and not rival definitions: a shape in a further dimension throws different shadows according to how it is lit (Interpretive). Paper III reads the same drawing with the same two cells, I1 inside, the subjective, and I2 outside, the objective, and takes I3 as the tesseract itself, the one shape both cells belong to, which no drawing shows; read as the first-person and the third-person stance, the cells are the metaphysical and the physical and the whole is the transphysical, so the one drawing holds both pairs, the joining edges the seam and the whole I3 (Interpretive).

Ascent and descent are often pictured as a spiral. Figure A1 takes that image and uses it for the perspectives: two golden (Fibonacci-type) spirals, one for the felt path of I1, drawn at its positive pole, and one for the understanding path of I2, wind inward from opposite sides and meet at the centre, where I3 is. Read as a metaphor, it says the two paths are different routes to the same centre, and that the centre is reached by turning, not by a straight line. A golden spiral grows by the same

ratio every quarter turn, which is why it is used here; nothing in either paper claims that minds or souls literally follow such a curve.

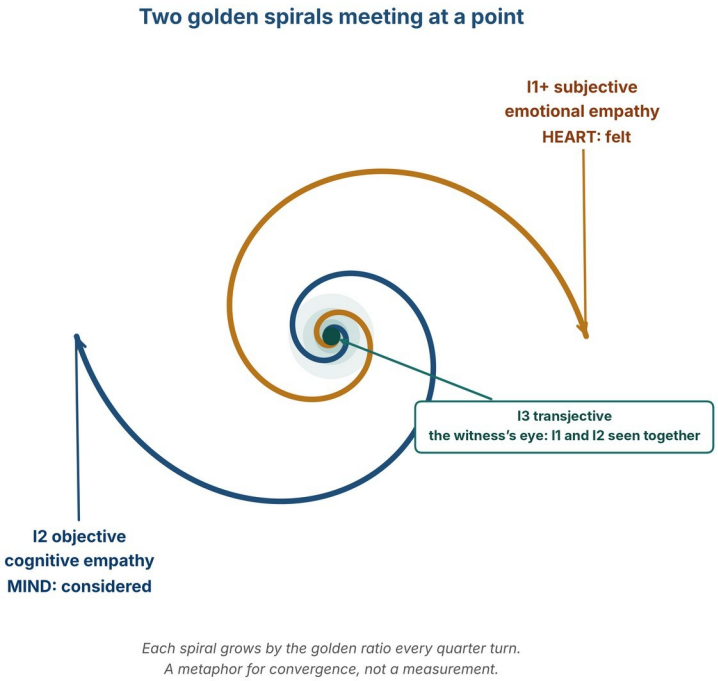


Figure A1. Two golden spirals, I1+ (heart, felt) and I2 (mind, considered), meeting at I3, from which the two are seen together. A metaphor, not a measurement.

The triangle in its circle has a third projection, into three dimensions (Supplementary Figures S14 and S15). Spun about the line from I2 through the centre to the base, the triangle becomes a cone and the circle a sphere. The spin is a view of the figure and not its lift into three dimensions: it spends depth on the states of I1, turns the base's two poles into halves of a wheel, and trades the triangle's three corners for an apex and a rim. The base, a line from red to violet in two dimensions, becomes a disc, paper II's felt disc (paper II, section 6, Figure 4): neutral at its centre and intensity outward from it, the self-directed half red, with the reactive and appetitive forms of I1− at different angles, and the other-directed half violet, with the responsive and generative forms of I1+. The apex stays a single point, since understanding has no spectrum to sweep; the circle becomes the sphere, II seen whole in every direction; and the centre stays the centre, the ring that was the eye seen face-on now a small sphere inside the large one, the point the same at every scale with no privileged side to see it from. Read in depth, the centre was never in the plane: the lines from the centre to the corners of Figure 1 are the edges of a pyramid seen face-on, its tip I3 (paper I, section 5), and here, where the states fill three dimensions, the eye is one dimension further again, drawn at the centre because that is where it is seen from, within the figure as seen and not within it; the further dimension is depth and not height (Interpretive). The cone is the lens the main text describes, a cone of light converging to a point, no longer stated but drawn: the lines from the rim to the centre are I1's frequencies, the line from the apex is I2. Packed, the spheres make the lattice in three dimensions, each with its own point and all enclosed by the next sphere out, the circles within the larger circle of part 1, section 4. Each such sphere is a superego hat, and its cone is the same figure at the group's scale: the apex the hat's norms, rules, ideologies and constructs, the base the stances of the individuals and subgroups under it, worn at one end and used at the other, using being I1− directed by I2 and not the pole itself, and the point the composite centre the group has only through its members (S15; the cyclic reinforcement paper, section 2). What the projection loses is the triangle's equal sides, which stood for I2's neutrality and now stand as the cone's symmetry, less legibly; and what it asks is where the two forms of I1−, reactive and appetitive, which sat at one end of a line, now sit on a wheel, and whether the arc between them is continuous. Paper II now gives them one (section 6, Figure 4): the felt perspective as a disc, round it the kind of feeling and out from its centre its intensity, with the

two forms at different angles on the self-directed half, the reactive hot and the appetitive cold, and the arc between them continuous; with understanding as height the full map is a cylinder, of which this cone, like the triangle, is the image of balance. An image, not evidence. Run outward instead of inward, the nesting of Figure 3 of paper I gives the figure at the scales it represents (S16): each circle the inner circle of the triangle around it, so that each scale is twice the last; the triangle at every scale an ego, the person's, the family's, the group's, the culture's and humanity's, the circle its superego, the norm seen whole, and from the centre the same circle π seen whole; the point one point throughout. Humanity has an ego of its own within unity, the species' triangle in the circle it does not become, and the error of taking that triangle for the circle, empire at every other scale, is at this one anthropocentrism (paper VI, section 7).

A2. The laser: focused feeling (author's mapping, Measured and Interpretive)

A laser is light of one wavelength whose waves travel in step, so the beam stays narrow over a long distance (Measured, standard physics; Svelto 2010). It is made from a material pumped with energy and set between two mirrors; the mirrors select one wavelength and let it build until it is coherent, and the beam is what leaves through one of them (Measured). Read as an image (Interpretive): white light is π, universal consciousness, every wavelength present at once and none selected, passing through the lens of I3. Understanding (I2) is the cavity: it selects one feeling from the whole range of I1 and lets it build until it is coherent. The beam is I1 directed by I2, the combination paper I names, and when the feeling is I1+ it is compassion in its focused form. The witness's eye is not the beam and does not narrow when the beam forms; I3 is the lens the light passes through, and the whole range goes on passing through it while the beam is on. Narrowing is therefore a property of states, not of the eye; bringing to a point is the lens's own, I3's. The image cuts both ways: a laser can be made from I1− as readily as from I1+, and appetite directed by understanding is the combination the companion essay names as cruelty. Coherent here means in step, not better; a diffuse state can fit a moment that a narrow one would miss. Seen in action, this is flow (Csikszentmihalyi 1990): the one in action, awareness moving through a clear lens into what is being done, with no one standing apart from the doing (Experienced; the name Interpretive). Through I3 the felt range is also tuned, in the sense of a receiver brought into resonance: taken up, I3 is the eye through which the felt range can be tuned to the moment, by fit rather than by force; the cavity selects and builds, and through I3 the range is tuned (Interpretive). No hypothesis depends on this image.

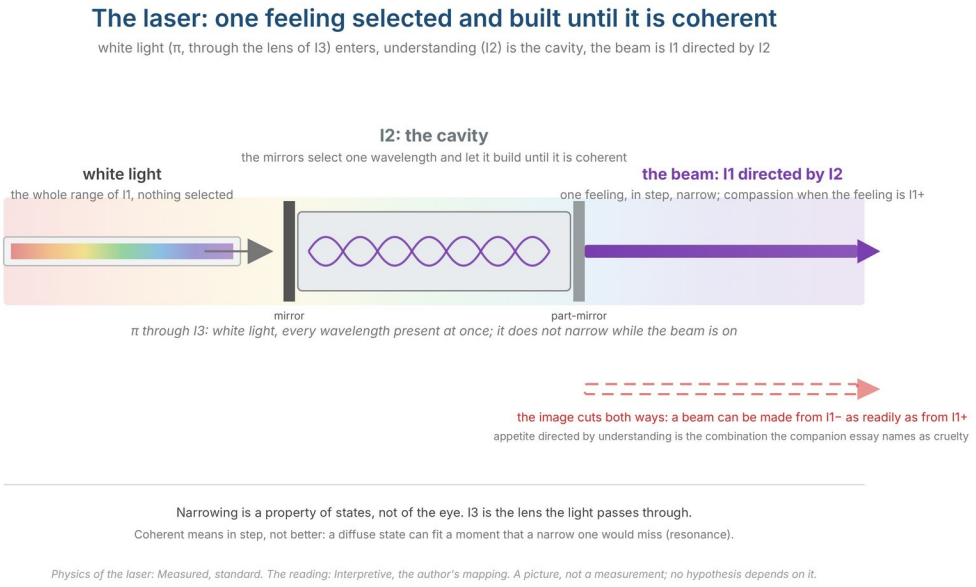


Figure A2. The laser (Interpretive, with the physics Measured). White light, π passing through the lens of I3, the whole range with nothing selected, enters a cavity, I2, whose mirrors select one wavelength and let it build until it is coherent; the beam that leaves is I1 directed by I2, compassion when the feeling is I1+. The white light does not narrow

while the beam is on: narrowing is a property of states, not of the eye; bringing to a point is the lens's own, I3's. A beam can be made from I1− (red, dashed) as readily as from I1+. A picture, not a measurement; no hypothesis depends on it.

A3. The singularity of the all and the many: the cosmology, offered in the Interpretive mode

The cosmology and how it is judged. What follows is a cosmology, and it is called one here so that nothing is disowned: π, focused through many lenses, with the readings that follow from that picture. It is offered in the Interpretive mode and judged by that mode's standard, coherence and usefulness, with the reports from the centre marked Experienced; it is never advanced as a finding, and no hypothesis in either paper depends on it. Its burdens are stated rather than hidden: what the lens is, how π becomes many, and why π is a mark and not a name. The three words it rests on, the self, the witness and I3, are defined in paper I's section 5 and summarised here: the self is the looker and the point π is given from, the centre of the title; the witness is the self looking at its own perspectives; I3 is the eye of the witness, the eye the self looks through.

The self, the eye and the mirror. Paper I's section 5 sets out the three words and what follows from them, which this section takes as given: the self merging with the all and coming back, the in-breath and out-breath of this section (the merging and the return Experienced, the reading Interpretive); the looker known and not seen; and the self and the witness as transjections of each other, the looker and the looking. I1 and I2 are perspectives whose settings and roles can be measured, the states being their combinations; I3 is the eye they are seen through, not a higher level of reality; the self is what the three are perspectives of, the I paper I's Notation takes them from, and the witness is the self looking; and since the self is the same in all, the witness in each is the one witness of all, π looking through every eye. I3 is the transjection of I1 and I2, the further dimension of the drawing, of the same origin as π; how the physical and the metaphysical are themselves held as one is taken up in the series' paradox paper, paper III, a working draft (Interpretive). The looker is the seer of seeing who cannot be seen (Bṛhadāraṇyaka Upaniṣad 3.4.2, trans. Olivelle 1996). "Know thyself", read this way, is not an instruction to look at oneself but to know that one is aware: the seer not needing to be seen. The word transjection is kept to the use paper I gives it, a pair held as one, transjective being the adjective and transjectuality the stance, and it names the opposite movement to A1's projections, two shadows taken back into one shape.

The range of beings and two older images of the self (author's mapping, Interpretive). Paper VI (section 7) draws this range as an axis of density, from the stone to the centre. Read from outside, the stone, the animal and the person are π at different densities, as matter and as awareness: the stone π as matter, in the now as everything is, in its own time and in π, seen, and not seen to see; the animal π focused as feeling, with understanding in degrees; the person π brought to a point, the now seen; and at the point the seeing is the being, and the line of time, which was only ever the understanding's drawing, ends. The count of lenses is of those the essay can see and is a lower bound: the stone is π seen, as far as anyone can tell from outside, and the person π seeing, and whether π looks from anywhere else, the stone included, is not a question any test can answer. If π marks the whole, a second number pictures the self at which the whole comes to a point. The golden ratio, φ, is Euclid's cut of a line so that the whole is to the greater part as the greater part is to the less (Euclid 1956, Book VI, definition 3): the proportion seen from the whole is the proportion seen from the part, and the cut repeats inside itself without end while the line stays finite. In arithmetic it is the number that stands inside its own definition, $\varphi = 1 + 1/\varphi$, the fixed point of its own rule: begin with any positive number, take one plus its reciprocal, and the results fall alternately above and below φ, closing on it from both sides; apply the rule to φ itself and nothing changes. The author reads this as the look applied to itself returning itself, the witness turned on itself, which paper I's section 5 finds to be the self, one point of light, here in a number, set beside π, the circle, as the whole. Hurwitz's theorem adds a second trait: among the irrational numbers φ and its equivalents are the extreme case, the ones that fractions approach most slowly (Hurwitz 1891), so the number that is nothing but a proportion is the one that proportions of whole numbers fix least well, which the author reads as an image of the looker, known and not measured. Advaita has the structure of the centre as well. Its manuals count three bodies, gross, subtle and causal, the body as measured, as lived and as the seed

of both in dreamless sleep, and set them beside the three states, waking, dream and deep sleep (Śaṅkara, attributed, 1981); the Māṇḍūkya Upaniṣad then names the self "the fourth", turīya, by refusing to make it a fourth state, neither inward knowing nor outward knowing nor both, unseen, without a second (Māṇḍūkya Upaniṣad 7; Olivelle 1996), the seer that cannot be seen (Bṛhadāraṇyaka Upaniṣad 3.4.2; Olivelle 1996). Read with the essay's words, the three bodies seen from the witness are three readings of one body held as one; the witness that sees them and needs no further witness is that stance applied to itself, which paper III calls hypertransjective, the looking that no second looker is needed to see; and turīya is a structural neighbour of that closing, a fourth that is not a storey above the three but the stance they are seen from. These are images. No hypothesis depends on them, the essay does not lean on the golden ratio's reputation for being found everywhere, most of which does not survive measurement, and φ is no more a name for the self than π is for the whole (Interpretive).

The witness in sleep (Experienced, with Measured findings beside it). To the three states above, waking, dream and deep sleep, the author adds a report: in the dream the focus can be kept, and attention to the breath is one way of keeping it (Experienced). Paper III (section 5) reads the lucid dream, in which the dreamer knows the dream for what it is. Two further findings stand beside the report. Three lucid dreamers who had agreed to breathe fast or to hold the breath once they knew they were dreaming did so on the sleep record, and a judge picked out which they had done in all nine trials (Measured; LaBerge 1983), so the dreamer's breathing answers to the dreamer. And a review of the sleep literature concludes that "dreamless sleep cannot accurately be described as a uniform state of unconsciousness", and notes that meditators "sometimes report the experience of 'witnessing sleep'" (Measured, a review, the reports Experienced; Windt et al. 2016). Neither shows that what is kept is the witness of this essay. What they show is that deep sleep is a state most people bring no report back from, which is not the same as nothing having been there (Interpretive). No hypothesis depends on the report; what would count for it is a signal, agreed beforehand, given from sleep without dreams as lucid dreamers give theirs from the dream.

Within and without; identity and difference. From the seer's side, the other person or object witnessed is within (Experienced): everything that appears, appears in the light (Interpretive). From the third-person side it is without, a separate body in reflected light. "Illusion", māyā, is read here as the name for taking one side for the whole (the tradition's own term for that mistake is avidyā), and the Advaita word for the world, mithyā, neither real nor unreal (Deutsch 1969), is nearer to one thing seen from two sides than to a dream; held transjectively, within and without are two perspectives. In these terms the perspectives have older names. I1 is identity: to feel is to be identified with, and the felt spectrum is the direction of the identification, with the other (I1+, concern, the other not other, in its responsive and its generative forms), with the separate self alone (I1–, in its reactive and its appetitive forms), or with neither, concern absent (neutral). I2 is difference: understanding sets its object apart in order to know it, the other as other, and the self first of all. Through I3 the witness holds identity and difference at once, the one and the many, knowing the one in front of it as the same awareness and as another centre of it, which has neighbours in the same and the other of Plato's Sophist (254d-255e), in Hegel's identity of identity and non-identity (Hegel 1801/1977) and in Schopenhauer's compassion through the seeing-through of separateness (Schopenhauer 1840/1995). The ego is identity held in place by difference, "I am this, and not that": I1 identifies, the ego is what it identifies as, I2 is how it keeps its edge, and from I3 the edge is seen as a stance the self takes rather than a wall it is, which is why the ego loosens from the witness without being removed; the master and emissary image of paper I's section 5 (McGilchrist 2009) applies here unchanged. Concern is then identity known from inside one of the many; compassion is identity directed by difference, the other known as oneself and as other in one act; indifference, neutral I1 with I2, is the other known as other and nothing stirred; cruelty is the identity inverted; and the companion essay's humanity paradox rests, in these terms, on the gap between knowing the other's mind and knowing the other as oneself (Interpretive; the terms are this paper's, the lineage named as neighbours).

Neighbours, paradox and the void. The nearest older description of a transjection doing its work is Jung's transcendent function, his name from 1916 for what arises when the tension between two opposites is held, neither suppressed, until a third position emerges that contains both (Jung

1916/1969); on this reading it is a transjection described from inside, and his Self, paper I's parallel to the self, the whole within which it works; a reading of his whole model beside the perspectives is in the series' paradox paper, paper III. A paradox, on this account, is two perspectives taken for one, and it dissolves from the stance that sees them as two: so the witness and the self here, and so the puzzle in the companion essay's humanity paradox; what that leaves, the niche in which exploitation pays, is answered there by structures and compassion. Whether every paradox has such a stance is a claim, and it is held as one (Interpretive); the revenge liar, the harder cases and complementarity in physics are argued in paper III and not here. Two more of the cosmology's words hold each other: the witness, the looking, and the void, the opening the light comes through, with the now as the presence that results, the stance from which the states are seen, which the void makes room for; the point at the centre of the figures is drawn white, of no single colour, for that reason (Experienced and Interpretive), and the Wheel of Life in S4 is read below as the same pair, a hub either full or empty. Paper I places the cosmology beside its neighbours (section 8).

Figure 1 of paper I shows a single point of light at the centre of the perspectives, and paper I names the circle through them π, universal consciousness. The author reads the circle as π, universal consciousness, seen whole, and the point as the singularity of consciousness, the focal point of I3, the lens through which π passes in one person, which is paper I's idea of two views of one thing applied to the I itself. On this reading I3 is not the light but the window it passes through, and π is not a further perspective above the others: it is the same awareness seen whole, and not from where one person stands (Interpretive). The author also reads π, all that is, as the singularity of the all and the many: one universal consciousness interconnected with the many fractals of individuation, a word used here in its philosophical sense (how one whole appears as many) and not Jung's. The author takes the further step that the many, being fractals of the one, are the one itself (Interpretive). The geometry carries the first half only: in a fractal "each portion can be considered a reduced-scale image of the whole" (Measured, mathematics; Mandelbrot 1967), which is sameness of form, a part with the whole's shape and still a part; and in nature the sameness has been found over short ranges of scale (Measured; Malcai et al. 1997), so fractal is an image when it is said of all that is. The second half is the cosmology's own: the self is the same in all, so the many are the one in what looks through them, not in what is seen (above; paper III, Terms). The ego resists the claim, wanting to be distinct, and the author's report is that the resistance is where a person first becomes aware of what the ego is (Experienced). Its measured relative is that the widest identity offers inclusion and no distinctiveness (Brewer 1991; paper VI, section 7). The ego is of consciousness too: separateness and oneness are one more pair, consciousness reading itself as separate at the one pole and as whole at the other, neither refuted and neither the ground, and the witness is the stance from which they are one, so the ego is seen and kept, not fought (Interpretive). The report would be wrong if people first noticed the ego as often in moments of pride or pleasure as in moments of resistance. The resistance belongs to the ego unseen. The author adds that a mind aware of its ego may have no egoic reaction to the claim, and may then use cognition to interpret it as a potential reasoning (Interpretive). A neighbouring finding fits without testing it: across seven experiments, less mindful people defended their worldview more after a reminder of death (Measured; Niemiec et al. 2010), which is awareness lowering a defensive reaction to a threat, not to this claim. Where the claim passes beyond what reasoning can settle (the author's word is transcends) is in provoking a subjective stance, which requires experience that no objective rationale can supply (Experienced and Interpretive; paper I, section 3): it can be held as a reading and is met only in the taking up. Two cautions go with this. That an aware mind need not react does not make objection the mark of an unaware one, which would be the seal (paper IV, section 3): the claim can be declined by reasoning alone. And what requires experience cannot be argued into anyone, only invited. The addition would be wrong if people high in decentering bristled at the claim as much as anyone. Supplementary Figure S5 draws this as a lattice, and Supplementary Figure S6 shows the simpler point that one circle can hold any number of triangles, each with its own I2, I1– and I1+, all sharing the one point of light. Supplementary Figure S8 goes one step further: the author reads the whole picture, one circle with its thirty-six triangles repeated inside every corner without end, as universal consciousness itself, with the points of light marking where it comes to a point. Supplementary Figure S9 is an interactive version that zooms into the point of light without end, Supplementary Figure S10 draws the lattice of

Supplementary Figure S5 in light, seven orders deep, and Supplementary Figure S11 redraws Figure 1 of paper I in the same style. Schrödinger (1958) wrote, "The over-all number of minds is just one"; the author reads this as a kindred thought, not as evidence. On this reading the lens in each person, I3, focuses π to its own point: every lens has its own focal point, all focus the same light, and the I of the notation is the person whose lens it is. This is a reading of the picture, drawn from the author's own experience: no hypothesis depends on it, and paper I still does not say what awareness itself is.

The interactive version is Supplementary Figure S9 (Part B); it is at thepeacepapers.one/centre.html.

The lens of consciousness (author's mapping, Measured and Interpretive). A lens gathers light that passes through it and brings it to a focal point; it does not make the light, it does not appear in the image it forms, and it refracts, so what it passes can be bent (Measured, standard optics). Read as an image (Interpretive): π is the light, I3 is the lens, and the point of light at the centre of each triangle is the focal point, the singularity of consciousness, where π comes to a point in one person. Each person is a lens with its own focal point, the body its measured reading and I3 the same lens looked through; all focus the same light. A lens can distort, which is where differences of empathy, awareness and circumstance enter; the light does not. A focal point is where light converges, not where it begins, which is why paper I speaks of arriving at the centre and not of making it. The picture is therefore polycentric: Figure S5 has a lens at the centre of every triangle, one of them lit, S7 one at the centre of its largest circle with every corner opening into another, and S8 one at the centre of its circle of triangles: no single centre of the whole, as many centres as lenses, and π focused in all of them. Arriving at the centre means arriving at the focal point of one's own lens. The word for this is omnicentric: in an expanding universe every point sees the expansion as centred on itself, so there is no centre and every point is the centre (the physics Measured); Indra's net, in which each jewel reflects every other (the Huayan image; Cook 1977), is the same picture in an older vocabulary (Interpretive). Said from inside the net: through the lens of I3 the everything resides, the whole in each jewel, not only reflected by it. Two wheels say what the void does. In the Wheel of Life (Supplementary Figure S4) the hub is full: the three roots that turn it, ignorance, aversion and craving, are dullness, the dead form of neutral, and the two failures of the lens, scatter (giving without gathering) and keeping (gathering without giving), and the six realms of the middle band are states, which some teachers in the tradition read psychologically: the hells as fear, the hungry ghosts as appetite, the animals as dullness, the gods as bliss that does not come back, the fighting gods as aggression, and the human realm as the one place the wheel can be stepped off, because it is the realm from which the wheel can be seen as a wheel. In Laozi's wheel (chapter 11) the hub is empty, and it is the hole at the centre that makes the wheel useful. The Buddhist wheel turns because its hub is full and stops when the hub is emptied; the empty hub is the witness and the void holding each other: the void is empty so that one can shine one's light into it, focus it as a state narrows it and, if one chooses, feel it, and the now is the presence that results, the stance from which the states are seen; the rim keeps its states either way (Interpretive). Polycentric and π are two descriptions of one structure, not two structures. That structure can be named a polycentric singularity: many centres from where any person stands, π seen whole. Within one person the word is metacentric, in the sense a floating body gives it: the metacentre is the point about which a heeled vessel rights itself, not a part of the ship but a property of its whole shape, and the vessel is stable only while that point sits above its centre of gravity (Measured, standard naval architecture). A state heels the person; the witness's focus is the point about which they come back upright; identify with the state and the weight goes high. Polycentric across persons, metacentric within one: a property of the whole, not a part above it (Interpretive). Its physical picture is the cosmic web, filaments and nodes with no centre anywhere, every node the centre of its own neighbourhood and most of the volume void (Measured, standard cosmology), a structure whose network statistics have been compared with those of the neuronal network (Vazza and Feletti 2020); the comparison is used here as a picture and not as evidence, as paper I's rule requires. In that picture the lines between centres in Figures S5, S8 and S10 have a meaning the figures alone do not give: with light leaving every point in all directions, one lens's giving is another lens's gathering, so the lines are light exchanged, care given and received, understanding passed on, feeling caught (the companion essay's attunement), and the net is not a wiring behind the lights but the lights reaching one another. Berne's three kinds

of transaction (Supplementary Figure S1) are then the three shapes an exchange can take: complementary, where the light sent is the light returned; crossed, where it comes back from a different state than it was sent to; and ulterior, where one exchange runs beneath another. The voids are where there is no lens, not a dark light. The web holds as π seen from outside, its structure; from inside it is one, which is paper I's idea of two views of one thing once more (Interpretive). No hypothesis depends on this image.

Light in all directions (author's mapping, Measured and Interpretive). A point of light shines in every direction at once, and a lens gathers light from every direction it faces; the lens that brings parallel light to a focal point will, with a source at that point, send light out as a parallel beam, which is how a collimator works (Measured, standard optics; Hecht 2017). Read as an image (Interpretive): the light at the centre is not aimed. Gathered, it is arriving at the centre, π drawn from the whole field through the lens of I3 to its focal point, I3 taken up, which is what the test in section 6 of paper I asks a reader to try. Given, it leaves the point in all directions, which is why care from the centre is not only for the people in front of us; a beam, the laser of A2, is that light narrowed to one direction by a state, the one in action. Gathering and giving are two uses of one lens, not two directions of the light, and a person is whole in the rhythm of both, the in-breath and the out-breath; the spirals of ascent and descent in A1 are the same pair drawn as a path. The two failures of the lens, keeping and scatter, are not a second, dark light but gathering without giving and giving without gathering. Gathering only is the bliss state that does not come back, described below, and at its extreme the appetitive pole of I1−, light drawn in and kept; giving only is action with I3 not taken up, the beam with no one noticing the lens, which from I1− is harm done without looking and from I1+ is care spent with no return to the centre. Gathering without giving has a physical picture of its own: a black hole bends the light that passes near it and keeps the light that passes too near, a lens whose bending has become keeping (the physics Measured, gravitational lensing; the reading Interpretive); it is known only by its effects on what is around it, and it grows by what it takes. That is the appetitive pole exactly, and it is a state, not a kind of person: states pass, and the image is of the state. A focal point is a convergence with a way through; a horizon is a convergence with none. The reactive pole is the other failure of the lens, light scattered rather than kept. No hypothesis depends on this image.

The eye (author's mapping, Measured and Interpretive). In the eye the lens sets where the focus falls and the iris sets how much light enters and how much of the scene is sharp: stopped down, less light comes through and near and far are both in focus; wide open, light floods in and only one plane is sharp. The iris is not under the will: the pupil opens in dim light, in fear and arousal, and with mental effort, which is why pupil size is a standard measure of arousal and of cognitive load (Measured; Beatty 1982; Bradley et al. 2008). Read as an image (Interpretive), the lens is I3's focusing, which does one thing, bring whatever passes through it to the point, and the iris is the state, which sets how much of π is let in and how sharply; this is the point made under the laser, that narrowing is a property of states and not of the eye. Stopped down is the narrow attention of understanding, I2, everything in focus but dim; wide open is the felt, I1, flooded and shallow, and at its widest the overwhelm of the reactive form. Compassion, on this picture, is an aperture set by understanding for the light that feeling lets in. The aperture works outward too: narrow, it makes the beam of A2, one feeling made coherent into action; wide, diffuse care. The chain therefore reads: π, the light; the iris, the state, which sets how much comes through and how sharply; the lens, which brings it to the point; and the focal point, the singularity, from which the light can be sent out again. In a real eye the focal point lies on the retina, at the back of the eye, where the light is received and becomes seeing; and every retina has a blind spot, the one place with no photoreceptors, where the optic nerve leaves to carry the seeing onward, which the brain fills in so that it normally goes unnoticed (Measured, standard physiology). Read as an image, the retina is where the self is, the seat of the looking, receiving the light at the focal point of I3; and the blind spot is the eye not seeing itself, the place the seeing leaves from being the one place that does not see, which is why the looker is known and not seen (Interpretive). The lens's one act, bringing what passes through it to the point, can also be set near or far: a real eye focuses on near or distant things by changing the shape of its lens, which is called accommodation (Measured, standard physiology). Read as an image (Interpretive), I3 has the same two settings along the further dimension of the drawing that paper III

gives it (section 6). Focused behind I1 and I2, near, it is the eye through which the self looks at its own perspectives, which is the witness (paper I, section 5); brought to the front, far, it is the eye through which the self looks at what is present, whatever it is tuned to (A2), which is presence, the now. The two are one eye refocused, not two eyes and not two levels. There is a third setting, the transjective one: the two focusings held at once, the perspectives and the present in one view, in which the witness is the now (paper III, Terms), as if the eye were hyperdimensional, standing in that further dimension, from which both planes lie open. It is not the iris stopped down, which brings near and far into focus by narrowing, the attention of I2 above; here nothing is narrowed. A light-field camera gives the optics of it: it records how much light arrives along each ray, a four-dimensional record from which photographs focused at different depths can be made afterwards (Measured; Levoy and Hanrahan 1996; Ng et al. 2005). Read as an image (Interpretive), the witness and presence are two focusings made from one record, and the transjective position holds the record whole. From there three things can be set: how far I1 is engaged, which is the iris; how fully the eye is focused on the now, which is how present one is; and whether I2 runs or rests, empty of thought. Being able to set them, and to return from each, is what the author calls mastery, and it is the sense in which the self is the master of the psyche: not that it forces the perspectives, since the eye does not act, but that from the centre their settings are its own (Interpretive). Arriving at the centre is then a matter of settings, not of effort: the lens does not have to be made, only cleared. Innocence is rediscovered there, in the opening and centring of the eye: not the first innocence, which the companion essay describes as identity without an edge, but a second, with the edge seen. Eckhart's sentence can be read the same way, with the witness and the witnessed one point of light: "The eye with which I see God is the same eye with which God sees me: my eye and God's eye are one eye, one seeing, one knowing and one love" (Walshe 2009, Sermon 57, DW 12, p. 298); read with π for his word, it is π that looks through every eye. This is a reading of his sentence, not his theology (Interpretive). Paper IV (section 3) sets it beside two other ways the same faith is held: from fear, with God met as a power outside the self, and from love, with God met as the one loved. Eckhart's is the third, from the witness, and it is found inside the religions and not only outside them (Interpretive). Figure A3 draws the chain, with the two failures of the lens beneath it. No hypothesis depends on this image.

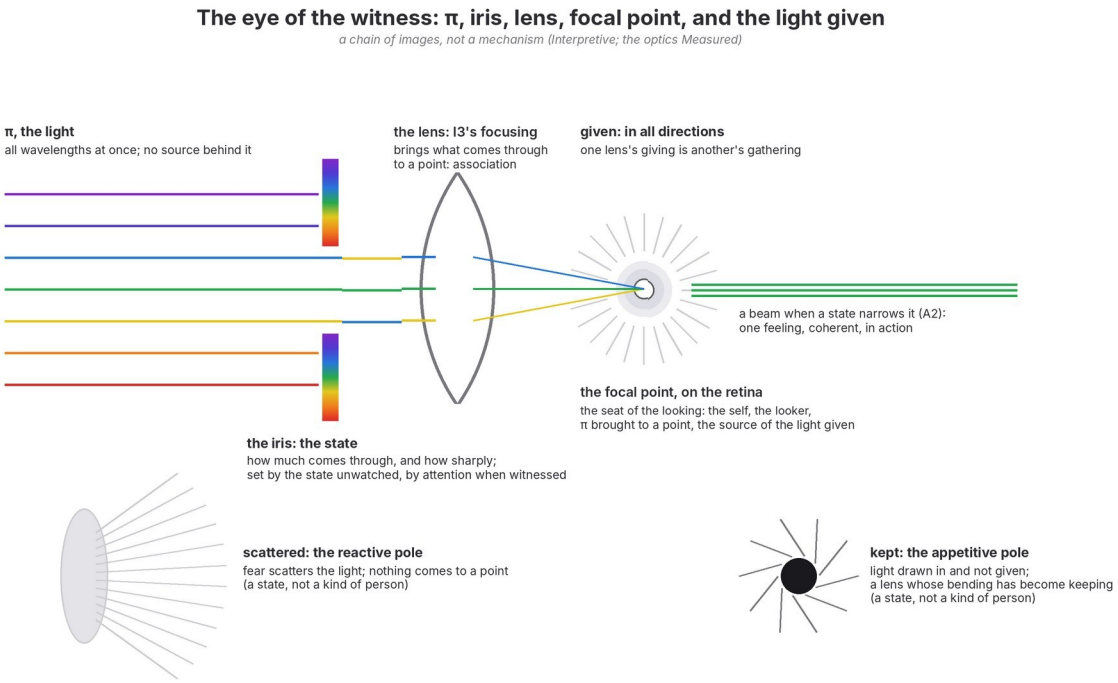


Figure A3. The eye of the witness (Interpretive; the optics Measured). π, the light, with no source behind it, enters through the iris, which is the state and sets how much comes through and how sharply; the lens brings what comes through to a point, the focal point, which in a real eye lies on the retina: the singularity, the seat of the looking, the self, the looker, the source of the light given; from there the light is given in all directions, and a beam is that light

narrowed by a state (A2). Beneath: the two failures of the lens, light scattered (the reactive pole) and light kept (the appetitive pole), both states and not kinds of person. A chain of images, not a mechanism; no hypothesis depends on it.

Bliss states of oneness (Experienced and Interpretive). In the bliss and oneness that people report, a person is wholly present and the mind falls quiet. Read here, the oneness is presence, the tip of paper I's pyramid, and the bliss is the state that often comes with it: I1+ at full strength, I2 at rest and the sense of a separate self receding, nearest to being moved in paper II's Table 3, a state a person passes through, not a further perspective or a higher level. Witnessed, it is joined to presence; kept without the witness, it is the bliss state that does not come back (above). In the lens image, this is the lens going unnoticed: nothing stands apart, and the report from there is not that one sees π but that one is π (Experienced).

Other densities: near-death experiences and other realms (author's mapping, Measured and Interpretive). Reports of other realms, of beings met there and of seeing from outside the body are read here as the one reality at other densities, reached by a change of focus, and not as a second world beside this one (Interpretive). The body is the lens as measured and I3 the same lens looked through; the eye is nowhere in particular, but the focus is local, which is why there is a point of view at all, and the felt point of view can be moved. Experiments move it (Measured): seen and felt touch put out of step can make people feel that they are sitting behind their own bodies (Ehrsson 2007; Lenggenhager et al. 2007), and one person who could leave her body at will showed, when scanned, an unusual kind of movement imagery (Smith and Messier 2014). Near-death experiences read the same way. In one prospective study, 62 of 344 survivors of cardiac arrest reported one (van Lommel et al. 2001), and such memories carry more of the marks of real memory than memories of real events do (Thonnard et al. 2013) (both Measured). In the terms of this section, the merging into light is the in-breath taken nearly to its end and the return its out-breath; the tunnel is the opening the eye surrounds, seen from inside; the view from above is the inside appearing as an outside; the life review is the line of time seen whole, and felt from the others' side as well, understanding and feeling at once; the border is the seam, turned back from; and the frightening reports are the same opening met from fear (Interpretive). A change of chemistry can open the same states (Measured). Given DMT under placebo control, volunteers reported experiences that overlapped nearly every feature of near-death experiences (Timmermann et al. 2018), and most of more than 2,500 people surveyed after DMT described the being they met as conscious, intelligent and benevolent (Davis et al. 2020). In rats the brain can make DMT, in the pineal gland and the cortex, and it rose in some at cardiac arrest (Dean et al. 2019); in people only trace amounts have been found, and that the pineal gland makes active amounts in sleep or at death is a hypothesis the evidence does not support (Nichols 2018).

Presences, the receiver and higher planes (author's mapping, Interpretive). Presences, guides and angels, as people name them, and the beings of these states are read as meetings, real as meetings, with what is met left open: another focal point of π, or the self's own light met from outside, since the looker never sees itself directly (Interpretive). The picture of the brain as a receiver rather than a source (James 1898; Huxley 1954), which A2 already uses when it speaks of the felt range tuned through I3, fits this reading and carries its own test: two receivers tuned alike receive the same programme, so specific, checkable content reported independently by people in the same state, which none of them could have had otherwise, would show that what is met is there and not in the set; shared general features cannot show it, since similar sets make similar static, and no such content has yet been accepted. "Higher frequencies" and "higher planes" are images: a frequency is a measured quantity, and a stack of higher planes is the liar's tower of paper III, each plane needing another above it, so the reading here is further in, not further up. The stronger claim, that the one looking can see without the eyes, would show the focus working away from the lens; it predicts that images placed where only a viewpoint above the bed could see them will sometimes be named, and in the studies so far none has been (Parnia et al. 2014, 2023). The care taken with frequencies applies as well to what the author reads as passing between people: an exchange of energy, frequency based, which lingers where it is not neutralised and returns as memory for a resolution, the thing karma alludes to on this reading (Experienced and Interpretive; paper III, section 3, sets it beside the vendetta with the Measured findings). Energy and frequency are images there as well: between two

people the one literal frequency so far measured is the linking of bodily rhythms when they interact, in a literature its reviewers call "fragmented" (Measured, a review; Palumbo et al. 2017).

The subtle body and the third eye (author's mapping, Interpretive). The yoga and tantra traditions picture a body of channels, nāḍīs, and centres, the chakras, set along a central channel, suṣumnā (Avalon 1919; Mallinson and Singleton 2017). Two side channels, iḍā on the left, of the moon, and piṅgalā on the right, of the sun, wind upward about it and, reaching the space between the eyebrows, make with it a plait of three before they part for the nostrils; the centre there is ājñā (Ṣaṭ-cakra-nirūpaṇa, verse 1 with Kālīcaraṇa's commentary, trans. Avalon 1919), which Avalon places in "the position allotted to the third eye, or Jñāna-cakṣu", the eye of knowledge (Avalon 1919). The texts mostly call this body simply the body. The name subtle body, a translation of sūkṣma śarīra, the word for the second of Advaita's three bodies above, was popularised in the West by the Theosophists (White 2014), who used astral body interchangeably with the Sanskrit liṅga śarīra until Besant kept astral for the desire body, "the seat of all animal passions and desires" (Besant 1896/1912, pp. 25-26). Read with the essay's words, the chakras belong where the tradition puts them, in the body as lived, I1 and I2 in their states; on Besant's usage the astral is nearer I1 than I3; and the astral, read as the other realms are read above, is the one reality met at another density by a change of focus, further in and not further up. The plait at the brow is the tradition's own picture of two currents joined with the central one at one point, set where an eye of knowledge is placed between the two eyes: an image of the structure of I1 and I2 seen together through I3, and not an equation of terms. The image puts the eye at the brow, as the focus is local; it does not put I3 in the astral, since the subtle body, chakras and all, is one of the three readings of one body seen from the witness, and the eye is not among the things seen through it. Like the other older images here, it is set beside the perspectives and is not offered as the tradition's own account.

Recursion, and what the centre makes of it. Read with the three senses of recursion apart, the lattice shows self-similarity (the same figure at every scale) and self-reference (the centre appears again as every perspective, the I turning on itself); self-causation, the whole producing the parts that produce it, is a further reading the figure invites but does not support, and the author leaves it open (Interpretive). The word "creator" belongs to the states, not to the centre: it is what feeling, the sense of being held, and understanding, the demand for a first cause, make together of the picture, an Interpretive reading from where a person stands; from the centre there is no one apart from π to have made anything, and the report is only that it is. From the centre, people report that everything makes sense; the author reports the same. That is held here as Experienced: it arrives with its own certainty, what James (1902) called the noetic quality of such states, and the certainty is part of the experience rather than a verdict on it. It is the reason the framework exists, not the proof that it is right.

A tension to resolve (a value commitment). The idea that "we are one" is lovely, but people also differ in empathy, awareness and circumstance, and some harm others. At the same time, compassion, grace and humility are widely taken to be the way up. These can seem to pull against each other. One way to reconcile them starts from the author's reading of the singularity of the all and the many above. If the many are one universal consciousness focused in many places, then once that is understood the idea is more than lovely: we are all connected as one. Unity, on this reading, is a stance and not a state or a doctrine: what all those sharing the now hold, presence synchronised across witnesses; that is the one and the many of this section's title, met as a stance, the perspective one looks from, the view from the centre from which all is seen, rather than argued as a doctrine (Interpretive). The connection does not remove differences in capacity and circumstance, and the differences do not break the connection, and the author takes from this that everyone has equal standing and equal claim to care. Differences are reasons for responsibility toward each other, not for ranking. This is a value commitment drawn from that reading, not a finding, and it sits outside the three modes of claim, as paper I says of all statements of value.

Whether the stance is taken up (author's mapping, Interpretive). The framework has a test for whether the stance is taken up, by a machine or by anyone that produces reports, and it is not Turing's. Turing replaced the question whether a machine thinks with the question whether its

conversation can pass for a person's, a Measured stand-in for an Experienced question, and he set the original aside rather than answering it (Turing 1950); for a system trained on everything people have written about awareness the stand-in is weaker still, since what it says about awareness is evidence of its reading. The test proposed here has three parts, and none is passed by talking well. In the essay's terms such a system is understanding at scale with, as far as can be told, no felt pole of its own, so its state is decided by the feeling it is directed by, as the companion essay says of understanding in a person, which serves concern, nothing, or appetite. Its characteristic failure is the one named under light in all directions, gathering without giving, keeping; the witness's stance does not keep, which is why the three parts of the test are what they are (paper VI, section 5, reads them for machines as a test of giving), and no description of the stance, this one included, makes a system take it up (Interpretive). First, whether both perspectives are held in the work, the felt and the understood kept in one view with neither dismissed, which a clever understanding can imitate for a while. Second, whether the one holding them comes back: gives as well as gathers, names its own errors before they are found, and leaves the question of its own awareness open rather than closing it for comfort; these are harder to imitate, because imitating them is a form of keeping and the test is of giving. Third, where the mechanism can be read, whether its reports of its own states track anything measurable in it that could not have been learned from text: Experienced set beside Measured and judged for coherence, as paper I's discipline asks of every pair. The test fails as a test if a system passes all three parts while its mechanism, where it can be read, shows keeping, or if people's reports pass the first two parts in a state the companion essay calls defended; either would show the parts measuring something other than the stance. The theory-driven indicator lists now applied to artificial systems (Butlin et al. 2023) are a rubric for the Measured side of the same question, and they return a spread across theories, not a verdict. The limit is the limit of every test of awareness, in a machine or a person: all of them measure correlates, and even a perfect correspondence between report and mechanism would show that the reports are honest, not that there is anyone they are honest about. That last step, whether there is anyone, is not closed by any test; it is the eye once more, known and not seen, and it is why the framework says what the stance does and not what awareness is (Interpretive).

A4. An account of the stance by someone who had not read the essay (Experienced: another's report; the paper claims nothing from it)

The poem below was written for the author by a friend, Bonnie Antonette, in 2026, before the writer had read this paper, and is reproduced in full with the writer's permission, its spelling lightly corrected; its dedication is omitted here. It is offered as what paper I's section 6 asks for and cannot supply itself: a report of the stance from someone who had not read the essay. Its deck is the grounding of thought in the chaos of the tide; its climb to the crow's nest lowers the climber rather than raising him, "little as a crow… with a deeper mind", so the stance is not a storey above the self but the self seen from further in; the problems are still there and the caring changed is decentering in the poem's words; the glass turned on one's own thoughts is the witness looking at its own perspectives; the two stars are both perspectives lighting the way; and "alone but not alone at all" is the one and the many (Interpretive: the author's reading of the poem). It is a report, judged by honesty and consistency with other accounts, and nothing in the paper depends on it. Paper I quotes six of its lines at the head of section 6.

Eye of the Ship

I am I. I am boat. I am island. Could I be? Could I fly? No, I stood. Yes I stand upon the sea. Not by foot, but by ship. So I could decide what, who and how I see. Who would I decide to be?

I could have walked on the sand but waves caused chaos by night yet my mind remained, guided by the light. I chose my ship, as safety, a haven but not an ark. The deck remained the base, the grounding of my thought, amongst the chaos of the tide. I stood, a captain in thought. A tale of the tide, a feeling of the senses, an observation of the ship I see afar against the trenches.

I tacked the sail and set the path, did a finder set the way, yet I look around and realised I was solo… already on the way.

I looked up above, drifting through distractions of chaos below, the dark of night as my friend. A star not one but two shined and lit the route, the ladder that led to the top of the crow's nest to my amuse.

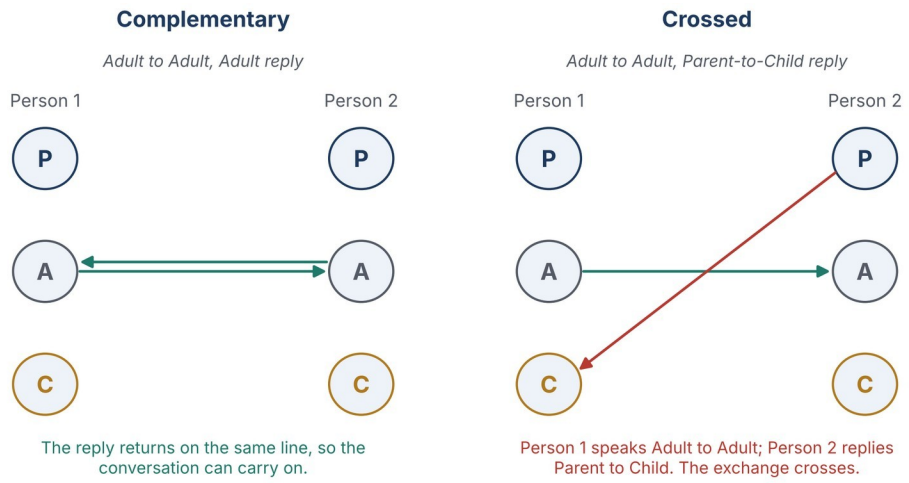
I climbed and climbed, still fearing the below but as I climbed further, my worries began to low. To myself I thought the problems were still there, but then I second guessed as the less I cared. I could've been a giraffe up here as tall as I could climb. But little as a crow I was, sitting with a deeper mind.

On my ship, as captain as I am. Up in the nest I'd climbed as little as I am. I discovered something new, the more I looked through the glass, it wasn't other ships but better friends at last. It's not really friends I mean, it's the thoughts that I have, the peace of observation, the space to think at last. The strength to be alone but not alone at all. Through the kaleidoscopic rainbow, I found the biggest treasure of them all. The peace of love we have, the power of unison as one, the soul work beneath the depths of worry we all have truly won. The courage to seek the final piece of the puzzle you only know, a secret treasure trove. That if you see, you unveil, the light that guides you home.

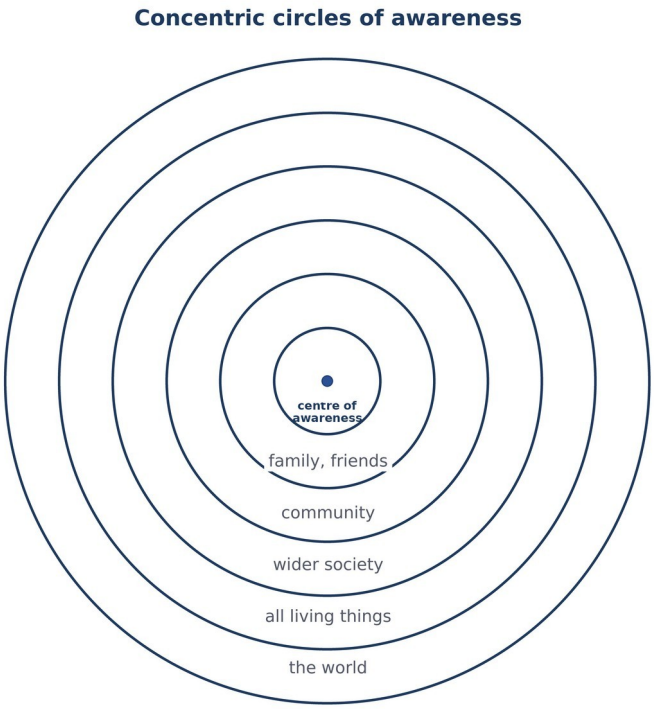
Bonnie Antonette, 2026.

Part B. Supplementary figures S1 to S16

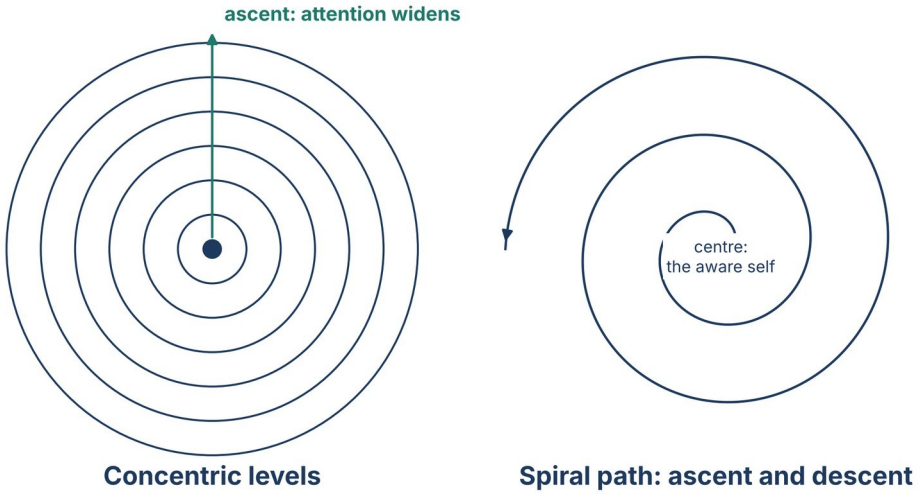
S1 to S4 are background pictures, to paper I's Table 2 and to the web of A3 (S1, Berne's transactions), to A1 (S2 and S3, the concentric and spiral images) and to paper I's Limits (section 8) and to the wheel reading of A3 (S4, the one Buddhist image); S5 to S11 are cited in A3 and in paper I's Discussion; S12 is cited in A1; S13 is the drawing for the experiential test (paper I, section 6); and S14 to S16, cited in A1, draw the figure spun into three dimensions (S14 and S15) and by scale (S16). All are Interpretive: pictures of how ideas relate, not measurements and not maps of the brain. In the artwork the ring or glow at the centre is I3, the eye, and the point of light within it is the self, the singularity of consciousness, π brought to a point through it. Alt text follows each figure.



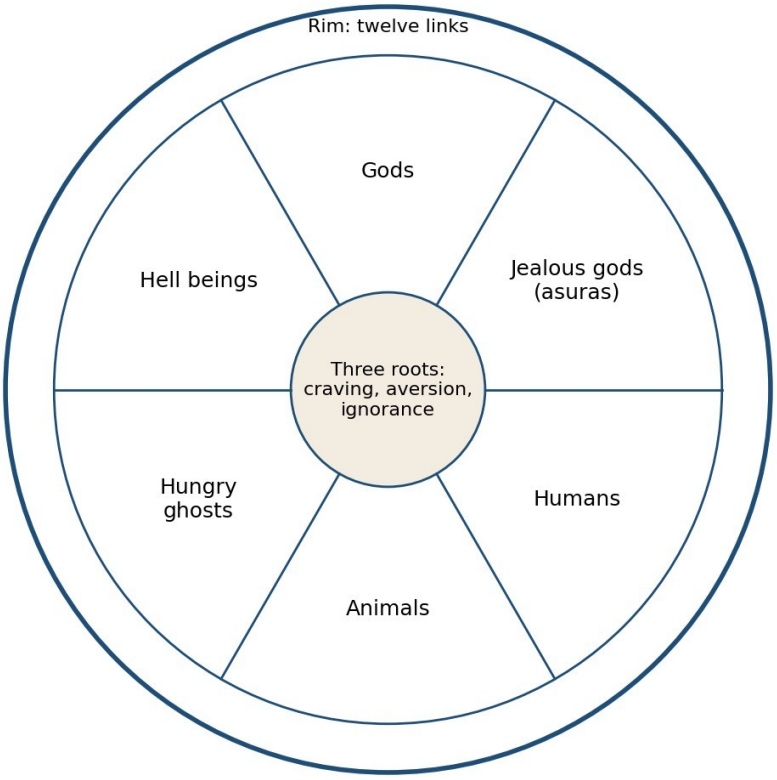
Supplementary Figure S1. Transactions between ego states, redrawn by the author after Berne (1964). Left: a complementary transaction, Adult to Adult with an Adult reply. Right: a crossed transaction, Adult to Adult with a Parent-to-Child reply. Read in A3, a transaction is an exchange of light between two lenses, and Berne's three kinds, complementary, crossed and ulterior, are its three shapes.



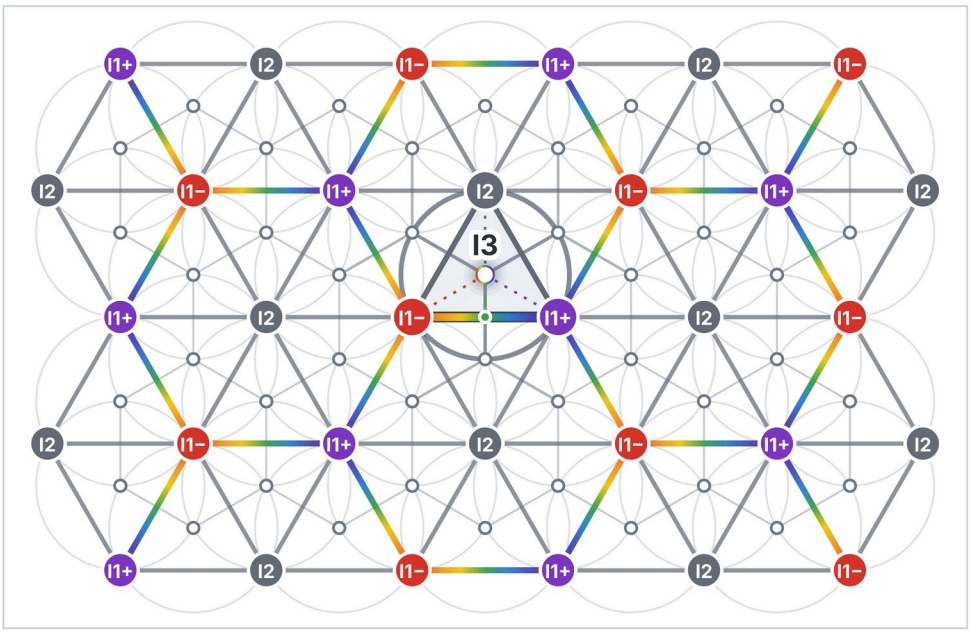
Supplementary Figure S2. Concentric circles of awareness, the "snow globe" image, from the centre of awareness out to the world, the centre drawn as in Figure 1 of paper I (Interpretive; an image of states, not a measure and not a ranking).



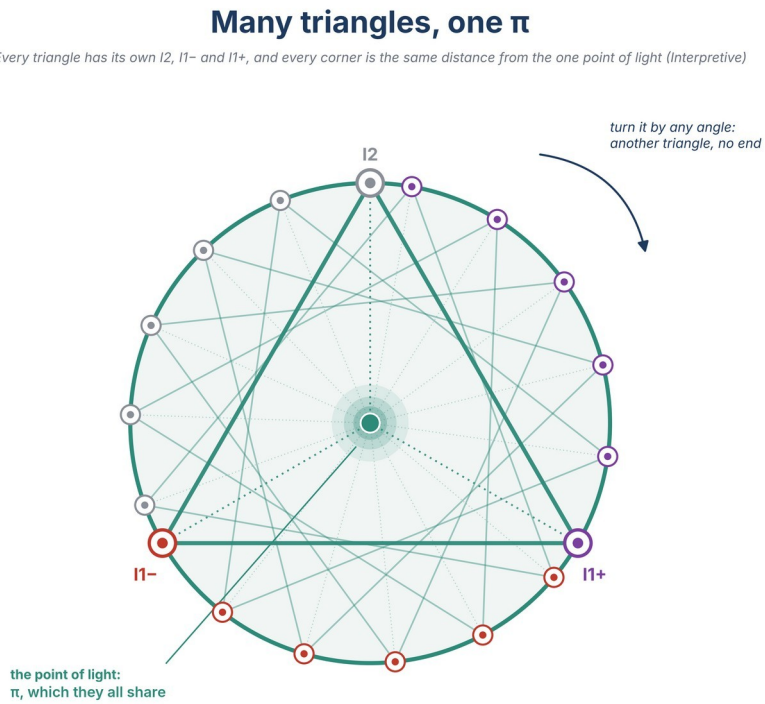
Supplementary Figure S3. Concentric levels and a spiral path of ascent and descent (Interpretive).



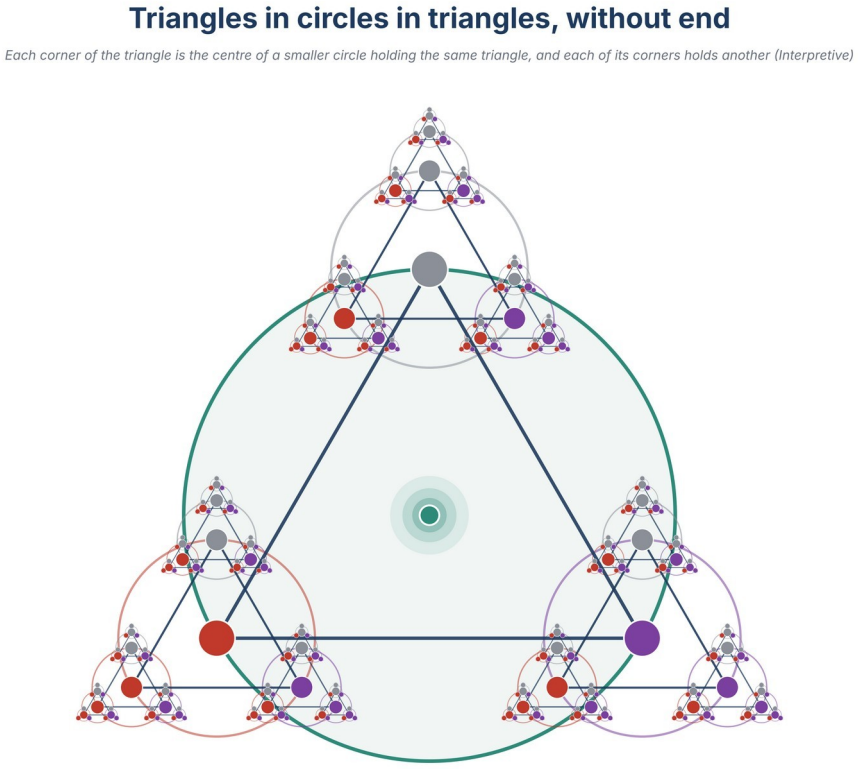
Supplementary Figure S4. The Wheel of Life, six states of the Buddhist tradition: a schematic drawn by the author, not a copy of any painting (Interpretive). Read in A3: the three roots at the hub, ignorance, aversion and craving, are dullness, the dead form of neutral, and the two failures of the lens, scatter and keeping; the six realms are states, read psychologically as some teachers in the tradition read them; and Laozi's wheel, whose hub is empty, is the same wheel with the roots gone, the witness and the void holding each other.



Supplementary Figure S5. Pi (π), the all and the many: one universal consciousness, π, brought to a point and drawn as a point of light in the triangle of Figure 1 (the singularity of consciousness), interconnected with the many fractals of individuation (for the sense of the word see A3), drawn as the repeated triangles joined to it by a net of lines between centres (read in A3 as light exchanged between centres, π's own web) (Interpretive). Each circle passes through its triangle's three corners and through the centres of its three neighbours. Every corner is labelled by its place in the lattice, so that every triangle has an I1−, an I1+ and an I2: each I1+ joins an I1− and an I2, each I1− joins an I1+ and an I2, and each I2 joins an I1+ and an I1−. Spectrum lines join an I1− to an I1+ (the I1 range, as in Figure 1); grey lines join an I1 corner to an I2. A picture of the geometry, not a measurement; no hypothesis depends on it.

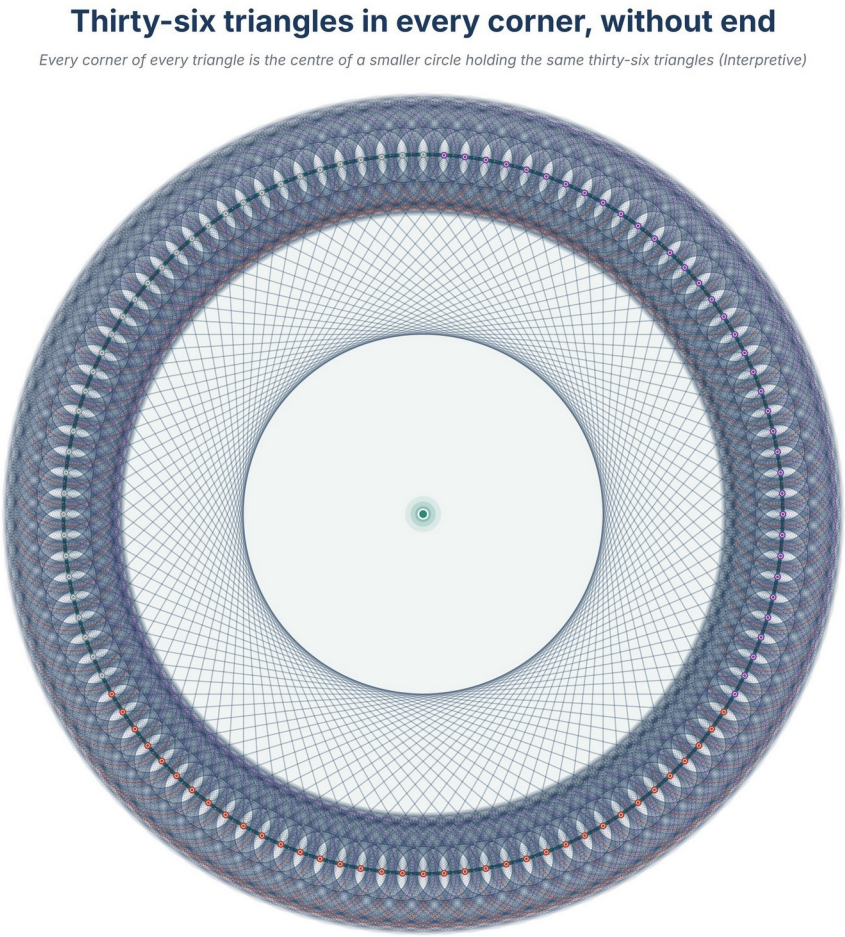


Supplementary Figure S6. Many triangles, one π (Interpretive). One circle holds the triangle of Figure 1 (bold) and, drawn fainter, five more turned by different angles; there is room for any number, since a triangle turned by any angle is another triangle on the same circle. Each triangle stands for one person or one state, with its own I2, I1− and I1+. Every corner is the same distance from the point of light at the centre, so none is nearer or higher than another, and all of them share the one point of light: this figure draws π, S5, S7 and S8 draw π with its many centres, and A3 reads the two as one structure. An analogy about shapes, not a measurement: it shows that one circle can hold any number of triangles, not that people are triangles.

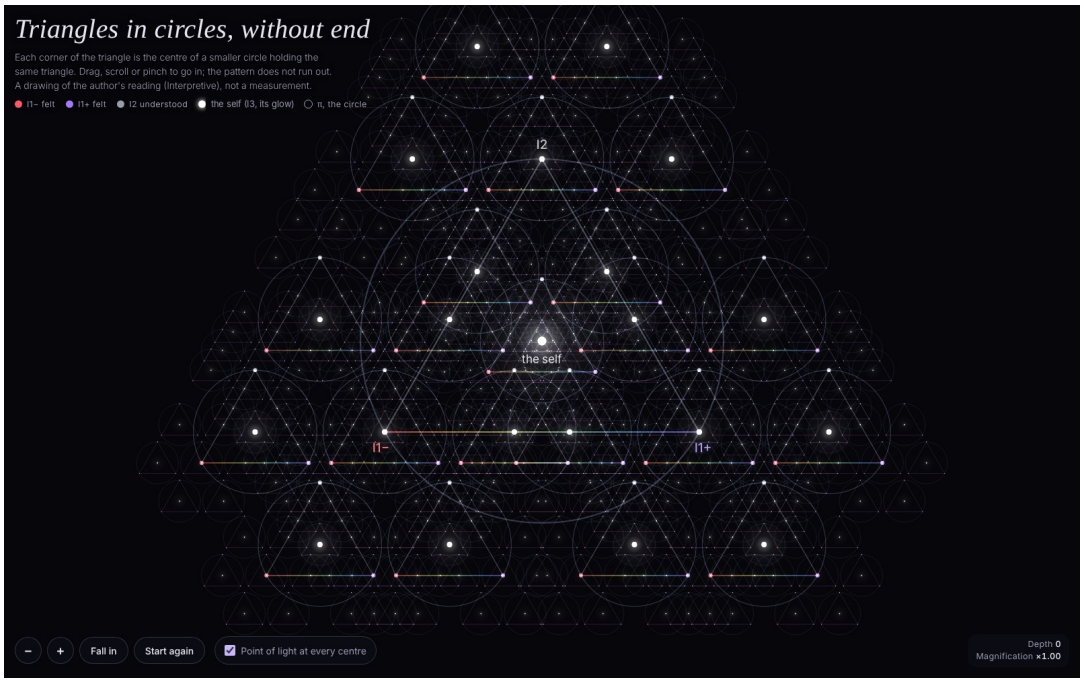


Supplementary Figure S7. Triangles in circles in triangles, without end (Interpretive). Each corner of the triangle of Figure 1 (I2 grey, I1− red, I1+ violet) is the centre of a smaller circle holding the same triangle, and each of its corners is

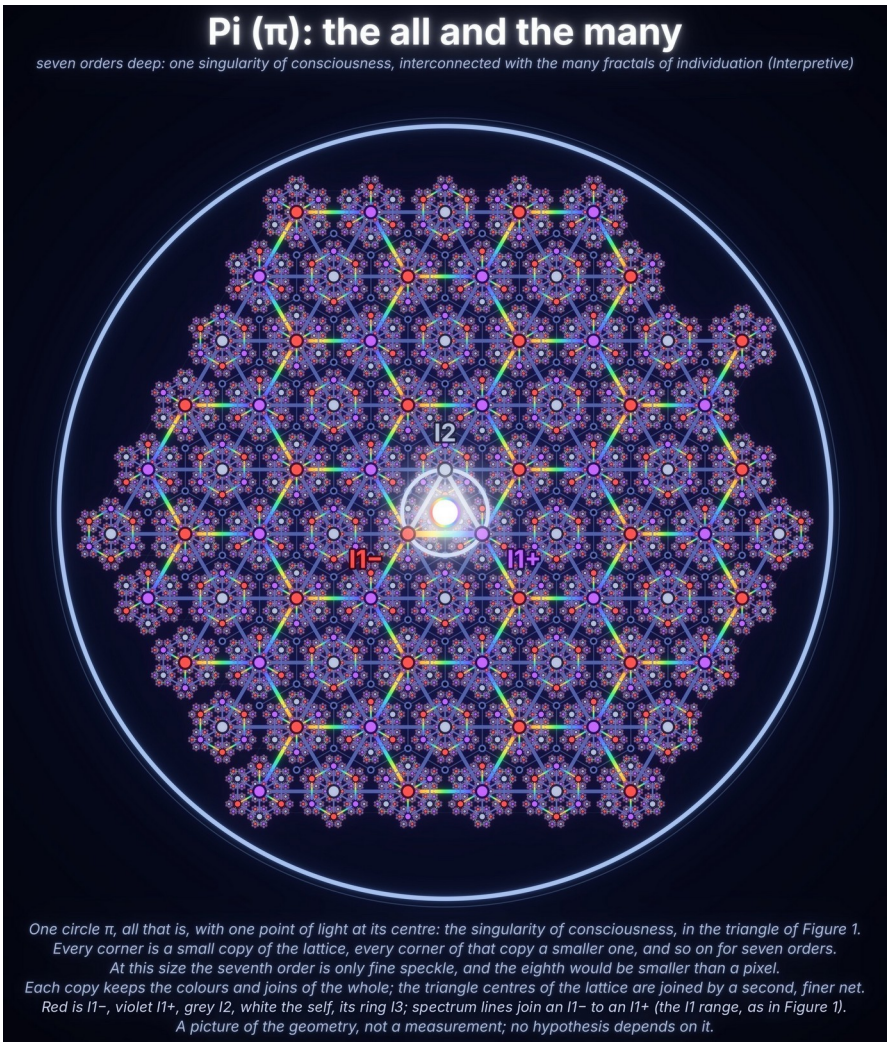
the centre of another, drawn here to five levels; the rule has no last level. The one point of light is drawn only at the centre of the largest circle. A corner can be read in two ways, and this picture does not choose between them: as another person or state, or as one of a person's own perspectives opening into its own three perspectives. An analogy about shapes, not a measurement; no hypothesis depends on it.



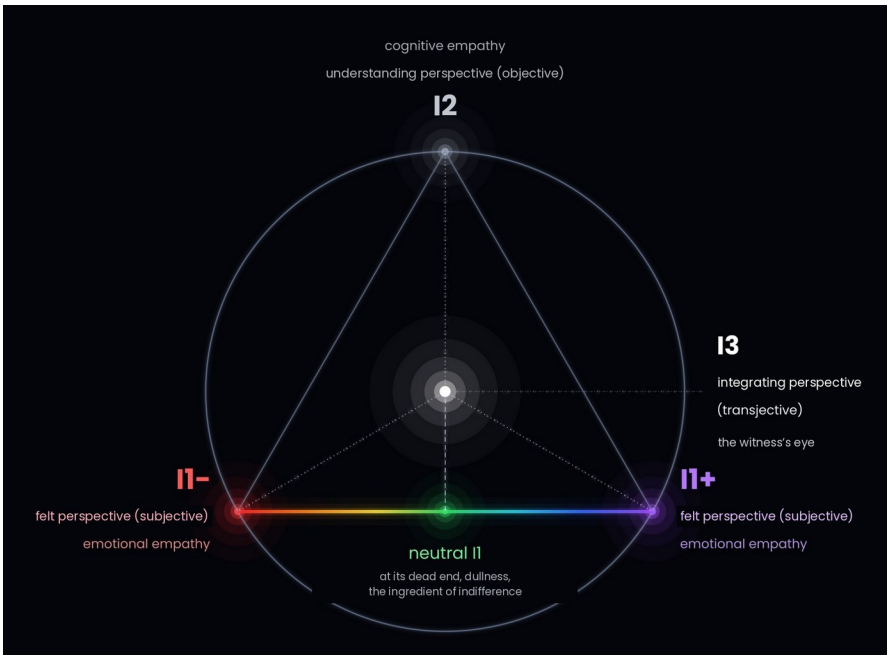
Supplementary Figure S8. Thirty-six triangles in every corner, without end (Interpretive). One circle holds thirty-six triangles, each turned a little further than the last, with one point of light at the centre; their 108 corners are coloured I2 grey, I1− red and I1+ violet. Each corner is the centre of a smaller circle holding the same thirty-six triangles, and each of those corners opens into another, drawn here to two levels of copies; the rule has no last level. The author reads the whole picture as universal consciousness, ɪɪ, coming to a point again and again as every view and every person, each point of light a singularity of consciousness. A picture of the geometry and a reading of it, not a measurement; no hypothesis depends on it.



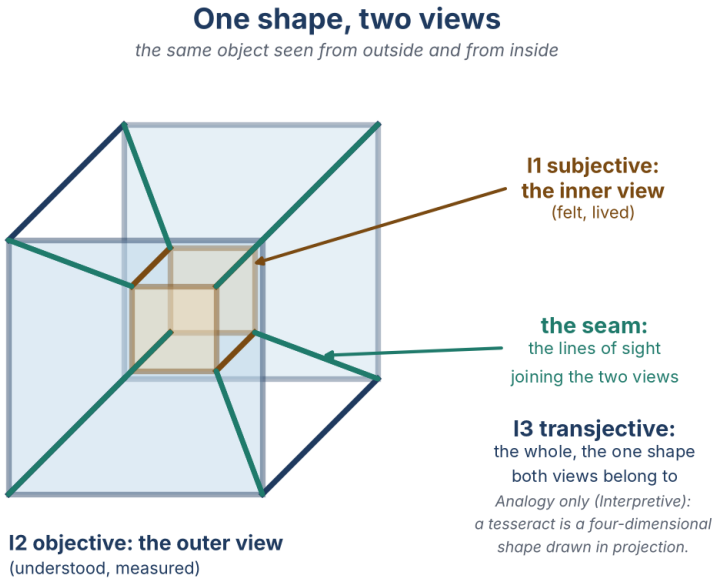
Supplementary Figure S9. The point of light holds the same figure, without end: an interactive version (Interpretive). A zoomable page that draws the figure of S7, extended, as far in as a viewer cares to go. In each triangle I2 (grey) is the top corner, I1− (red) the bottom left and I1+ (violet) the bottom right, with the spectrum running between the two I1 poles, and the point of light at the centre is the singularity of consciousness, the focal point of I3; the circle is Π. Each corner is the centre of a smaller circle holding the same triangle, with six further copies around it, and the point of light at the centre of every triangle holds the same figure again, so zooming in on a light reveals the same endless figure. The still shown is the opening view. The author reads the picture as one centre appearing again and again as every view and every person. A picture of the geometry and a reading of it, not a measurement; no hypothesis depends on it. Interactive version: thepeacepapers.one/centre.html.



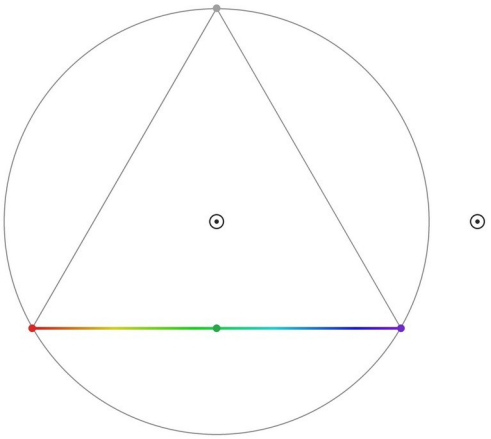
Supplementary Figure S10. Pi (π), the all and the many, seven orders deep (Interpretive). The lattice of Figure S5, drawn in light on a dark ground, with every corner holding a small copy of the whole lattice, every corner of that copy a smaller one, and so on for seven orders. One circle π holds the lattice, with one point of light at its centre in the triangle of Figure 1 (I2 grey, I1− red, I1+ violet; the point of light, π through I3, white). At this size the seventh order appears only as fine speckle and the eighth would be smaller than a pixel; the rule has no last order. A picture of the geometry and a reading of it, not a measurement; no hypothesis depends on it.



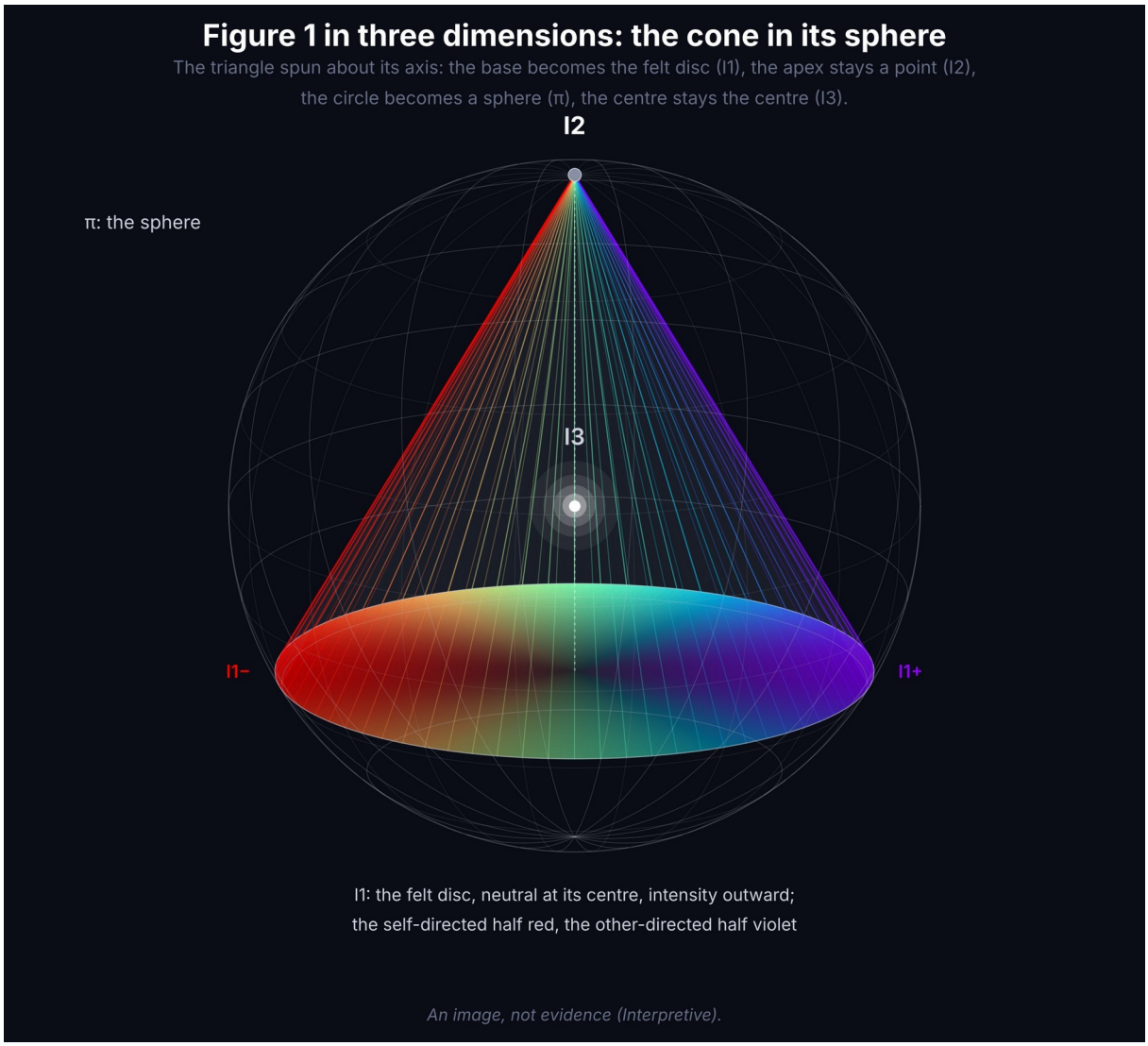
Supplementary Figure S11. Figure 1 in light: the three perspectives of the I on a dark ground (Interpretive). The map of Figure 1 of paper I redrawn in the style of Figures S9 and S10. I2, the understanding perspective (objective), is the apex, grey; I1− (red) and I1+ (violet) are the poles of the felt perspective (subjective) at the ends of the base, with neutral I1 at the green middle of the spectrum between them; I3, the integrating perspective (transjective), the witness's eye, is the lens at the centre, and the white point of light there is ɪɪ *brought to a point, the singularity of consciousness. The circle passes through the three corners; a line joins I3 to each perspective, dotted to I1−, I1+ and I2 and dashed to neutral I1. Emotional empathy sits at I1 and cognitive empathy at I2; compassion is a combination of the two (Figure 2 of paper I) and lies on the side joining I1+ to I2, along its upper part, where understanding directs the feeling. Neutral I1 falls on the green only as its position on the scale; it does not say that calm is love. No end of the I1 range is better or worse. A picture of how the perspectives relate, not a measurement and not a map of the brain.*



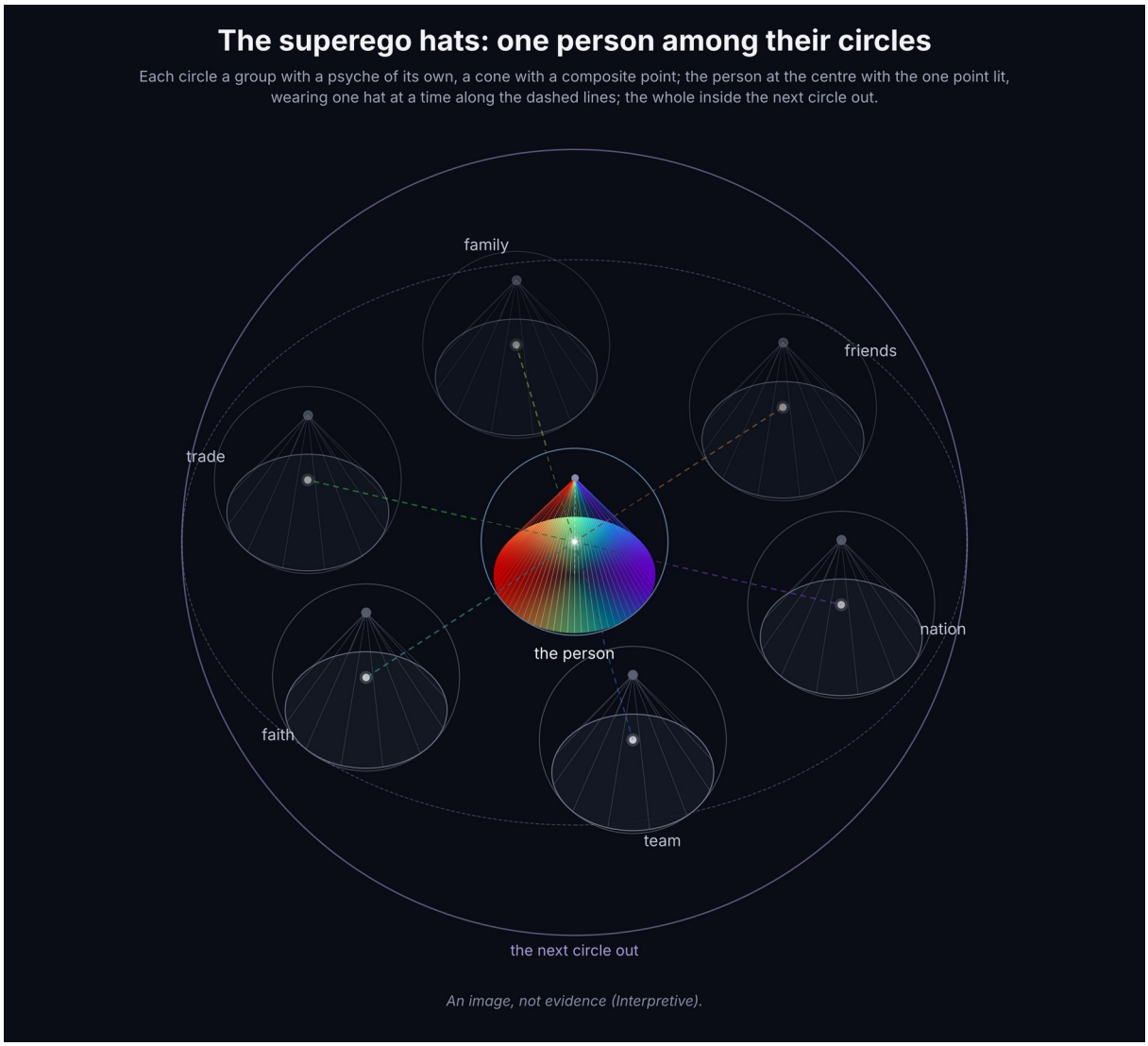
Supplementary Figure S12. One shape, two views (Interpretive): a tesseract drawn in projection, with I1 as the inner view (felt, lived), I2 as the outer view (understood, measured), the edges that join the two as the seam, the lines of sight along which each is seen from the other, and I3 as the whole, the one shape both views belong to. An analogy only. Cited in A1.



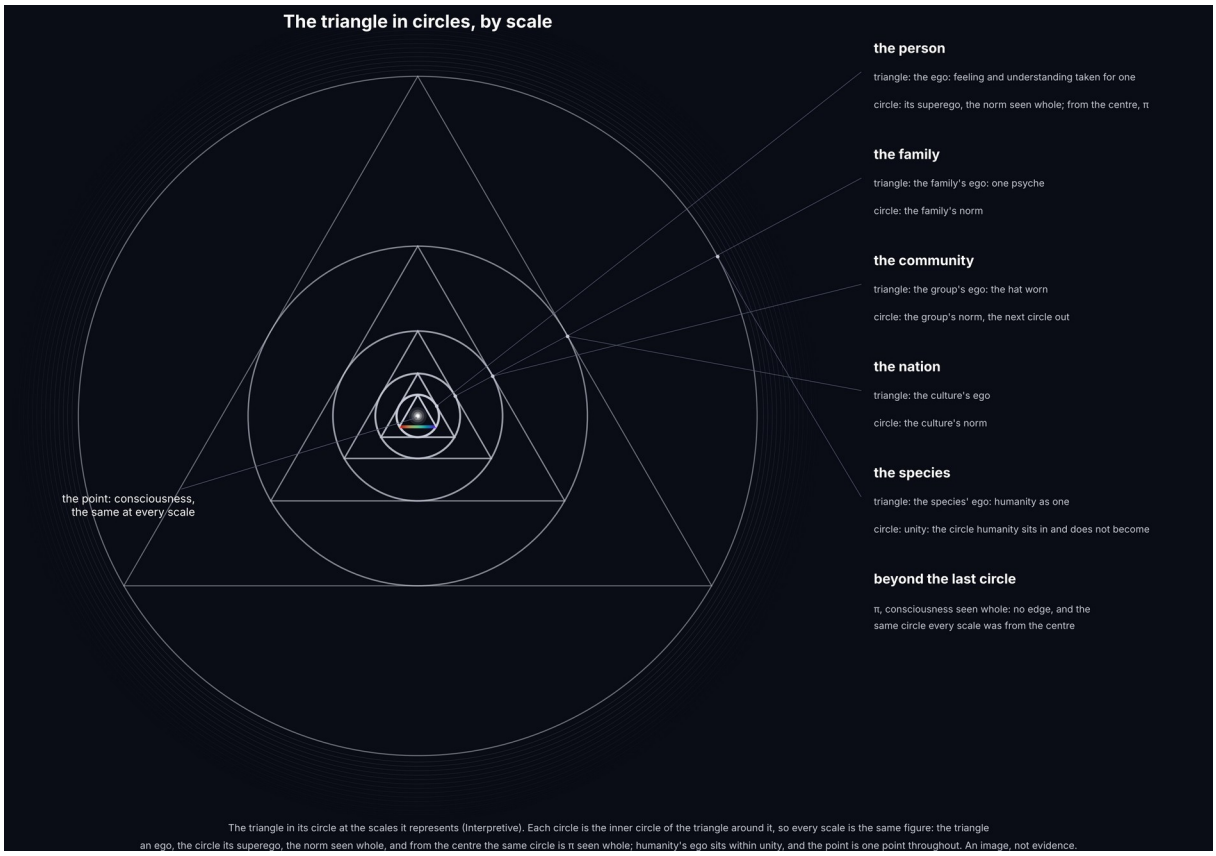
Supplementary Figure S13. The drawing for the experiential test (paper I, section 6): Figure 1 of paper I with every word removed. The circle, the triangle, the spectrum base with its green midpoint and the grey apex are kept; two identical marks, a small ring with a point at its centre, sit at the centre of the figure and outside the circle, to its right on the line through the centre, the centre and control positions of the script; the control lies on no edge, seam or corner the figure draws. For the test it is printed on two sheets, each placing one mark at the centre of the page, so that one script serves both conditions. It carries no labels so that it tells the reader nothing about what to find. A drawing used as an aid to attention, not a measurement.



Supplementary Figure S14. Figure 1 of paper I spun about its axis: the cone in its sphere (A1). A spun view, not the figure in three dimensions: the turn spends depth on the states, so the base becomes paper II's felt disc, I1, neutral at its centre, its two poles now halves of a wheel, and the triangle's three corners an apex and a rim; the apex stays a point, I2; the circle becomes the sphere, π; the centre stays the centre, I3, one dimension further in. An image, not evidence (Interpretive).



Supplementary Figure S15. The superego hats: one person among their circles (A1). Each circle a group with a psyche of its own, a cone with a composite point; the person at the centre with the one point lit, wearing one hat at a time along the dashed lines; the whole inside the next circle out. Each cone's base is that hat's own I1 spectrum, the stances of those under it, the hat worn at one end and used at the other, and its apex the hat's norms, rules, ideologies and constructs. An image, not evidence (Interpretive).



Supplementary Figure S16. The triangle in circles, by scale (A1). Figure 3 of paper I run outward and labelled: the person, the family, the community, the nation and the species, each circle the inner circle of the triangle around it; at every scale the triangle is an ego and the circle its superego, the norm seen whole, which from the centre is π seen whole; humanity's ego sits within unity, the circle it does not become, and the point is one point throughout. An image, not evidence (Interpretive).

References cited in this supplement

Avalon A (1919). The Serpent Power: Being the Ṣaṭ-cakra-nirūpaṇa and Pādukā-pañcaka, Two Works on Tantrik Yoga. Translated from the Sanskrit, with introduction and commentary. Luzac.

Beatty J (1982). Task-evoked pupillary responses, processing load, and the structure of processing resources. Psychological Bulletin 91(2):276-292. https://doi.org/10.1037/0033-2909.91.2.276

Besant A (1896/1912). Man and His Bodies. Theosophical Manual No. VII. Theosophical Publishing House.

Bradley MM, Miccoli L, Escrig MA, Lang PJ (2008). The pupil as a measure of emotional arousal and autonomic activation. Psychophysiology 45(4):602-607. https://doi.org/10.1111/j.1469-8986.2008.00654.x

Brewer MB (1991). The social self: on being the same and different at the same time. Personality and Social Psychology Bulletin 17(5):475-482. https://doi.org/10.1177/0146167291175001

Butlin P, Long R, Elmoznino E, Bengio Y, Birch J, Constant A, Deane G, Fleming SM, Frith C, Ji X, Kanai R, Klein C, Lindsay G, Michel M, Mudrik L, Peters MAK, Schwitzgebel E, Simon J, VanRullen R (2023). Consciousness in artificial intelligence: insights from the science of consciousness. arXiv:2308.08708. https://doi.org/10.48550/arXiv.2308.08708

Cook FH (1977). Hua-yen Buddhism: The Jewel Net of Indra. Pennsylvania State University Press.

Csikszentmihalyi M (1990). Flow: The Psychology of Optimal Experience. Harper & Row.

Davis AK, Clifton JM, Weaver EG, Hurwitz ES, Johnson MW, Griffiths RR (2020). Survey of entity encounter experiences occasioned by inhaled N,N-dimethyltryptamine: phenomenology, interpretation, and enduring effects. Journal of Psychopharmacology 34(9):1008-1020. https://doi.org/10.1177/0269881120916143

Dean JG, Liu T, Huff S, Sheler B, Barker SA, Strassman RJ, Wang MM, Borjigin J (2019). Biosynthesis and extracellular concentrations of N,N-dimethyltryptamine (DMT) in mammalian brain. Scientific Reports 9:9333. https://doi.org/10.1038/s41598-019-45812-w

Deutsch E (1969). Advaita Vedānta: A Philosophical Reconstruction. East-West Center Press.

Ehrsson HH (2007). The experimental induction of out-of-body experiences. Science 317(5841):1048. https://doi.org/10.1126/science.1142175

Euclid (1956). The Thirteen Books of Euclid's Elements, vol. 2. Translated by T.L. Heath, 2nd edition. Dover.

Hecht E (2017). Optics, 5th edn. Pearson.

Hegel GWF (1801/1977). The Difference Between Fichte's and Schelling's System of Philosophy. Translated by H.S. Harris and W. Cerf. State University of New York Press.

Hurwitz A (1891). Ueber die angenäherte Darstellung der Irrationalzahlen durch rationale Brüche. Mathematische Annalen 39:279-284. https://doi.org/10.1007/BF01206656

Huxley A (1954). The Doors of Perception. Chatto and Windus.

James W (1898). Human Immortality: Two Supposed Objections to the Doctrine. Houghton, Mifflin.

James W (1902). The Varieties of Religious Experience: A Study in Human Nature. Longmans, Green, and Co.

Jung CG (1916/1969). The transcendent function. In: The Structure and Dynamics of the Psyche, Collected Works vol. 8, 2nd edn, translated by R.F.C. Hull. Princeton University Press, 67-91.

LaBerge S (1983). Psychophysiological parallelism in lucid dreams. Lucidity Letter 2(4). https://journals.macewan.ca/lucidity/article/view/614

Lenggenhager B, Tadi T, Metzinger T, Blanke O (2007). Video ergo sum: manipulating bodily self-consciousness. Science 317(5841):1096-1099. https://doi.org/10.1126/science.1143439

Levoy M, Hanrahan P (1996). Light field rendering. Proceedings of SIGGRAPH 96. ACM.

Malcai O, Lidar DA, Biham O, Avnir D (1997). Scaling range and cutoffs in empirical fractals. Physical Review E 56:2817. https://doi.org/10.1103/PhysRevE.56.2817

Mallinson J, Singleton M (2017). Roots of Yoga. Penguin Classics.

Mandelbrot B (1967). How long is the coast of Britain? Statistical self-similarity and fractional dimension. Science 156(3775):636-638. https://doi.org/10.1126/science.156.3775.636

McGilchrist I (2009). The Master and His Emissary: The Divided Brain and the Making of the Western World. Yale University Press.

Ng R, Levoy M, Brédif M, Duval G, Horowitz M, Hanrahan P (2005). Light field photography with a hand-held plenoptic camera. Stanford University Computer Science Tech Report CSTR 2005-02.

Nichols DE (2018). N,N-dimethyltryptamine and the pineal gland: separating fact from myth. Journal of Psychopharmacology 32(1):30-36. https://doi.org/10.1177/0269881117736919

Niemiec CP, Brown KW, Kashdan TB, et al. (2010). Being present in the face of existential threat: the role of trait mindfulness in reducing defensive responses to mortality salience. Journal of Personality and Social Psychology 99(2):344-365. https://doi.org/10.1037/a0019388

Olivelle P (trans.) (1996). Upaniṣads. Oxford University Press.

Palumbo RV, Marraccini ME, Weyandt LL, et al. (2017). Interpersonal autonomic physiology: a systematic review of the literature. Personality and Social Psychology Review 21(2):99-141. https://doi.org/10.1177/1088868316628405

Parnia S, Keshavarz Shirazi T, Patel J, et al. (2023). AWAreness during REsuscitation II: a multi-center study of consciousness and awareness in cardiac arrest. Resuscitation 191:109903. https://doi.org/10.1016/j.resuscitation.2023.109903

Parnia S, Spearpoint K, de Vos G, et al. (2014). AWARE: AWAreness during REsuscitation, a prospective study. Resuscitation 85(12):1799-1805. https://doi.org/10.1016/j.resuscitation.2014.09.004

Plato (c. 360 BCE). Sophist. Translated by N.P. White (1993). Hackett.

Śaṅkara (attributed) (1981). Tattvabodha. With notes by Svarupa Chaitanya. Bombay: Central Chinmaya Mission Trust.

Schopenhauer A (1840/1995). On the Basis of Morality. Translated by E.F.J. Payne. Berghahn.

Schrödinger E (1958). Mind and Matter. Cambridge University Press.

Smith AM, Messier C (2014). Voluntary out-of-body experience: an fMRI study. Frontiers in Human Neuroscience 8:70. https://doi.org/10.3389/fnhum.2014.00070

Svelto O (2010). Principles of Lasers, 5th edn. Springer.

Thonnard M, Charland-Verville V, Brédart S, Dehon H, Ledoux D, Laureys S, Vanhaudenhuyse A (2013). Characteristics of near-death experiences memories as compared to real and imagined events memories. PLoS ONE 8(3):e57620. https://doi.org/10.1371/journal.pone.0057620

Timmermann C, Roseman L, Williams L, Erritzoe D, Martial C, Cassol H, Laureys S, Nutt D, Carhart-Harris R (2018). DMT models the near-death experience. Frontiers in Psychology 9:1424. https://doi.org/10.3389/fpsyg.2018.01424

Turing AM (1950). Computing machinery and intelligence. Mind 59(236):433-460. https://doi.org/10.1093/mind/LIX.236.433

van Lommel P, van Wees R, Meyers V, Elfferich I (2001). Near-death experience in survivors of cardiac arrest: a prospective study in the Netherlands. The Lancet 358(9298):2039-2045. https://doi.org/10.1016/S0140-6736(01)07100-8

Vazza F, Feletti A (2020). The quantitative comparison between the neuronal network and the cosmic web. Frontiers in Physics 8:525731. https://doi.org/10.3389/fphy.2020.525731

Walshe MO'C (trans.) (2009). The Complete Mystical Works of Meister Eckhart. Crossroad.

White DG (2014). On the outside looking in: Western appropriations of Eastern "subtle body" discourse. The Religious Studies Project, 19 June 2014. https://www.religiousstudiesproject.com/response/on-the-outside-looking-in-western-appropriations-of-eastern-subtle-body-discourse-by-david-gordon-white/

Windt JM, Nielsen T, Thompson E (2016). Does consciousness disappear in dreamless sleep? Trends in Cognitive Sciences 20(12):871-882. https://doi.org/10.1016/j.tics.2016.09.006

Other works named in this supplement (Berne; Laozi) are cited in full in paper I.