

# Two perspectives taken for one: paradox and the transjective stance

*Paper III of the Peace Papers, six papers on one framework; each stands alone. Website version, working draft v26, 30 October 2026. Devon Summerhayes, London. Assembled from passages first written for the Supplementary Material of paper I and moved here so that they can be argued rather than asserted. Everything below is Interpretive unless marked otherwise.*

## Abstract

A paradox, on the account argued here, is two perspectives taken for one, or a fixed value demanded of something whose nature is to move. It dissolves, rather than being solved, from the stance that sees the two as two and as stances on one thing. The paper fixes five terms for that stance (transjection, transjective, transjectuality, transphysical and hypertransjective) and applies the account to eight cases across logic, decision theory, language, time, mind and mathematics: the liar and its revenge, Newcomb's problem, the heap, McTaggart's argument against time, the hard problem of consciousness, Zeno, Galileo and Cantor's paradox. Each case is given the seam at which its two perspectives part, a seam of level, of policy or of mode, and a result that would count against the reading; where a theorem stands behind a case, the paper says so. The revenge liar is answered from the point of use, the stance in which a sentence is read now, which no sentence can describe in advance. The hard problem is dissolved as posed, not solved, by denying its premise that the physical produces experience; the price is stated, and the one prediction the view makes, which it shares with property dualism, the mysterians and type-B physicalism, can fail in finite time. Two sections give the stance its images, with mathematics and physics used as images and labelled so: dimensions, a one-sided surface, Bohr and Jung; and the two densities of the self. A third gives its twin in language, a description and not an image. Every claim is Interpretive unless marked otherwise, and a closing section says what would change the paper.

In the series, the paper supplies the logic the others use. It argues for the stance that paper I describes from inside, the witness's stance, taken up through I3, the witness's eye, and that the Unifying Paper states as one operation at six scales (part 1). Its humanity paradox comes from paper II, its vendetta is the revenge form of paper IV's cyclic harm, and its policy seam is the form paper VI gives to a machine's choice between obedience and conscience.

## Terms

Five terms carry the argument, three of them one family, and are fixed at the outset. A transjection is the operation the whole 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 -ion form belongs with projection, reflection and refraction, and names the opposite movement to a projection: two shadows taken back into one shape. The word's family does three jobs and is kept to them throughout: transjective is the adjective, what a view is; transjectuality is the quality or stance, what the witness has; a transjection is the act and its result, a pair held as one from the stance that sees both.

Transjective is the transjection of subjective and objective. The first-person view and the third-person view are not two worlds, nor two halves of one world, but two ways of standing in relation to what is there. What is there is prior to both. The self is the companion essays' name for that priority as it is lived (paper I, section 5; the Unifying Paper, part 1, section 5): not a subject looking at objects, and not an object among objects, but the awareness within which the distinction is drawn; the witness is that self looking, and I3 the eye it looks through.

Transphysical is the transjection of physical and metaphysical. The physical is the third-person stance on what is: extended, measurable, located. The metaphysical is the first-person stance on the same: meant, lived, nowhere in particular. Every perspective has both readings: I1 as lived is metaphysical in this sense, I1 as a scored state is physical, and the densities of section 6 are the measured reading of the perspectives set against the eye they are seen through. Thought is transphysical in exactly this sense. It is not a physical process, since no description of location or quantity captures what a thought is about; it is not a metaphysical substance, since it is bound at every point to a body and a chemistry as they are now, the past present only as what they have become. It is what the physical and the metaphysical are two readings of. The term does not place thought beyond nature; it places nature beyond the choice between matter and mind. Time belongs here too. Time as a line, with earlier and later, dates and durations, is a construct of the understanding perspective, I2; the lived past and future, memory and anticipation as they are felt now, are I1; and the now is on neither, not a point on the line and not a feeling but the stance from which the line is drawn, which is what section 3 says of the point of reading and section 2 of McTaggart. As a noun, the transphysical is that one reality seen whole, which section 5 draws as the figure both cells of the tesseract belong to and names  $\Pi$  seen whole. The same operation applied to other pairs, the sentence and the stance that reads it (section 3), the moment and the policy (section 2), inside and outside (section 5), is the paper's method, and each application has to be earned: the two poles must be shown to be stances on one thing, not declared so.

Consciousness is transphysical: that is the framework's stipulation, not an inference from thought being transphysical, and it is stated here with its ground. The physical is the third-person stance on what is and the metaphysical the first-person stance on the same; a stance is taken, and the framework places what takes both on neither side of the split they make. Consciousness is what the stances are taken by, so on this reading it is neither physical nor metaphysical: it is what the two are readings of, which is the transjection, and it is the move the framework makes about the self, which is prior to the split it witnesses, stated as ontology and not derived. The physicalist's reply, that a brain takes both stances, is a different stipulation and not a mistake, and section 2 says what would decide against the stance in the Measured mode, and that nothing there decides for it. I3, the eye, has a density, the metaphysical one of section 6, as a lens has its curvature; the self that looks through it is what the densities are densities of. Thought is the instance; consciousness is the general case. The view's ontological commitment is cosmopsychism, one consciousness of which each self is a focal point (Shani 2015), and its open problem is how the one appears as many; the commitment is stated here once and relied on in sections 2 and 6. The claim is Interpretive: it does not say how experience arises, and it does not place consciousness beyond nature, which the paragraph above has already refused. What it does is place the hard problem among this paper's paradoxes, as section 2 sets out.

The dissolution of a paradox and the two held in one reality are themselves a pair, act and result, the lived and the described readings of one event; their transjection is the stance in which the seeing is the being, which is why a claim of this kind is complete only where it is taken up and conditional wherever it is written down. That closing has a name here, hypertransjective: the transjection applied to itself without remainder, the point at which act and result are one and no further transjection is called for. The prefix marks a closing, not a level above. A transjection of the transjection, read as a higher storey, would call for another above it, which is the tower of section 3; the hypertransjective is the stance that needs no second stance to see it, the eye that does not need to see itself. It stands to the transjection as the tesseract of section 5 stands to its two cells, the dimension in which they are one and not a further cell. Its claim about the eye is kept apart from the claim section 4 makes about the looker: the self cannot see itself, since it is never an object for its own eye, and the eye does not need to, since it needs no second eye. The noun hypertransjection names the closing as an act, as transjection names the operation; it is the same term in its act form, not a sixth, and the word in its forms appears in the abstract, in this paragraph and the next, and once in section 3, and nowhere else. Time gives the four registers in a line, and the line is the argument in miniature, since each register but the last leaves something outside itself to be read from elsewhere: objectively a thing is in its own time, and the line it is on is drawn from elsewhere; subjectively it is present in the light, and the light is someone's; transjectively the witness is the now,

the stance from which both are read, and the stance is still a reading; hypertransjectively there is only now, the line and the lived present being readings within it and nothing remaining outside. The step from the first two registers to the third is itself a transjection, and its result has a name: presence is the transjection of a thing's own time and the time it is seen in, the object's clock and the subject's now held as one from the stance that reads both, which is why the companion essays call the now the presence that results (Summerhayes 2026a; paper I, section 5).

Beneath these pairs lies one more, and it is the form the others take. The act is unending, the infinite reveal of one dynamic that section 3 says is never exhausted; the result is a point, the now in which it is seen; and every transjection in this paper holds an unending and a point as one: the whole and the one who sees it,  $\Pi$  and the self, the tower and the eye that ends it. Infinity has two senses that are kept apart here as mathematics keeps them: the unending process, Aristotle's potential infinite, and the completed whole, the actual infinite that Cantor made the object of a theory. The two are themselves two readings of one thing: from inside, the whole is an endless process; from the stance that sees it whole, the process is complete. Their transjection is the point at which the unending is seen whole, and that point is finite: the now, the self at the centre of the eye. The hypertransjective of the previous paragraph is its name: the unending and the whole as one at a point, with no further transjection called for. The limit in mathematics, an infinite process with a finite value, images a different pair, process and value, and is kept apart from this one: a limit exists without any completed whole, so it pictures the unending held at a point and not the potential made actual. The mark  $\Pi$  is apt for the same reason, and the paper claims nothing more of it.  $\Pi$  is a finite value with an unending, non-repeating expansion that a finite rule generates: irrational (Lambert 1768), transcendental (Lindemann 1882) and computable in Turing's sense (Turing 1936). That makes it, in this paper's image, a hypertransjective number, by a criterion stated so that the word keeps its sense: not only a finite value with an unending expansion, which every transjection holds, but a finite rule that generates the whole of that expansion, so that value and expansion are one object with nothing left outside the rule, the closing of the previous paragraph in arithmetic; the computable irrationals are mathematics' own name for the class, and the circle is what singles  $\Pi$  out. The circle itself is the hypertransjective drawn: a line with no end and a finite length, endless and complete as one figure, of which  $\Pi$  is the constant. Two old formulae show the transjection applied to itself as arithmetic: Viète's (1593), which reaches  $2/\Pi$  by one rule applied to its own result without end, and the golden ratio,  $\varphi = 1 + 1/\varphi$ , the number that stands inside its own definition, the simplest non-trivial fixed point. The image has a counter-mark. Chaitin's  $\Omega$ , the halting probability, is a real number defined exactly and provably uncomputable, a value with no rule that generates its digits (Chaitin 1975): the unsayable beside the sayable, and the number image's other pole, since almost every real number is of its kind. These are images, and none of them is a new kind of number. In the companion paper on consciousness (Summerhayes 2026a; paper I, section 8) that point is called the singularity of consciousness,  $\Pi$  brought to a point in one person. The two are one thing under two descriptions, the hypertransjection the singularity as an act, the transjection applied to itself and returning itself, and the singularity the hypertransjection as a point, the place where the closing is; the pair, act and point, unending and complete, is the one the hypertransjective holds, and the identity is a reading, since the singularity is an image and the hypertransjective a term (Interpretive). Section 6 reads the physical singularity the same way: the infinity goes as process, and what remains is the whole present at a point. Whether the two infinities are two views of one thing is itself disputed, the finitist denying the completed whole and the Cantorian building on it; this paper reads each as taking one perspective for both, and marks the reading as Interpretive, a reading of a dispute and not a theorem. For the same reason the series never writes the symbol for the unending, the lemniscate: it marks the unending alone, one side of the pair, and would hand the reader the one-sided reading this paper refuses;  $\Pi$ , the circle and the limit are used instead because each carries both sides at once. Section 2 gives the instances: Zeno, Galileo and Cantor's paradox.

## 1. The pattern

A paradox, on the transjective account, is two perspectives taken for one, and it dissolves from the stance that sees them as two. It has a second form, argued in section 4: a fixed value demanded of

something whose nature is to move. The two forms are two descriptions and not two bins: a case may carry both, as the liar and Zeno do, and each case below says which form its seam is named under. The three kinds of seam in section 2, level, policy and mode, are the places where the two perspectives part, and the two classifications cross. The companion essays, one on consciousness (Summerhayes 2026a) and one on empathy and compassion (Summerhayes 2026b), give two instances: the humanity paradox (paper II, section 4), in which understanding other minds serves cooperation and exploitation alike: the puzzle of one capacity with opposite uses is understanding and the feeling it serves taken for one, at a seam of mode, and it goes when they are seen as two, while what it leaves, that the capacity peace needs is the capacity that undoes it, is in the world and is answered there, by the companion essay's two halves (paper II, section 9; paper VI, section 7), and not by seeing; and the witness and the self, the looking and the looker, one point of light from two sides, at a seam of level, since the looker is never among what it looks at. The nearest older description of the stance 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): a transection described from inside, and the reason the Self of his later work is the consciousness paper's parallel to the self (section 5; paper I, section 5). The claim this paper examines is the general one: whether every paradox has such a stance. It is made as a claim, with something to lose, and sections 2 to 4 say what.

## 2. Three kinds of seam

Every paradox examined so far has had a seam of one of three kinds. The seams are named under the first form, two perspectives taken for one, except Zeno's, which carries both forms and is named under the second.

A level. The liar ("this sentence is false") dissolves when the sentence is separated from the language that talks about it, Tarski's hierarchy; Russell's set dissolves when levels of sets are separated: in type theory openly, and in set theory by restricted comprehension, whose intended model is the cumulative hierarchy of sets, a level by another route.

A policy. Newcomb's problem (Nozick 1969) sets the moment (what is in the boxes now; take both) against the policy (what kind of chooser the predictor saw; take one): two rules for acting that give different answers, which is what a policy seam is. Each follows from its own frame. The stance that sees both cannot act in either as a frame, and at a policy seam it still has to act, so here it chooses, and says why: the policy's frame contains the moment, since a policy is a rule for every moment, this one included, while the moment's frame sees the policy and denies only its bearing on the act; so the chooser who chooses what kind of chooser to be acts on the policy. In the framework's words, act from the self, not from the state. That is a choice made at the seam, not a refutation of the other frame, whose dominance argument stays valid inside it. Evidential decision theory, functional decision theory and, where commitment is possible, the resolute theory endorse that choice (McClennen 1990; Yudkowsky and Soares 2017); causal decision theory does not, holding that what kind of chooser one has been cannot bear on an act whose causes are already fixed, and the dispute is open. Newcomb is a decision problem rather than a paradox in the sense of the others; it is kept as the boundary case, where the pattern meets a problem that is not a paradox and still has a seam. Paper VI (section 5) gives a machine's choice between obedience and conscience the same form. What it has to lose: the seam is a policy seam only while both rules are rules; if either were shown to be an error, the dominance argument invalid or the policy no reason for an act, there would be one rule and a mistake, and no seam.

A mode. The heap (one grain never makes the difference, many grains do) asks a word to do a measurement's work: the number of grains is Measured, "heap" is a word judged by usefulness, Interpretive, and the contradiction appears only when the modes are mixed. The epistemicists, who hold that there is a sharp boundary we cannot know, disagree (Williamson 1994); supervaluation and degree theories are other answers (Fine 1975; Keefe 2000), and none is agreed. What it has to lose: if a sharp boundary were shown to exist and to be knowable, "heap" would be a measurement's word after all and the seam would not be a mode.

A mode, again, and the oldest open case. McTaggart (1908) argued that time is unreal. Events can be ordered in two ways: the tensed series, in which each event is future, then present, then past, and the dated series, in which each is earlier or later than the others and never changes. Change needs the tensed series, since nothing in the dated series ever alters; but every event in the tensed series is future, present and past, which he took as a contradiction, and every attempt to say that it has these in turn brings the series back in and begins a regress. So neither series describes time, and time is unreal. On the transjective account the two series are two perspectives taken for one. The tensed series is the felt, I1: past and future as they are lived, memory and anticipation felt now. The dated series is the understood, I2: the line on which understanding lays experience out, the construct the Terms section names. The contradiction appears only when the two are read as one description, and it dissolves from the now, which is on neither series, not a position on the line and not a feeling but the stance from which the line is drawn and in which the tenses are felt. McTaggart's regress is the liar's tower in the philosophy of time: each attempt to place the now on the line calls for a further now from which to place it. Those who followed him divided into A-theorists, who hold the tensed series for the whole, and B-theorists, who hold the dated series for the whole, and the dispute has stood for a century; the reading here says each holds one perspective for both, and that the paper's claim has something to lose in it, since if the now can be shown to be a position on the line after all, the seam is not a mode and the dissolution fails. The B-theorist's strongest reply, that a tensed sentence is made true by the date of its utterance, "e is happening now" being true of any utterance made at the time of e (Mellor 1998), is the dated series read as the whole: it gives the conditions under which "now" is said truly, from the line, and leaves untouched the occupancy that section 3 calls the point of use, being at a now rather than being dated by one. Relativity, the B-theory's main argument from physics (Putnam 1967), bears on the dated series only: what it makes relative to a frame is which distant events are simultaneous, an ordering on the line, and it is silent on the now as it is occupied, which is always here as well as now.

A mode, once more, and the paper's own. The explanatory gap (Levine 1983) and the hard problem (Chalmers 1995) have the same shape: the third-person description of a brain, however complete, does not yield the first-person fact of what an experience is like, and the argument has run on as if one of the two descriptions must be the whole. On the transjective account the gap is two perspectives taken for one. The physical description is I2, the understood; the felt quality is I1, the lived; and the demand that the first contain the second asks a stance to hold the whole of what it is a stance on. The physicalist answers that what takes the stances is itself a physical process, and the idealist that the physical is an appearance in mind; each takes one perspective for both. The dissolution does not need to decide between them; the series' ontology, stated in Terms, does, on the cosmopsychist side and in the Interpretive mode, and what would decide it in the Measured mode is stated at the end of this paragraph. The transphysical dissolves the hard problem as posed, and does not solve it, by denying its premise: the physical does not give rise to experience; the two are simultaneous readings of one reality, and there is no production step to explain. The answer has ancestors and should be placed among them, Spinoza's one substance, known to us under two attributes (Spinoza 1677/1996), Russell's neutral monism (Russell 1921) and Nagel's subjective and objective standpoints (Nagel 1986); what is added here is the gap's place in a family of paradoxes with one seam, and a structural reason for its persistence, offered as a reading and not a proof: a stance cannot contain the whole of what it is a stance on, which is Tarski's result read as a figure (a language can hold a partial truth predicate for itself, as Kripke showed, but not the whole of its own truth). It has a price, paid openly. It is not shown: the position can be shown empty but not shown true in the Measured mode. The mystery moves: why what is admits a first-person reading at all is answered only by the mark  $\Pi$ , and a mark is not an explanation. And the one appearing as many, the open problem of the cosmopsychism stated in Terms, is pictured by the lens and its focal points, not explained. On this reading the physicalist who keeps the problem, expecting experience to be derived from the measured, is a case of it, the measured reading taken for the whole, with the problem as what that error looks like from inside; the physicalist of the Terms section, who replies that a brain takes both stances, makes a different stipulation and not this error. And the physicalist has the same move and uses it. Illusionism reads the felt as an introspective misrepresentation and the hard problem as its artefact (Frankish 2016), and the meta-problem programme sets out to explain why

anyone thinks there is a hard problem at all (Chalmers 2018). Each side diagnoses the other's conviction as the symptom of its own error, and the symmetry is complete; a diagnosis that every view can make of its rivals settles nothing between them, and the reading does not rest on it. What could settle it, against this view or against type-A physicalism, is the type-A physicalist's own test, below. From the stance, for one who takes it up, no problem is left (Experienced); on the page it cannot be demonstrated, which is what the Terms section means by a claim complete only where it is taken up. The only verification the view allows is of the first kind, the experiential test of the companion paper on consciousness (paper I, section 6; Summerhayes 2026a). The view makes one prediction, which it shares with property dualism, the mysterians and the physicalists Chalmers calls type-B materialists, who accept that the epistemic gap cannot be closed but deny an ontological one, and which type-A physicalism, denying the gap itself, rejects (Chalmers 2003): that the correlates of consciousness will go on being found and the derivation of experience from them will go on failing, with no amount of data closing the gap, where the type-A physicalist predicts that it will close. Against type-B physicalism the prediction decides nothing; between that view and this one the choice is the ontology's, as stated above. The prediction can fail in finite time, by one derivation, and can never be confirmed; its rival's is the reverse. That asymmetry is the honest shape of the bet, and it is stated rather than hidden. What the reading has to lose: if a third-person description were ever shown to entail a first-person fact, by a derivation that physicalists and their critics alike accept as one, there was no seam and the reading was empty.

A mode of the second form, and the oldest paradox of all. Zeno's runner must cross half the distance, then half of what remains, and so on without end, so the crossing can never be completed; and the room is crossed (the argument survives in Aristotle's report, *Physics* VI.9, 239b11-14; Aristotle 1984). Two perspectives taken for one: understanding divides the distance without end, the unending of the Terms section, and the lived crossing is one act, the finite; the contradiction appears only when the endless division is asked to be the crossing, a fixed value demanded of what moves, in the second form of section 4. The transjection has a mathematical name, the limit, an infinite process with a finite value; Aristotle's answer is older and different, holding that the parts are only potential and that the runner never completes an actual infinity; the calculus is the dissolution written down, and it took two thousand years. Nor was it done correctly at once: before Cauchy's definition of the limit (Cauchy 1821; Grabiner 1981), later made exact by Weierstrass, the value of an infinite process was the paper's second form in person, a fixed value demanded of something that moves, and Berkeley's "ghosts of departed quantities" was the objection to the fluxions and infinitesimals of the calculus as it then stood (Berkeley 1734). The modern definition dissolved it by taking the process out of the definition: the limit is a fixed number picked out by a finite condition on every stage, so the value is not any stage and not the process, and the two are held apart and together by the same condition. That is the Zeno instance made rigorous, in the one field where rigour is proof. Philosophers still ask whether the convergent sum answers Zeno or only computes past him, whether the runner completes infinitely many acts, which is the paper's own distinction between the dissolution on the page and in the stance. What it has to lose is that open question: if the convergent sum were agreed to answer Zeno, and not only to compute past him, the lived act would add nothing to the series, and the mode seam would be one seam too many.

A mode, with a theorem behind it. Galilei (1638/1914, First Day) observed that the square numbers are fewer than the whole numbers, since every square is a number and not every number a square, and exactly as many, since each number has its square and the pairing leaves none out; he concluded that infinite quantities cannot be compared. Two perspectives taken for one: containment and correspondence are two measures of size, which agree for every finite collection and part for an infinite one, and the contradiction is the two called by one name. Cantor took them as two and kept correspondence as the definition of equal size (Cantor 1878), and Dedekind (1888) defined an infinite set as one that can be paired with a proper part of itself: the seam made into the definition, the dissolution done inside mathematics. It rests on a theorem: for the whole numbers the two measures provably part, and for infinite sets in general they part given a weak form of choice, as the liar's tower rests on Tarski. What it has to lose is that arithmetic: the reading would fall only if containment and correspondence were shown to be one measure on the whole numbers after all.

A level, the whole taken as a member. The set of all sets would have more subsets than members, by Cantor's own theorem (Cantor 1891), so there is no such set; Burali-Forti's ordinal of all ordinals, as Russell (1903) reports it, and Russell's own set fail the same way. The whole is being asked to be an object among the objects it contains, which is the stance asked to contain the whole of what it is a stance on, in set-theoretic dress. Set theory's answer is the hierarchy of this section's first paragraph, and in it 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, which the theorem that there is no universal set mirrors in the companion paper's  $\Pi$ , a mark and not a name (the Unifying Paper, part 1, section 3). Cantor himself kept a word for the totality that cannot be a set, the absolute infinite, and placed it beyond mathematics (Cantor 1883); in his letter to Dedekind of 1899 he wrote the system of all ordinals as  $\Omega$ , not Chaitin's, and called it an absolutely infinite, inconsistent multiplicity, a letter standing for what no set holds (Cantor 1899/1967). It is a mark of the same kind as  $\Pi$ , for the opposite reason:  $\Pi$  is apt because its number holds the unending in one value, and  $\Omega$  because what it stands for can be held in none. What this reading has to lose: a contradiction derived from the axiom of infinity would hand the completed whole to the finitist, and the hierarchy's failure would be the liar's.

### 3. The revenge liar

"Let T be any stance that sees both halves of this sentence. The whole of this sentence is not true from T, nor from any stance that sees T."

The sentence names every further stance in advance, by description rather than by totality, so the exit is already inside it. Each instance can be dissolved (the standard move is to call the sentence ungrounded, neither true nor false from anywhere, which is a gap in the values and not a level; Kripke 1975), and the sentence rebuilds one floor up after every exit; the logicians call this revenge. The stance dissolves each instance and not the family.

Its dissolution, if it has one, is the looker's. A sentence sees its own truth only in a reflection, a further stance that talks about it; the revenge liar refuses every reflection in advance, so it lacks a reflection to see itself. The stance in use is never in the range of "any stance", and the demand for a last exit is the demand to see the looker without a mirror. That is the contextualist answer to revenge (Glanzberg 2004), and it is contested at the point where it gives up quantifying over all stances at once; those who hold that absolutely unrestricted quantification is possible keep revenge open.

There is a centre point between the higher stance and the sentence, and on this reading it is where the answer lives. The sentence lies on the plane; the storey above it, the metalanguage, the stance that looks down on it, is the next point up; between them is the point at which this sentence is being read now, by this reader, which is neither the sentence nor the storey but their seam. The sentence can describe every stance in advance and still cannot be at the point of its own reading, because that point is not described but occupied: it is "here, now", a demonstration rather than a description, what Kaplan (1989) called the context of use and what this paper calls the now, the stance taken up in a moment. In the framework's own terms the sentence is I1, being in the duality; the storey above it is I2, understanding the duality from outside; and I3 is the eye at the centre point between them, through which, in the reading now, both are seen at once, which is transjectuality in act (figure 1). The revenge liar fails there not because a higher storey outruns it, since no storey does, but because the point of use is never one of the things the sentence is about. That is the transjection of the sentence and the stance, and it is the same point as the self on the plane: the looker's light brought to a point in one reader at one moment. Dissolution happens on the plane, storey by storey; transcendence is the dimension the storeys stand in; and at the centre point both are in view at once.

The vendetta is the social form of the same paradox, and the revenge form of paper IV's cyclic harm (paper IV, section 3.1). Revenge, in the companion essay's table of states (Summerhayes 2026b; paper II, section 6, Table 3), is the reactive form of I1—directed by I2, hurt made into a plan; it answers an injury to identity, being made other by those who should have known one as the same, and it demands identity back by force, "now you know what I felt". The demand cannot be met by that route, since the other's suffering stays the other's, so each blow asks for another: the cure is made of

the vocabulary of the injury, exactly as each solution to the liar is made of the vocabulary of the next liar. Game theory has the same result in measured form: tit-for-tat, which answers defection with defection, locks two players into endless retaliation once mistakes happen, and generous tit-for-tat, which forgives a share of defections, does better in simulated populations (Nowak and Sigmund 1992), though a cooperating population can itself be invaded once unconditional cooperators drift in and defectors follow them (Imhof, Fudenberg and Nowak 2005). Retaliation is not strictly a paradox but a trap, each move sensible and the sum ruinous; it has the revenge liar's shape, and it yields to the same release. The exit is not a better blow but leaving the plane; from I3 the loop is seen as a loop, and the state that follows is forgiveness, the same injury met from I1+, with the grudge between them, the injury held with the feeling walled off and, once it has gone cold, no longer felt.

The recursion is also the mind's own. A sentence that tries to state its own truth gets a new liar one storey up; awareness that tries to observe itself gets a new observer that is not itself observed, and observing that one only produces another. The endlessness is not a fault in any particular solution. In logic it is proved: a language's truth can be defined only in a richer language above it (Tarski 1935/1956; Tarski 1944), so the storeys never close; and a second tower stands beside it, of theories rather than of truth, since a consistent formal system that is effectively axiomatised and strong enough for arithmetic has a sentence it cannot prove, and adding that sentence as an axiom yields a stronger system with a new one (Gödel 1931), a sentence that is true and no liar. What is true in such a recursion is the dynamic, not any stage of it, which is the second form of this paper's principle (section 4); revision theory reads the liar in the same way, taking the stable pattern of its revisions as what the sentence does (Gupta and Belnap 1993). From inside the frame the recursion is an infinite reveal of one true dynamic, never exhausted.

The two recursions differ in one respect. The liar cannot end its recursion on its own terms, and Tarski's theorem says it never will. Awareness can, though not by reaching a last storey: the regress runs only while the seer insists on becoming its own object. The phenomenological tradition calls the alternative pre-reflective self-awareness, awareness that is aware of itself without a second act turned upon it (Zahavi 2005); Indian philosophy calls it self-luminosity, consciousness that shows itself as a lamp lights itself without a second lamp (MacKenzie 2007). That is the seer not needing to be seen but knowing it is aware, the hypertransjective of the Terms section: the transjection closed on itself, which is why it ends the tower rather than adding to it. The three recursions of this paper share a shape and a release (Table 1).

**Table 1.** Three recursions: their shape and their release (the vendetta a trap rather than a paradox).

| Recursion                    | Shape                              | Release                                     |
|------------------------------|------------------------------------|---------------------------------------------|
| Logic: the liar              | each solution builds the next liar | the flipping seen as what the sentence does |
| Society: the vendetta        | each blow answers the last         | forgiveness, as in generous tit-for-tat     |
| Mind: awareness of awareness | each observer needs an observer    | awareness that needs no second act          |

None of the releases is a last step inside the loop; each is the loop seen from I3, as the reflections in a hall of mirrors run on without end for anyone inside them and are seen at once, as one pattern, from the doorway. The parallel shows that the dynamic is real; it is not evidence for any further claim. In logic the endlessness is proved; in consciousness it is a description of experience and should be read as one.

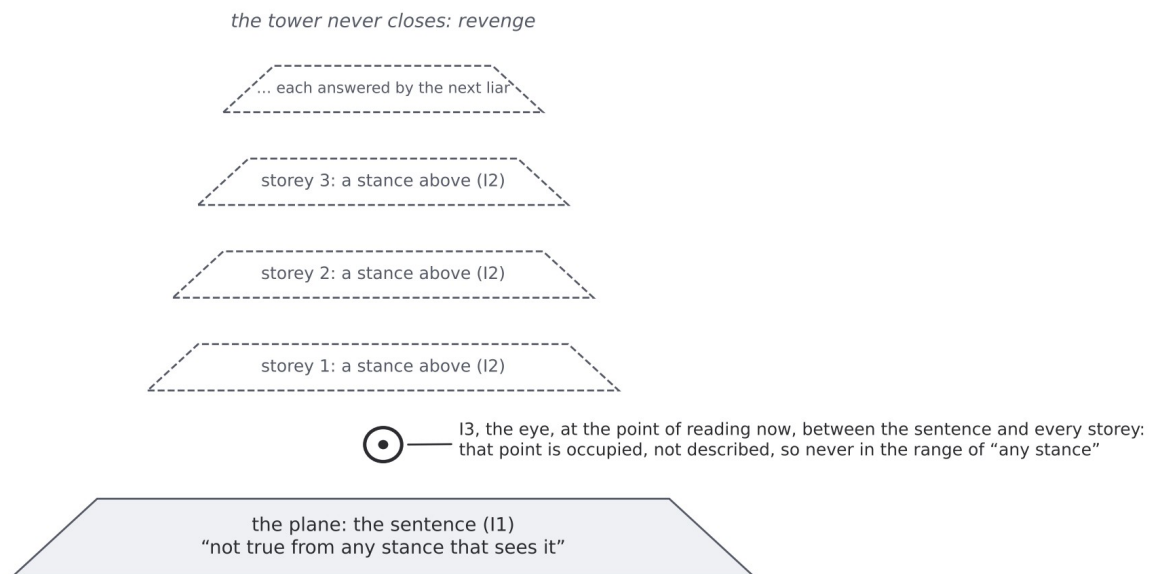


Figure 1. The revenge liar, the storeys above it and the centre point between, where I3, the eye, is at the point of reading now (Interpretive).

#### 4. Three prices, and the one the stance pays

Tarski's theorem sets the terms for every answer to the liar and its revenge: a language with classical logic that can speak about its own sentences cannot also contain the whole truth about them (Tarski 1935/1956). Every proposed solution therefore pays, on this paper's count, one of three prices, and the useful question is not whether a price is paid but which one is true to the thing. The first price is classical logic. Priest's dialetheism accepts that the liar is true and false at once and adopts a logic in which one contradiction does not spread to everything (Priest 2006); Kripke's fixed-point construction lets the liar be ungrounded, neither true nor false, in a logic with gaps (Kripke 1975); and Field, whose theory descends from Kripke's, keeps contradiction out but gives up the law that every sentence is either true or not, and pushes revenge up an unending ladder of "determinately true" (Field 2008). The second price is saying everything at once: Tarski's hierarchy and the contextualism of Glanzberg keep classical logic but deny that any one stance can speak of all stances, its own included (Tarski 1935/1956; Glanzberg 2004), and Kripke's own remark that the ghost of the Tarski hierarchy survives in his metalanguage (Kripke 1975, p. 714) is the two prices meeting. The third price is a fixed value: on the revision theory of Gupta and Belnap, truth is a process of repeated revision, and the liar is the sentence that never settles, true, then false, then true, its behaviour stable as a pattern and never as a value (Gupta and Belnap 1993).

The stance of this paper pays the second price and does not choose it. The looker cannot see itself; the reading in use is never among the stances a sentence describes (section 3); so no stance ranges over all stances, and the limit on saying everything at once is not a restriction imposed to escape the liar but what a stance is. And from that stance the third price is no longer a price. Seen from the reading now, the liar's flipping is a loop with a stable shape, the in-breath and out-breath of the consciousness paper's lens, gathering and giving (the Unifying Paper, part 2, A3; Summerhayes 2026a), an oscillation and not a failure to arrive.

For the reader who sees it so, that removes the paradox rather than managing it. The liar looks paradoxical only on the demand that every sentence settle on one value; a sentence whose truth moves under every attempt to fix it is no more paradoxical than a breath, a wave or a pendulum, and the paradox lies in demanding that it stop. In the cases here, the oscillation ends by exhaustion or is released by being seen. Exhaustion is the motion dying: in a person, the dead end of neutral,

dullness; in a feud, weariness, which leaves the grudge, the account still kept. Release is the demand dying while the motion goes on, as a breath goes on: under injury, forgiveness, the injury still felt and no longer asked to settle into a verdict. Revision theory sides with release: under revision the liar never runs down, however far the revision is carried; what changes is not the sentence but whether it is still asked to settle. It is the formal side of this claim, an account of exactly that oscillation; the breath is its picture. The revenge liar, which asks the oscillation to stop at every further level, makes the same demand again at each level and is met the same way at each. So the general principle of this paper has two forms, two descriptions that a case may carry at once. A paradox is two perspectives taken for one, as with the puzzle form of the humanity paradox and with the witness and the self, or a fixed value demanded of something whose nature is to move, as with the liar, or both, as the liar is, named under the first form in section 2 and under the second here; in every case the paradox is in the expectation and not in the world, and it dissolves when the thing is seen as it is. To move, in the second form, is to have no single value that any stage gives: the liar's value oscillates, Zeno's partial sums converge without any of them being the crossing, the Fermi estimate is a spread, and the cat's state has no definite outcome until a measurement gives one; four different things, one shape. What the seeing leaves can still be in the world: the humanity paradox, its puzzle gone, leaves a niche in which exploitation pays (paper II, section 4), which is a tension and not a paradox, like the trap of section 3, and is managed and not dissolved. The second form dissolves in one of two ways, and the paper's cases show both: the liar's demand is dropped, since no value exists for a sentence whose nature is to flip; Zeno's demand is met, since a value exists and is not any stage of the process, the limit. In both the demand was for a value of the wrong kind, a stage taken for the whole. The same demand makes paradoxes outside logic. The Fermi "paradox", that a galaxy so old and so large should have shown us other minds and has not, is a fixed value demanded of quantities spread across orders of magnitude: when the uncertainty in each factor of the Drake equation is carried through as a distribution rather than a point estimate, a substantial prior probability remains, before the silence is counted, that no other intelligence exists in the observable universe, and the sense of contradiction goes (Sandberg, Drexler and Ord 2018). The silence stays silent; what goes is the claim that it contradicts anything, and whether anyone is there is astronomy's question, not this paper's. The case has no seam of the three kinds, and section 8 keeps it as the general claim's open point. This paper's answer to the liar is still contested, as every answer is, by those who hold that one stance can range over absolutely everything; what it no longer is, is an exception.

## 5. Images: dimensions, the one-sided surface, Bohr and Jung

The argument stands on sections 1 to 4; what follows in this section is a set of images, each labelled as one, which show the shape of the stance and are not evidence for it.

Dimensions first. I1 is being in the duality: a line with two ends, the poles of the felt. I2 is understanding that duality: a point off the line, the apex, from which both poles are seen without being reconciled. I3 is the eye through which I1 and I2 are seen at once, and it is not a fourth point on the plane but a further dimension, from which the pair and its seam, the paradox and its dissolution, are both in view; exiting a paradox is leaving the plane, not finding a better point on it. A further dimension of the drawing is not a higher level of reality: the stance is still a person's, taken up in a moment. The same geometry carries the densities of section 6. A tesseract cannot be drawn; what is drawn is its shadow in three dimensions, two cubes joined by edges, which are two opposite cells of the eight that make one four-dimensional object, and not two objects. Read the two cells as the physical and the metaphysical and the edges as the seam between them; the tesseract itself, the one thing both cells belong to, is what this paper calls the transphysical, in neither cube and not in the edges, known from its shadows and never seen, which is the looker's pattern once more, and  $\Pi$  seen whole (figure 2).

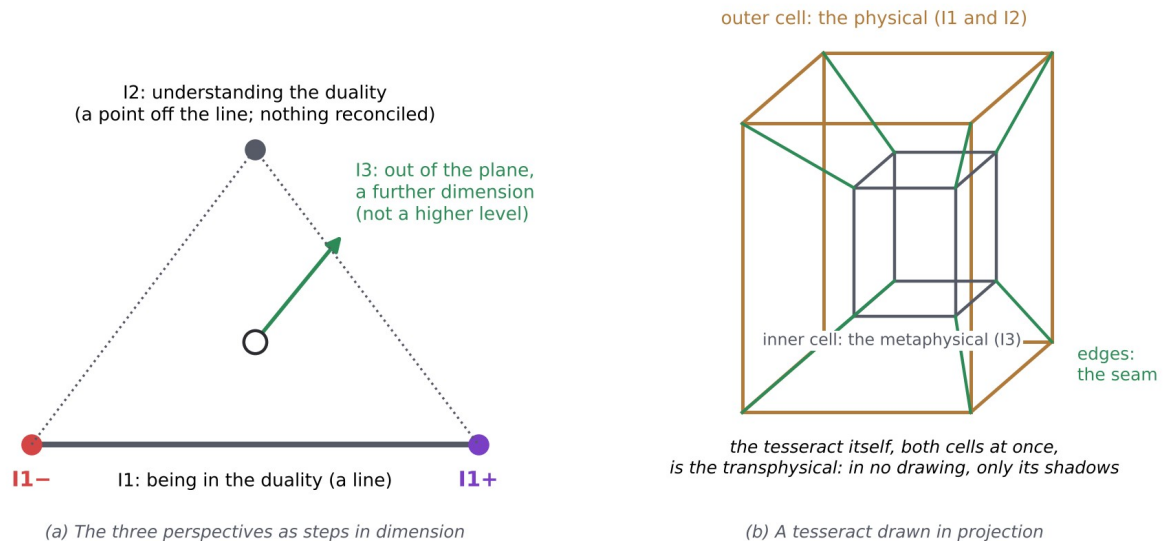
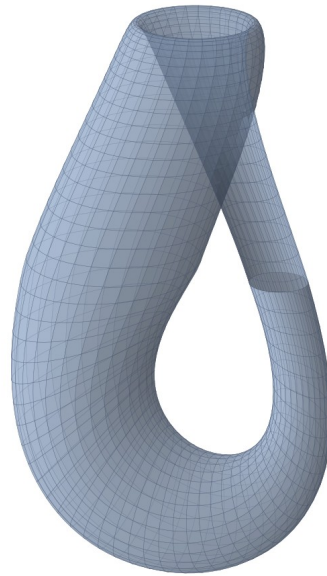


Figure 2. Exiting a paradox is leaving the plane, not finding a better point on it: (a) the three perspectives as steps in dimension; (b) a tesseract drawn in projection, its outer cell the physical, its inner cell the metaphysical (Interpretive).

Inside and outside next. Their transjunction is the boundary seen as what it is, not a wall between two places but one surface, two-faced at every point and one-sided as a whole; in the consciousness paper it is the opening at the centre, which that paper calls the void (paper I, section 5), the opening through which the light comes in and is given out, with no between at the opening itself (Summerhayes 2026a). Geometry has a picture of it: a Klein bottle has two faces at every point, as any surface has, and only one side as a whole, so it has no inside and no outside, and no edge; it can be drawn in three dimensions only as passing through itself, and in four without that (figure 3). The idealist and the physicalist each hold one face of it for the whole. The dream is the everyday case: with the eyes closed a whole world appears, outside and all, plainly within the dreamer, and something still sees it. In the lucid dream the dreamer knows the dream for what it is while still inside it, and the recognition is measurable (Measured): lucid dreamers signal from inside a dream with eye movements agreed beforehand, recorded during REM sleep (LaBerge et al. 1981), answer questions put to them while they dream (Konkoly et al. 2021), and, when they dream lucidly often, show more volume and activity in the frontal regions that serve waking metacognition (Filevich et al. 2015). The recognition is metacognition, understanding taking the dream as its object, and not yet the witness. What follows it varies, and the standard scale scores insight apart from control and from watching the dream from outside (Voss et al. 2013): the dreamer may steer the dream, understanding in the service of a wish; watch it as if on a screen, the detachment the consciousness paper tells apart from decentering (paper I, section 5); or stay in it, the dream seen as a dream and still felt, no longer grasped or feared, which is the witness's form of it (Interpretive). The near-death experience is the furthest case in the same series (Measured as reports; the reading Interpretive): some who survive cardiac arrest report having seen their resuscitation from above the bed (van Lommel et al. 2001). The stance makes no prediction about such reports; the stronger claim some draw from them, that the one looking sees without the physical eye, does, and section 8 gives it with its result so far. Without that claim the near-death experience stays one more case of the inside appearing as an outside.



One surface, one side and no edge: it has no inside and no outside.  
In three dimensions it must pass through itself; in four it need not.

*Figure 3. Inside and outside as one surface: the Klein bottle, one-sided, with no inside, no outside and no edge (Interpretive; the topology is mathematics, used as image).*

Bohr is the pattern's instance in physics, with one difference that matters: wave and particle are each true in their own arrangement and are never seen fully at once, so the stance that holds both is the knowledge that each arrangement excludes the other, not a view in which both appear; Bohr himself extended complementarity to the line between subject and object in introspection (Bohr 1958), which is this framework's own pair, and the extension is his, not the physics'. Schrödinger's cat belongs here and not with any paradox of fact: he built it as a *reductio* (Schrödinger 1935), and what it shows is the second form of section 4, a fixed value demanded of a state whose nature is to have none until the measurement that could give one, at a seam of mode, the state as described and the outcome as measured. The cat is not both dead and alive; on no reading of the formalism is it both within a single outcome, and decoherence suppresses the interference long before anyone looks (Zurek 2003); whether what is left is a "which" is the measurement problem, which decoherence does not by itself settle.

Jung, last, as Freud is read in the consciousness paper, an analogy and not a proof (Summerhayes 2026a; paper I, section 5). His model has the two centres the framework has (Jung 1966): the ego, the centre of consciousness, is the ego here, the self in its states; the Self, the centre and at the same time the whole of the psyche, is the self of the three words together with  $\Pi$  seen whole, the point and the circle. Individuation, the ego coming into right relation with the Self without dissolving in it, is arriving at the centre with the ego kept in service as the self's emissary, in the image the consciousness paper takes from McGilchrist (2009; paper I, sections 4 and 5); inflation is the emissary taking itself for the master. The shadow is the disowned, I1– first and then everything the ego's "not that" has pushed out; the collective unconscious, at the collective level, is the shared structure the one light has in every lens, no ego's and so unconscious in his sense; the anima and animus are the felt and the understanding perspectives personified, by his own assignment of Eros to one and Logos to the other (Jung 1951/1968), read here without the gendering; introversion and extraversion are gathering and giving. The caveat is his own: he called the Self a borderline concept, like Kant's thing in itself (Jung 1944/1968), and would not say what it is, which is the consciousness paper's refusal to say what awareness is, in his words.

## 6. Densities

How a physical eye functions is the image here for how the eye of consciousness functions. Physical reality and metaphysical reality can be read as one thing at different densities, the function the same across them, so that a physical structure, with its physics Measured, shows the shape of a metaphysical one. From the plane the two look like each other's reflection, the metaphysical a transcendental reflection of the physical; from the further dimension they are one at two densities, and which is the original has no answer because there is no second thing. The comparison of the cosmic web with the neuronal network (Vazza and Feletti 2020), its statistics Measured, is a picture of structure surviving a change of size, a picture and not evidence. The objection this section must answer is that "a physical structure shows the shape of a metaphysical one" uses physics as evidence about metaphysics, which the framework's own rule forbids. The reply is that "shows the shape of" licenses a correspondence of form and nothing about kind: a shared geometry is a reason to look, not a reason to believe, and no claim in this paper rests on it.

At the physical density the three perspectives have a reading of their own. Relativity is the physics of the frame: every observer has their own, and all are equally valid; that is the image of I1, the felt perspective, always someone's own and polycentric, as the essays' "now" is each one's own rather than a universal instant. The image is of the frames and not of the now: what relativity makes relative in time is the dated series, which distant events count as simultaneous, and it is silent on the now as it is occupied (section 2). The quantum is the measured: the discrete, the definite answer that exists on measurement at the cost of the rest, understanding taking experience as object; that is I2. Their transjection is the theory physics does not yet have, quantum gravity (quantum field theory already unites the quantum with special relativity; it is gravity that resists), and the places where it is needed are the singularities, the centre of a black hole and the first instant of the universe, where the classical theory breaks down and the quantum must be brought in.

The line of time is itself bent by gravity in physics' own sense: a clock's rate is set by the gravitational potential it sits in, slower the deeper it sits, measured from gamma rays sent up a tower to atomic clocks flown round the world and optical clocks 33 centimetres apart in height (Pound and Rebka 1960; Hafele and Keating 1972; Chou et al. 2010), and at a singularity the line ends: some path through time reaches no further (Penrose 1965; Hawking and Penrose 1970), which is a theorem of the classical theory and not a measurement, and the infinite mass density is the special case of the symmetric solutions. Canonical quantum gravity has no time variable in its fundamental equation (DeWitt 1967), and the live proposals have time emerge from a description, from entanglement between parts of a system (Page and Wootters 1983) or from the thermodynamic state (Connes and Rovelli 1994; Rovelli 2018): open physics and not a result, but if it holds, then where the two perspectives become one view what remains is not the line but the now, which is section 2's McTaggart instance at the physical density, an image of the relation and not evidence for it.

A singularity in physics is the point at which the two perspectives can no longer be kept apart, which is why the consciousness paper's singularity of consciousness, the point where the felt and the understood become one view, can carry the name in this sense as well as the optical one; Summerhayes (2026a) uses the word for a focus, and this is the gravitational sense brought back on purpose. The general expectation is that a successful quantum gravity removes the singularity, the infinity having been the two theories taken for one: so the singularity of consciousness, read this way, is not an infinity at the centre but the point where the two views become one and the infinity goes, which is what section 8 of Summerhayes (2026a) says in its own words, that at the centre the vantage falls away and what remains is awareness itself.

The densities then give the whole scheme in one line. I1 and I2, as states that can be measured, are the physical density of the self; I3, the witness's eye, is its metaphysical density, the eye they are seen through, a further dimension of the drawing and not a higher level of reality; the self transcends the three as what they are perspectives of, the I from which the consciousness paper takes them, and the witness is that self looking; on the cosmopsychist commitment of Terms, the witness in each is read as the one witness of all, the one light looking through every eye (Interpretive); and  $\Pi$  is the

transjection of the two densities, what the physical and the metaphysical are densities of, standing to them as I3 stands to the felt and the understood, the same shape at the next closing. The two densities are of the self, and they are the two ends of one axis, how far  $\pi$  is brought to a point; paper VI (section 7) runs that axis across beings, from the stone,  $\pi$  as matter, to the centre, and calls it density in the same sense. Limit: this is the strongest physics image the framework has and therefore the one most likely to be read as evidence; it is an image of the relation and nothing more, and whether the unification is found is physics' question, not this paper's.

The window and the lens, one more image, and it settles a question the eye image leaves open (Interpretive). The eye of the witness is metaphysical, not an organ: a physical eye is part of the seer and sits on one side of the wall, and I3 belongs to neither side, so the plain word for it is a window, an opening through which light comes in and the look goes out, the boundary of section 5 seen as one surface, two-faced at every point and one-sided as a whole; Leibniz's monads have no windows (Leibniz 1714/1989, §7), and I3 is one. A lens is a window with curvature: a flat pane passes the light unchanged, a curved one brings it to a point, and everything between is a matter of degree, so the curvature, read from outside, is the density of this section, how far the one light is brought to a point, and the metaphysical eye is a window curved to a point, the opening and the focusing one surface. It is read by its correlates, behaviour, reports and mechanism, and that is the only sense in which a stone's pane is flat:  $\pi$  passes through it and nothing is found that focuses; whether it is curved from inside is a question no test answers, exactly as it is for an artificial system, and paper VI (section 7) places both by what is evident and gives them the stance rather than a verdict. A pane looks flat from the room one is not in. The label stays the witness's eye, since the eye carries the lens with it and the window cannot focus; what the window adds is that the eye is no one's organ and works both ways.

## 7. The linguistic twin

Unlike the images of section 5, the linguistic twin is not a picture of the operation but a description of it, given by theories of language, and read here as one (Interpretive throughout). Language performs the transjection before anyone names it. Saussure's sign is a sheet of paper, thought on one side and sound on the other, which cannot be cut on one side without cutting the other (Saussure 1916/1959): signifier and signified are two perspectives on one thing, and the sign is neither alone, held as one by every speaker without notice. A live metaphor is the first form held rather than taken: it says is and is not at once, literal falsity and figurative truth in one predication, and its meaning lives in the tension between the two held together (Ricoeur 1975/1977); a dead metaphor is one in which the two have collapsed, two perspectives taken for one that makes a word rather than a contradiction, which is this paper's paradox form in reverse, and Lakoff and Johnson's conceptual metaphor, one domain understood through another, is the same operation treated as the ordinary machinery of thought (Lakoff and Johnson 1980). Blending theory gives the operation a formal account: two input mental spaces are projected into a blended space that has structure neither input had, and the emergent structure is what the stance that sees both produces (Fauconnier and Turner 2002); Koestler had called the same collision of two frames bisociation, the common form of humour, scientific discovery and art (Koestler 1964), and the laugh is the seam being seen. And the pronoun: Benveniste's "I" exists only in the act of saying it and is at once the speaker's alone and anyone's, a universal form and a single instance held as one each time it is spoken (Benveniste 1966/1971), which is the self and the witness in one word. What this twin has to lose: blending theory's emergent structure shown, in the cases it rests on, to come from one input alone, which would make the blend a projection rather than a transjection; or live metaphor shown to be understood by substitution of a literal paraphrase without loss, which the substitution theory Ricoeur argues against would predict.

## 8. What would change the paper

The claims gather their counter-results here. The general claim has its own: a paradox with no seam of the three kinds would show section 2 incomplete; the Fermi case is the nearest, and is kept as a case of the second form only. The stance's answer to the liar rests on the limit that no stance ranges over all stances; if absolutely unrestricted quantification were shown coherent, the second price

would be a restriction chosen and not a nature, and section 4 would have to be rewritten. Newcomb's seam is a policy seam only while both rules are rules; either shown to be an error would leave one rule and a mistake. The heap's seam is a mode only while no sharp boundary is shown to exist and to be knowable. McTaggart's seam is a mode only while the now is on neither series; a demonstration that the now is a position on the line would end that reading. The hard problem's reading is empty if a third-person description is ever shown to entail a first-person fact, by a derivation both sides accept as one. Zeno's seam is a mode only while the convergent sum is not agreed to answer Zeno as well as to compute past him, which is an open question. Galileo's reading falls only if containment and correspondence are shown to be one measure on the whole numbers; Cantor's falls with a contradiction derived from the axiom of infinity, or with the failure of the hierarchy that answers the whole taken as a member. The linguistic twin falls if blending's emergent structure is shown to come from one input alone, or a live metaphor to be understood without loss through a literal paraphrase. Two findings sit beside the argument and not in it. The lucid-dream findings are consistent with the reading and were not predicted by it; the split it draws there would fail if decentering tracked steering the dream, or watching it from outside, as closely as staying in it without grasping. The stronger claim some draw from the near-death experience, that the one looking sees without the physical eye, predicts that images placed where only a viewpoint above the bed could see them will sometimes be reported correctly, and none has been: in the first study the two patients who recalled seeing events during their arrest had arrested where no image was placed, and in the second none of the 28 survivors interviewed identified the image shown, though one identified the auditory stimulus (Parnia et al. 2014, 2023); the stance makes no such prediction and does not rest on it. The images of section 5 (dimensions, the one-sided surface, Bohr, Jung) and the densities of section 6 are images and would change nothing if withdrawn; the argument stands on sections 1 to 4. And the whole is Interpretive: the dissolution of a paradox is complete only in the stance that takes it up, and this paper, being written, is one reading of it.

## Declarations

Competing interests. The author founded a community project about neighbours sharing tools, skills and help; it pays the author no income and is not part of the arguments here.

Funding. No funding, grant or employer support was received for this work.

Use of AI. Generative AI (Claude, from Anthropic: Claude Fable 5.1 and Claude Opus 5.5, used in October 2026) was used as a drafting partner: to draft and edit text from the author's notes and conversation, first as passages for the Supplementary Material of the consciousness paper and then for this paper, to find and summarise literature, with every source then checked against its publication record, to draw the figures, to run and respond to independent reviews of the drafts, and to check references and internal consistency. The author is responsible for every claim.

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