

Gravity Is the Neck

Artist’s Proof 53

Notebook IV – Forces and Constants – beside AP28, AP44, AP50

Keeping in place: the equivalence, the landscape, and what remains

The 420 Code – Studio G

Contents

0 – Dependency and Scope

1 – Keeping in Place

Gravity is not a force on the grains · it keeps the record history in place · why it seems weak

2 – Free Fall, Twice, and the Equivalence

The neck's grain · a settling site · both halves · the fence

3 – The Landscape Sets the Reading

The pile between A and B · light goes round · the grain rolls · slope, and the change of slope

4 – The Source Is What Has Landed

Mass and actualised energy · resistance and the pull · the rate refused

5 – At the Neck, All Is Potential

The work's 1:1 as structure · the two pulls as the two sides

6 – The Dent That Swallows

The tubes, opened

7 – What Is AP08's, and What Remains

AP08 as an upstream claim · the dual, AP43-D1

8 – In Plain Words

9 – What This Paper Does Not Claim

10 – Kill Switches

Armed at lock

11 – Dated Notes This Paper Triggers

Claim Summary · Conditionality Footer

Artist’s Note

Gravity was the last one for me. Not because it is the hardest. Because everybody already has a picture of it, and the picture is wrong.

We are taught that gravity pulls. That it is a force, and a weak one, and that the weakness is a mystery nobody has solved.

I do not think gravity is a force acting on things. I think it keeps things in place. It keeps the whole record history in place, relative to itself and to every other record history. What you feel as a pull is the pull against your own resistance to collapse. Mass is the expression of it. Mass is what is held down.

Alpha holds the record. Gravity holds the entire record history in place. That is a big difference, and once you have seen it you cannot unsee it.

And gravity is not weak. It depends on every one of the twenty-one ways a grain couples, all at once. A thing that depends on twenty-one things is worth the product of them. That is the whole of the mystery. There is nothing weak about it. The world is not a collection of objects. It is a process of record keeping.

The rest of this paper is a landscape. Put a pile between two points and the light goes round it. A grain has to roll on the landscape. It cannot ignore the dent. Make the dent deep enough and it stops being a road at all. It swallows the grain and spits it out somewhere else as a grain.

I do not have all of it, and I will not pretend otherwise. The equation for what has landed is AP08’s, and it was written before I went looking for it. What is still owed is the other side – the pull from what could be written, not from what has been. AP43 named it. I have not paid it. I say so here rather than let a reader find it for himself.

What I am doing, and what I will keep doing until the day I die, is clearing a road. I can see this from the axiom side. Einstein and the people who wrote the record saw it from the other. If both sights are true they have to meet. What is unclear is the road between them, and clearing that road is the work. Not for my glory. As a gift.

The description continues.

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Orientation

AP28 counted gravity. AP44 priced it. AP50 said why the count has its shape. AP52 gave the kinematics of readings between sites settling uniformly. This paper is the other half. Not the flat case. The case where grains have landed and the landscape has a shape.

General relativity's content, in the work's terms, is four sentences. First: a site settling freely reads what a site on a flat landscape reads, and a site held on the landscape reads what a site pushed by anything else reads. Neither reads the landscape from inside. That is the equivalence principle. Second: the landscape sets where a grain can move and where light can cross. That is the geodesic principle. Third: what has landed is the source. Fourth: how much the landscape bends per what has landed. The first three are in the hourglass. This paper takes them from it, at the structural register, and says exactly what that register gives. The fourth is a field equation. AP08 derives the form of Einstein's from the record algebra, with the coefficient identified through the Lock and the circularity disclosed. This paper reads AP08's manifold as the landscape and its curvature as the change of slope, and AP08's own §2 says the first: the manifold is accumulated record structure, not a pre-existing container. What the work still owes is the dual: the gravity of possibilities, AP43-D1, whose Newtonian limit AP43 closes and whose relativistic form is open. In the hourglass the two pulls are the two sides of the neck. This paper says so, for the walk, and leaves D1 where AP43 left it.

It touches no number.

The describing of 9 September 2026, which this paper stands on. "Gravity is the force that holds the neck that presents the opportunity for the operator to express awareness. A neck actualises one grain at a time – that is the structural condition and constraint. Probability and possibility are in harmony as pure potential, but from there: selection – and selection holds. Coupling, selection, is made to hold. Gravity is not made to hold; gravity is there to keep in place – to ensure the possibility of coupling and selection by keeping the entire hourglass in place, not just the neck. But at the neck the entire universe exists as now – and that is why all possibilities are present now – and from there it breaks."

Notation. The neck, the grain, the landscape, the crossing record, a site's count and settling are AP50's and AP52's. Landed and the holding are AP50 §3's. A pile is a configuration of landed grains. A dent is where a pile has pulled the landscape down. Free fall is two things, and §2 names both.

0 – Dependency and Scope

0.1 – What this paper does

It says what gravity is in the picture: keeping in place, not holding. It says why gravity seems weak and coupling strong, in AP50 §5's terms (§1). It states the equivalence principle at the structural register, with both its halves and its fence. A site settling freely reads what a site on a flat landscape reads. A held site reads what a pushed site reads. Neither reads the landscape from inside, at the resolution at which the slope under it is one slope (§2). It derives, from AP52 §3 and a stated rule, that the landscape changes the crossing record between sites. It says exactly what of the geodesic principle that gives and what it does not (§3). It names the source: what has landed, as mass and as actualised energy (§4). It reads the work's 1:1 at the neck as structure (§5). It opens the tubes (§6). It carries AP08 as an upstream claim and names the dual as what remains (§7).

0.2 – Dependencies

AP28 (gravity as the persistence coupling over all twenty-one channels). AP44 (the realised coupling). AP50 (the neck as the grain's own aperture; the conjunction; gravity's two roles; landed and the holding; one grain uncoupled always; a grain falls free). AP51 (a site is a held configuration; position as record history; the pupil). AP52 (distance as the crossing record; a site's clock as its own count; motion as settling; uniform settling fenced; the energy ruling recorded there for this paper). AP43 (The Gravity of Possibilities): "Two pulls on the now, one from what has been written, one from what could be written. They are duals across the eye"; §7 the Newtonian partial closure of D1 (a Poisson equation on configuration space, source the Born weight, coupling α via AP07); D1 the full relativistic field equation of the gravity of possibilities, owed. AP08 (The Identity: Einstein's field equations derived from the record algebra). Its §0.1: the form of Einstein's field equations with cosmological constant derived from the four axioms – the weak-field limit from four axiom-derived constraints, the tensor form from five covariant constraints and Lovelock's theorem in 3+1, with N = 3 from AP10; the coefficient identified, not derived, as $8\pi G/c^4$ through the Lock, the circularity disclosed at KS-I.3 and KS-I.4; Λ predicted to exist, its value open (KS-I.7). Its §2: the manifold understood as accumulated record structure, not a pre-existing container. Its §3.2: record density is matter density, an identification conditional on the Lock; KS-I.5, the curvature-record identity, live and empirical. Its §0.2: the Lorentzian signature load-bearing, from AP10 §4 fenced at KS-D.4 – which AP52 now pays at the structural register. AP48 (The Assembly): the ropes slack from the first record, taut when the building is up; eighteen hold, three guide. AP03 (The Ratio): $c^2 = \beta/\alpha$; c finite by Axiom C. AP25 (record-weighted selection). AP30 (resistance as mass). The describings of 9 September 2026, quoted where used.

0.3 – What is claimed and what is refused

Claimed. That gravity keeps the record history in place and coupling holds the record; that the perceived weakness is the compounding of AP50 §5, conditional on AP50's formula (§1, ruled; derived from AP50 §5). The equivalence principle at the structural register, both halves, with its fence at one slope (§2, derived from what a site can read from inside). That the landscape changes the crossing record between sites; that light is redirected by the pile, on a stated rule; that a changed route is a changed distance (§3). That the source is what has landed, as mass and as actualised energy (§4, ruled). That the 1:1 at the neck is a statement of potential, not a number (§5, ruled).

Refused. Any number. A derivation of the geodesic principle's motion law: the picture gives that the landscape sets where a grain can move, on a stated rule; the metric that makes it exact is not here. A derivation of gravitational time dilation: named, not derived (§3). A re-derivation of the field equation for records: it is AP08's, verified, and §7 reads it and does not redo it. The relativistic field equation for the gravity of possibilities, AP43-D1: owed. The tubes as a derivation: §6 opens them and closes nothing. That the equivalence here is Einstein's in full generality: it is the work's, at the structural register, and §2 says what that register gives. The value of G: AP28's and AP44's.

0.4 – Honesty box

The describing came first. The desk asked five things and named no formula. He answered all five in the returned primer, on 9 September 2026. The desk then read each answer into the work's objects. In v0.2 the desk stated the equivalence principle as the equivalence of a settling site and a held site. That pairs the two things the principle distinguishes. A held site reads weight. A settling site does not. The ruling was about the neck's grain, and this paper applies it to sites. Five reviewers caught it. v0.3 says the principle with both its halves, from what a site can read from inside, and names free fall twice. The desk learned from AP43's file that the field equation for records is AP08's. AP08's file was then supplied and read. What AP08 derives is the form. What it identifies is the coefficient and the source. It says both. This paper reads its manifold as the landscape, and AP08 §2 already says the manifold is accumulated record structure.

0.5 – Epistemic status per section

§	Content	Status
1	Keeping in place; why gravity seems weak	RULED; the two registers DERIVED from AP50 §5, at the structural register; the smallness conditional on AP50's formula
2	Free fall, twice; the equivalence, both halves; the fence	RULED (the neck's grain unreadable); DERIVED at the

§	Content	Status
		structural register (what a site reads from inside); the fence RULED (one slope)
3	The landscape sets the reading; slope and change of slope; dilation	RULED (light redirected by the pile; the landscape sets where a grain can move); DERIVED (a changed route is a changed distance; the Shapiro-type delay); dilation NAMED, not derived
4	The source: what has landed, as mass and actualised energy	RULED; the rate refused
5	The 1:1 at the neck as potential; the two pulls as two sides	RULED, at the structural register; the two sides a reading, offered for ruling
6	The dent that swallows	STATED; opened
7	AP08's field equation, verified; what remains	AP08 VERIFIED – the form derived, the coefficient and source identified; read as the landscape; AP43-D1 OWED, unchanged
8–11	Plain words; refusals; switches; dated notes	–

0.6 – Kill-switch summary

Armed at lock: KS-GRAV.1 (the equivalence, both halves, fenced), KS-GRAV.2 (the landscape sets the crossing), KS-GRAV.3 (two registers). Full text at §10.

0.7 – Items held open without claiming debt status

AP43-D1, the relativistic field equation of the gravity of possibilities: named as what remains (§7). AP08's coefficient circularity (KS-I.3, KS-I.4), its source identification (KS-I.5) and its conservation bridge (KS-I.8): AP08's own, unchanged here. The relation between AP08's pull and AP43's – independent, dual, or coupled: not settled here (§5, §7). The tubes (§6). The metric that would make §3's motion law exact.

0.8 – Structural relationships

Upstream: AP28, AP44, AP50, AP51, AP52, AP43, AP08, AP48, AP03, AP25, AP30. Downstream: the tubes paper, if it is one. AP43's dated note (§11). The Museum's AP28 + AP44 entries.

0.9 – Definitions

- **Keeping in place.** Gravity. "The structural property that keeps the grains in place relative to the record history, and gravity as a whole keeps all the record histories in place relative to one another." Over all twenty-one channels.
- **Holding.** Coupling. "Alpha holds the record." One channel. AP50 §3. In this paper "holds" is used in this sense only.
- **The neck's grain in free fall.** The uncoupled grain, not yet a record (AP50 §8). "It does not meet the conditions of a record; therefore unreadable as a record." Not a site.
- **A site settling freely.** A held configuration – coupled, reading its own records – that is not kept in place against the landscape. A laboratory in free fall. A site.
- **The landscape.** What has landed. "The landscape determines the conditions for the reading." A settled site implies a landscape. A settling site is not landscape yet.
- **The pile; the dent.** A pile is what has landed together. A dent is what a pile does to the landscape around it: the pull of the record history, exaggerated at that point.
- **The slope; the change of slope.** The slope is the pull at a place. The change of slope across places is what a distant reader calls curvature. The "yes" was to the second, and §3 says so.

1 – Keeping in Place

What gravity is, in the picture. And why it is perceived as weak.

Claim. Gravity is not a force on the grains. It is the structural property that keeps the grains in place relative to the record history. As a whole, it keeps all the record histories in place relative to one another. Coupling holds the record. Gravity keeps the whole record history in place. That is the difference. It is the difference between one channel and twenty-one. Under AP50's formula it is why gravity is perceived as weak and coupling as strong.

Intuition. The world is not a collection of objects. It is a process of record-keeping. Coupling writes and holds one record. Gravity keeps the whole pile from sliding. One is local and strong. The other is over everything and seems weak. It is not weak. It depends on all twenty-one channels at once – a conjunction, AP50 §5 – and what depends on twenty-one passages at α each is worth α twenty-one times over. "Spread over everything" means conditional on everything. It does not mean divided among it.

Givens. AP28 (gravity over all twenty-one channels). AP50 §5 (gravity's two roles; the neck is not a gate; a gate a completed exchange worth α). AP50 §12 (the ratio in the visible). AP50 §1 (the describing, 8 September: "gravity has to hold everything in place – that is why it seems weak – it is not weak"). The describing of 9 September.

Ruling. "The neck is the entry point of the record – where the grains land. Gravity is not a force on the grains. It is the structural property that keeps the grains in place relative to the record history, and gravity as a whole keeps all the record histories in place relative to one another." "Alpha holds the record. Gravity doesn't just hold the record, it holds the entire record history in place. Big difference." "The world is not a collection of objects – it is a process of record keeping – that is why gravity is perceived as weak and phase coupling capacity as strong – gravity keeps the coupling configurations structurally in place; phase coupling holds the configurations themselves in place."

Theorem – the two registers. AP50 §5 has gravity in two roles. The G-face is one reading of a landed grain. The neck is what all twenty-one gates compound to. The describing sets the two roles beside coupling's one job. Holding is coupling's: one channel, at α, the record held. Keeping in place is gravity's: all twenty-one, the record history held against every other record history, at the neck, now. So the same grain is held strongly, by one completed exchange, and kept in place by twenty-one compounded. Within AP50's formula the contrast between the two is twenty powers of α, with AP50's two correction factors retained (AP50 §12): gravity compounds twenty-one gates, coupling is one, and the difference is twenty. That is a conditional consequence of AP50's product. It is not an independent explanation of a small number. The perception of weakness is the compounding. Nothing is weak.

Grade. Ruled. The two registers derived from AP50 §5, at the structural register. The smallness conditional on AP50's formula.

Kill switches

KS-GRAV.3 — Two registers. Fires if gravity is shown to enter a reading at one gate's worth — a coupling of order α with no compounding — or if coupling is shown to enter at the compounded worth of the persistence coupling. The observable is AP28's: the ratio of the realised gravitational coupling to α at the electron. LIVE — STRUCTURAL.

Coupling holds the record. Gravity holds the record history. That is the whole difference. Twenty-one gates against one, and the difference is twenty.

2 – Free Fall, Twice, and the Equivalence

The equivalence principle, from what a site can read from inside. Both halves. And its fence, which the picture gives a reason for.

Claim. A site settling freely on the landscape is not kept in place against it. So it reads no keeping in place. From inside, at one now, it reads what a site on a flat landscape reads: AP52's readings, and no gravity. That is the first half. A site held on the landscape reads keeping in place as the pull against its own resistance: weight. A site kept in place by anything else – a floor, a rope – reads the same pull against the same resistance. From inside, at one now, it cannot read which. That is the second half. Neither site reads the landscape's shape from inside, at the resolution at which the slope under it is one slope. That is the equivalence principle, at the structural register. It is forced by what a site can read from inside: its own holding, and nothing past it.

What free fall is, twice. The described "grain in free fall" is the neck's grain. Uncoupled. Not yet a record. Unreadable (AP50 §8). It reads nothing at all, gravity included. It is not a site. A site settling freely is a different thing. It is coupled. It holds and reads its own records. A laboratory in free fall keeps its clocks and its photographs. What it is not is kept in place against the landscape. This section is about the second. The first is why the second reads no gravity, in the picture's own words: what is not kept in place reads no keeping in place. The two must not be one word, and in v0.2 they were.

Intuition. Nothing constrains the neck's grain until it lands. It is unconstrained information. Not yet a record. At the big bang the fall was long. The ropes had to pull tight first. That is the first meaning. The second is the elevator. Cut the cable and the floor stops pushing. You float. From inside you cannot tell whether you are falling toward a pile or drifting far from any. Stand on the floor and it pushes. From inside you cannot tell whether a pile below is pulling you down or a rocket below is pushing you up. Those are the two halves. Both are about what you can read from inside.

Givens. AP50 §1 (a grain falls free; before the landscape can hold it falls unbounded). AP50 §8 (the neck's grain uncoupled, unreadable). AP48 §1 ("the ropes are there from the first record, but they are slack … When the building is up and the ropes go taut, the horse walks"). AP51 §1 (a site is a held configuration). AP51 §5 (only what has held can be read). AP52 §§3–5 (the readings of a site in uniform settling). §1 here (gravity is read as keeping in place). §4 here (weight is the pull against the resistance). The describings.

Ruling. "The grain in free fall can't be read – or read yet. The conditions only constrain it once the grain lands. That is why at the big bang the free fall was, relative to the record history, very long: the ropes connected to the horse first had to get tight; or a single grain of sand is very small relative to the hourglass, and it fell far before it hit the hourglass itself. So a grain in free fall reads as unconstrained information. It is not a record yet." "A held grain is a record – is readable. A grain in free fall doesn't meet the conditions of a record – therefore

unreadable as a record." On whether a settling site and a held site are locally indistinguishable, and whether the structure forces it: "100% – absolutely – it also couldn't be any other way – the structure forces it." The desk read his "indistinguishable" as the two halves below, and not as a settling site reading what a held one reads. That reading was ruled on 11 September 2026: two things, one word. The split is his.

Theorem – the equivalence, both halves. A reading is a coupling to a held record (AP51 §2). Gravity is read only as keeping in place (§1). A site reads it as the pull its holding resists: weight (§4). A site settling freely on the landscape is not kept in place against it. So it reads no keeping in place. From inside, at one now, a site settling freely and a site on a flat landscape read the same: AP52's readings, and no gravity. That is the first half. A site held on the landscape reads keeping in place as the pull against its resistance. A site kept in place by anything else – a floor pushing it, a rope pulling it – reads the same pull against the same resistance. From inside, at one now, it cannot read which. That is the second half. Neither site reads the landscape's shape from inside itself. The shape is read only across sites, by crossing records (§3). So every reading taken at one site and one now is AP52's: flat. The landscape is what readings across sites disagree by. That is the equivalence principle at the structural register. It is forced by what a site can read from inside. Nothing is added.

The fence, and why it is where it is. "At one now, from inside" means at the resolution at which the slope under the site is one slope. A site large enough to read two slopes reads their difference. Two grains dropped at its two ends converge or part. That is §3, across the site's own extent. It is what a reader far away calls tidal. The principle holds at one slope. The picture says why: a site reads the landscape only by crossings, and a crossing inside one site is across the site's own extent. Where the extent spans two slopes, the site reads the change of slope. Where it spans one, it reads none.

What it is not. It is not a site with no landscape near it. "Landscape is the potential of a landscape. The landscape determines the conditions for the reading. Something in relation to absence is structurally forbidden. To be read, Axiom S needs to break – something in relation to something else. A settling site is not landscape yet. A settled site implies a landscape structurally." So the first half is between not kept in place and a flat landscape. It is not between a landscape and none. There is no no-landscape: to be a site is to be a held configuration, and a held configuration stands on something. What the work has no word for is a site standing on nothing.

What this does not derive. That every body settling freely, whatever it is made of, settles alike. The work's reason is that every site is the same sand (AP51 §4), and that is a ruling. That local experiments inside a settling site obey AP52's kinematics in full: this section says they read AP52's readings, and AP52 is the flat case; the metric that makes "flat at one slope" exact is not here.

Grade. The neck's grain unreadable: Ruled. The equivalence, both halves: Derived at the structural register, from what a site can read from inside. The fence at one slope: Ruled, with the picture's reason.

Kill switches

> KS-GRAV.1 — The equivalence, fenced. Fires if a freely settling site is shown to read keeping in place from inside itself, at the resolution at which the slope under it is one slope. Or if a held site is shown to read, from inside, whether the landscape or something else keeps it in place. Tidal readings across a site's own extent are §3 and do not fire it. The observables are the standard ones: a freely falling laboratory's internal accelerometer at zero; the universality of free fall between test bodies of different make. LIVE — STRUCTURAL.

Cut the cable and you float. Stand on the floor and it pushes. From inside you cannot read which pile, or whether there is one. That is the principle, and the picture says why it stops at one slope.

3 – The Landscape Sets the Reading

What the picture gives of the geodesic principle. What it names. What it does not derive.

Claim. The crossing record between two sites is the route light takes (AP52 §3). Put a pile between A and B and light no longer crosses on the flat route. It is redirected by the pile. That is the ruling. A redirected route is a longer crossing record. So the same two sites are further apart than they were before the pile landed. Distance, in the work's sense, changed. Nothing moved. Mass landed. For a grain it is the same: the landscape sets where it can move. The pile changes the slope. The change of slope across places is what a distant reader calls curvature. Gravitational time dilation is named here and not derived.

Intuition. On a flat plane the shortest route from A to B is a straight line. That is the route light takes. Now make a pile of sand between A and B. Light is directed round the pile. For a grain it is the same. If the landscape is flat, the roll is short. If there is a big dent between A and B, the grain must follow the landscape. It rolls on it. The landscape determines where it can move.

Givens. AP52 §3 (distance is the crossing record; light is the ruler). AP52 §4 (a site's clock is its own count). AP52 §5 (motion is settling relative to the landscape; accelerated settling refused there and taken up here). AP50 §1 (where a grain lands depends on the landscape). The describing.

Ruling. "It influences their relative distance from one another. On a flat plane the shortest route between point A and point B is a straight flat line – the shortest route light can travel to transfer information from A to B. Now if you make a pile of sand between A and B, the shortest route from A to B is no longer a straight line – the light is now directed – the distance – by the concentration of mass piled between them. Mass determines the trajectory possibilities of the light. The inverse is the same. For a grain of sand to travel from A to B it must roll across the landscape. If it is nice and flat, the destination is in sight and the roll is easy and the shortest possible roll. Now if there is a big dent in the landscape between A and B, the grain of sand has to follow the curvature of the landscape. It must roll on the landscape. The landscape determines where it can move." Is the pile's slope what a distant reader calls curvature? "Yes."

Theorem – a changed route is a changed distance. AP52 §3: a site's only measure of another's distance is the crossing record, the ticks a grain took to arrive. That light is redirected by the pile is the ruling above. Given the ruling, the crossing between the same two sites is longer than the same two sites' crossing before the pile landed. That is a comparison inside the record history, and it is readable. So distance changed and nothing moved. Both sites read the crossing longer. That there is a delay, and that it is symmetric, follows from the ruling. It is the kind of delay a reader far away calls Shapiro's. Its amount is the metric's, AP08's, not this paper's.

Slope, and the change of slope. The pile changes the slope of the landscape around it. The slope at a place is the pull there. A slope alone is not curvature: an incline has slope and no curvature, and a reader settling freely on one incline reads nothing. What a reader far away calls curvature is the change of slope across places. Two grains dropped a little apart converge where the slope changes. The “yes” is read as that: the pile changes the slope, and the change of slope is curvature. That is a ruling of the picture. The metric that makes it exact is not here.

Gravitational dilation, named. A site in a dent is read from outside as counting slowly. It reads the outside as counting fast. That is gravitational dilation. A longer crossing record does not give it. A longer route delays every arrival by the same amount and leaves the spacing of arrivals unchanged. Dilation is the spacing changing, and it is asymmetric. The picture names it: the deep site keeps its grains against a steeper pull, and its count is its own ticks (AP52 §4). The picture does not yet derive it. The amount and the direction are AP08’s, by §7.

Why this is not a force, and what it is not yet. A force acts on a thing and moves it. The landscape does not move the grain. It is where the grain can be. “The landscape determines where it can move.” That is the geodesic principle said in sand, on a stated rule. It is AP52 §5’s settling with the landscape given a shape. What it is not yet is a motion law: which route, of all the routes on the landscape, the grain takes, and why light takes the route it takes. That needs a metric. The metric is the fourth sentence, §7.

Grade. That light is redirected by the pile, and that the landscape sets where a grain can move: Ruled. That a changed route is a changed distance, and the symmetric delay: Derived from AP52 §3. The change of slope as curvature: Ruled. Gravitational dilation: Named; AP08’s. The motion law: not here.

Kill switches

> KS-GRAV.2 — The landscape sets the crossing. Fires if the crossing record between two sites at rest to each other is shown unchanged by a pile landing between them. The observables are the standard ones: the deflection of light by a mass, and the round-trip delay of a signal passing near a mass, each against its own null. LIVE — STRUCTURAL.

The pile changes the slope. The change of slope is what you call curvature from far away. Up close it is where the grain can go.

4 – The Source Is What Has Landed

Named. Not measured.

Claim. The source of the slope is what has landed. As mass: the landed read as what resists. And as actualised energy: “the record history is actualised energy” (AP52 §5, ruled, recorded there for this paper). Gravity concentrates around mass. Or the other way round: mass is the expression of gravity, in that mass is held down. High concentrations of what has landed exaggerate the pull of the record history at that point. Clumped configurations are held in place by their resistance to collapse. The pull against that resistance is gravity. Resistance is a function of the phase coupling now. What the slope is per what has landed is not in this paper.

Intuition. A pile pulls the landscape down around it. Put more on the pile and the dent deepens. The pile does not collapse into its own dent because the grains resist collapse. That resistance is coupling. The pull against it is gravity. Weight is the pull you feel against the resistance you are.

Givens. AP30 (resistance as mass; the proton). AP50 §3 (the landed readings: m_e and G two faces of one landed grain; the material face, that the held does not collapse). AP28 (gravity over all channels). AP52 §5 (the energy ruling). The describing.

Ruling. “Gravity concentrates around mass – or the other way round, mass is the expression of gravity in that mass is held down. High concentrations of mass exaggerate the pull of the record history at certain points – all local and relative to the record history as a whole. You can read this as gravity is the force that keeps us on the planet, and the force is expressed as mass configurations clumping. Clumped mass configurations are held in place by their resistance to collapse, and the pull against that resistance is gravity. And resistance is a function of the phase coupling now.” And, from AP52 §5: “The record history is actualised potential – potential actualised as a specific coupling configuration. The record history is actualised energy.”

Theorem – where the source sits. A landed grain is read as mass: one unit of resistance (AP30; AP50 §3). Many landed together are a pile. The pile is kept in place by gravity (§1) and holds itself up by coupling: the material face, the held does not collapse. The pull and the resistance meet at every grain of the pile. Where more has landed, more is kept in place, and the pull of the record history is greater there. That is the dent. The source is what has landed: mass, and everything the record holds as actualised energy. Light gravitates in the settled universe, and the work’s word for the whole of what gravitates is the ruling on energy. Mass is the reading of the landed as what resists. Held down is the reading of the landed as kept in place (AP50 §3: m_e and G, two faces). The sentence as given names the pair at one grain. It is not one face. The picture gives the source. It does not give the rate: how much slope per what has landed, nor the full account of what counts – energy, momentum, pressure, stress – in the settled universe. That is the fourth sentence, §7.

Grade. Ruled. The source named, as mass and as actualised energy. The rate, and the full source law, refused.

The source is what has landed. How far down the landscape goes, per how much, is the fourth sentence.

5 – At the Neck, All Is Potential

The work's 1:1. Read as he now reads it: structure, not number.

Claim. At the neck the full potential of gravity over all channels is available. (Not a numerical equality: see the ruling below.) Phase coupling in all its potential is available. All twenty-one channels are pure potential there. From now, gravity keeps twenty-one channels: it keeps the record history structurally in place. From now, phase coupling happens: the record is held. Gravity and coupling are both present at the neck as structural capacities. No equality of strength, probability or measure is asserted. It is not a claim that α and G share a numerical value in any units. They do not. That is what "one to one at the neck" means, and it carries no number.

Intuition. At the neck the entire universe exists as now. Every possibility is present. Nothing has been chosen. Gravity and coupling are both there in full. One will keep the whole in place. One will hold the grain that lands. Neither has done anything yet.

Givens. AP50 §5 (gravity's two roles; a gate a completed exchange; AP28 Proposition 5 at one gate). AP50 §12 (the ratio in the visible). AP25 (the possibilities weighted by the record before any lands). AP43 (the two pulls). The describings of 8 and 9 September.

Ruling. "At the neck the full potential of gravity over all channels is available, and phase coupling in all its potential is available at the neck. It is not a number but a structural reading. From now gravity holds twenty-one channels – it holds the record history structurally in place. From now phase coupling happens and the record is held." "All is structurally equal as potential." "All twenty-one channels as pure potential – actualisation moves to selection, a coupling configuration being actualised." And, on the desk's reading that the 1:1 is AP28's Proposition 5 said at one gate, and that "α is relative to gravity" is the six constraints as ratios of one another: "Yes, I believe so fully. The visible is expressed through the phase coupling mechanism – that is also necessary for the reading – it is a forced reading condition. The six readings – constants and arrow of time – all records must be structurally constrained by the constants in order to be a record."

Theorem – the 1:1 as potential. At the neck the grain has not passed any gate. Nothing has compounded. Gravity is all twenty-one gates as potential. Coupling is one gate as potential. Before selection, neither has acted. The possibilities are weighted – AP25 weights them by the record – but no gate has been passed, and what has not been passed has not compounded. So at the neck the two are equal in the only sense available there. Both are wholly present as capacity. Neither has acted. That is the 1:1. Once the grain lands, the twenty-one compound and the one does not. The ratio in the visible is twenty powers of α, with AP50's two factors retained (AP50 §12). The 1:1 and the twenty powers are the same fact read at two places: before the gates, and after. And "α is relative to gravity, and to all the other constants" is the yes quoted above: the six constraints are one grain's six readings, ratios of one another, none absolute, all forced on a record for it to be a record.

The two pulls, as the two sides – ruled, 11 September 2026. AP43 names two pulls on the now: from what has been written, and from what could be written. Duals across the eye. In the hourglass those are the two sides of the neck. The landed side pulls: that is the gravity of records, the slope of §3, AP08's. The potential side presses: that is AP43's gravity of possibilities, the whole dark universe pushing on the neck (AP50 §1). They meet at the neck. At the neck, both are wholly present. That is the reading of "at the neck the entire universe exists as now" in AP43's terms, taken into this paper by ruling. Whether the two pulls are independent, dual, or coupled is not settled here. It waits on D1. It ships, and goes to AP43 as a dated note (§11).

Grade. Ruled, at the structural register. A reading of potential, not a number. The two sides: ruled, 11 September 2026.

Before the gates, both are wholly there and neither has acted. After them, one has compounded twenty-one times and the other once. Same grain. Two places.

6 – The Dent That Swallows

The tubes, as described. Opened. Not closed.

The describing. “Now if the dent becomes very deep and accumulates a lot of mass, sometimes a black hole can develop, and rather than rolling all the way to point B, the black hole swallows the grain of sand … and spits it out somewhere else as a grain of sand.” And from The Keys and AP50 §1: the tubes swallow configurations, defragment them back to grains, and each is actualised again. That is the total loop.

What the picture says. A dent deep enough is a tube. It does not curve the crossing. It ends it. A grain that enters does not arrive at B. It is defragmented: the configuration is undone to grains. The grains re-enter through the neck. So a black hole, in the picture, is the landscape swallowing configurations back into potential. What comes out is a grain, not a record. Nothing un-records – the record history keeps what was written – but a configuration can be returned to sand.

What this paper does with it. Nothing more than name it. The return of configurations through the neck is a conjecture of the picture. No dynamics of the return, its destination or its observable consequences is supplied here. It is not bare. The work carries it as AP04, The Loop Hypothesis, conjectural and under nine switches, and AP46 prices the leak at the neck as the sky’s expansion. What §6 adds is the picture’s word for it: the dent that swallows. This paper does not need the tubes for §§1–5. The tubes are their own paper, or nowhere. What was said is recorded here, so that paper starts from those words.

Grade. Stated. Opened. A conjecture, named as one, with its home named (AP04; AP46).

The dent that swallows returns the configuration to sand. It does not un-record.

7 – What Is AP08's, and What Remains

The fourth sentence is carried as an upstream claim. The dual is owed.

The picture gives three of general relativity's four sentences, at the register §§2–4 state. The equivalence (§2). The landscape setting the crossing (§3). The source (§4). The fourth is how much the landscape bends per what has landed. That is AP08's, and it has been read. AP08 derives the form of Einstein's field equations with cosmological constant from the four axioms: the weak-field limit from four axiom-derived constraints, the tensor form from five covariant constraints and Lovelock's theorem, with N = 3 from AP10. The coefficient is identified, not derived, through the Lock, and AP08 discloses the circularity (KS-I.3, KS-I.4). The source is record density, identified as matter density conditional on the Lock (AP08 §3.2; KS-I.5). The manifold is accumulated record structure, not a pre-existing container (AP08 §2). That last sentence is the connection this paper needs, and AP08 already made it: AP08's manifold is this paper's landscape; its record density is what has landed (§4); its curvature is the change of slope (§3); and the metric it inherits is AP10's Lorentzian signature, fenced there at KS-D.4, which AP52 pays at the structural register. So the fourth sentence is not owed. It is AP08's, with AP08's own open items: the coefficient's circularity (KS-I.3, KS-I.4), the source identification (KS-I.5), Λ's value (KS-I.7), and the bridge from record monotonicity to covariant conservation, which AP08 §8.1 names as a bridge step and not a completed derivation (KS-I.8). If that bridge fails, AP08's tensor form fails at its third constraint, and the fourth sentence is owed again. This paper adds no equation to it.

What the work owes in either case is the dual. AP43 names two pulls on the now. One from what has been written. One from what could be written: the gravity of possibilities, the pull toward the high-amplitude branch before actualisation. AP43 §7 closes its Newtonian limit: a Poisson equation on configuration space, the Born weight as source, α as the coupling. Its relativistic form is AP43-D1. Owed. This paper does not pay it. It says where it sits in the picture: the potential side pressing on the neck (§5). If the picture can give D1, it will give it there: as the rate at which the potential side's press sets what lands next, compounded over the gates. That derivation is not attempted here. The relation between the two pulls – whether AP08's curvature moves the press, and the press moves where grains land – is not specified here. It waits on D1.

Grade. AP08: verified; the form derived there, the coefficient and the source identified there; read here as the landscape and the change of slope. AP43-D1: owed, unchanged; its place in the picture named.

The landed side has its equation. The potential side does not yet. The picture says where to look.

8 – In Plain Words

In plain prose.

Gravity is not a force that pulls on things. It is what keeps the pile from sliding. Coupling holds one grain to another. Gravity holds the whole record history in place, relative to itself and to every other record history. That is why gravity seems weak. It is not weak. It depends on all twenty-one ways a grain couples at once, and a thing that depends on twenty-one things is worth the product of them.

Cut the cable and you float. From inside you cannot tell whether you are falling toward a pile or drifting far from any. Stand on the floor and it pushes. From inside you cannot tell whether a pile below is pulling you down or a rocket is pushing you up. Those are the two halves of what Einstein called the equivalence principle. In sand they are one sentence: a site reads its own holding, and nothing past it. It stops being true when the site is big enough to lie across two slopes. Then it reads the difference. The picture says why: a site reads the landscape only by crossings, and a crossing inside one site is across the site's own width.

Put a pile of sand between two places. Light goes round the pile. The crossing takes longer than it did before the pile landed. So distances change when mass lands. Not because anything moved. Because the landscape changed shape. A grain rolls on the landscape and cannot ignore the dent. The pile changes the slope. Far away, you call the change of slope curvature. Up close it is where the grain can go. What the picture does not yet say is which route the grain takes of all the routes, or why a clock deep in a dent counts slowly to someone outside. It names both. It does not derive them.

The source is what has landed. Mass, and everything the record holds as energy. A pile pulls the landscape down around itself. It does not fall into its own dent because the grains resist collapse. That resistance is coupling. The pull against it is gravity. Weight is that pull, felt against the resistance you are made of.

At the neck, before any grain has passed any gate, gravity and coupling are both fully there and neither has done anything. That is what I mean by one to one. It is not a number. After the grain lands, gravity has compounded over twenty-one gates and coupling over one. That is why one is twenty powers stronger than the other. Same grain. Two places.

How deep the dent is per grain landed is not this paper's. AP08 derived the form of that years ago, and says plainly what it identified rather than derived. What is still owed is the other pull. The pull of what could land, pressing on the neck from the potential side. AP43 has its first form. The full form is owed. I would rather say all of that plainly than pretend.

9 – What This Paper Does Not Claim

- Any number.
- That a site settling freely reads what a held site reads. It does not. The falling site reads nothing of keeping in place. The held site reads weight. The equivalence is between free settling and a flat landscape, and between being held by the landscape and being held by anything else (§2).
- The geodesic motion law. The landscape sets where a grain can move, on a stated rule. Which route, and why light takes its route, needs a metric. Not here (§3).
- Gravitational time dilation. Named. Not derived (§3).
- A re-derivation of the field equation for records. It is AP08's. Read, not redone (§7).
- The relativistic field equation of the gravity of possibilities. AP43-D1 stays owed.
- The full source law: energy, momentum, pressure, stress in the settled universe. The source is named as what has landed, as mass and as actualised energy (§4).
- The tubes as a derivation. §6 opens them as described and closes nothing.
- That "α:G = 1:1 at the neck" is a number, an equality of strength, or a probability. It is a reading of potential (§5).
- The value of G. AP28's and AP44's.

10 – Kill Switches

Armed at lock. Each names what would exhibit the counterexample.

KS-GRAV.1 — The equivalence, fenced

Claim. A site settling freely reads no keeping in place from inside, at the resolution at which the slope under it is one slope. A held site cannot read, from inside, whether the landscape or something else keeps it in place.

Test. A freely settling site shown to read keeping in place from inside, at one slope: a freely falling laboratory's internal accelerometer away from zero. Or free fall shown to differ between test bodies of different make – which tests the ruling that every site is the same sand (AP51 §4), not the derivation of §2, which does not reach universality. Or a held site shown to read, from inside, which keeps it. Tidal readings across a site's own extent do not fire it.

Status. LIVE — STRUCTURAL.

Recovery. The equivalence of §2 loses its structural ground and reverts to Einstein's postulate.

KS-GRAV.2 — The landscape sets the crossing

Claim. A pile landing between two sites at rest to each other changes the crossing record between them. Light is redirected by the pile.

Test. The crossing record between two sites at rest to each other shown unchanged by a pile landing between them. The observables: the deflection of light by a mass, and the round-trip delay of a signal passing near a mass, each against its own null.

Status. LIVE — STRUCTURAL.

Recovery. §3 fails. The ruling on redirection falls. AP52's flat case stands.

KS-GRAV.3 — Two registers

Claim. Coupling holds a record, at one channel. Gravity keeps a record history in place, over all twenty-one. Within AP50's formula the perceived weakness is the compounding.

Test. Gravity shown to enter a reading at one gate's worth, uncompounded. Or coupling shown to enter at the compounded worth. The observable is AP28's ratio of the realised gravitational coupling to α at the electron.

Status. LIVE — STRUCTURAL.

Recovery. §1 fails. AP50 §5's two roles collapse to one.

11 – Dated Notes This Paper Triggers

Beside the locked bodies, never in them. On a stated rule. One dated note per paper.

AP43 – The Gravity of Possibilities

- §0.2 and §7: the two pulls on the now read as the two sides of the neck – the landed side's pull and the potential side's press – meeting at the neck (§5 here). Ruled, 11 September 2026. A reading, not a change to AP43's content.
- D1: unchanged. Its place in the hourglass named (§7 here).

AP52 – Reading Relativity

- §5: the energy ruling recorded there is used here (§4). No change to AP52.

AP08

- §0.2: KS-D.4, load-bearing there for the Lorentzian signature, is paid at the structural register by AP52. §2 and §3.2: this paper reads the manifold as the landscape and the record density as what has landed (§§3–4 here). A reading, not a change.

Claim Summary

Section 0. Contract with the reader. Three of four sentences of general relativity from the picture, at the register each section states. The fourth AP08's, verified. The dual named as what remains. No number.

Section 1. RULED; DERIVED. Gravity keeps the record history in place. Coupling holds the record. One channel against twenty-one. The perceived weakness is the compounding, conditional on AP50's formula.

Section 2. RULED; DERIVED. Free fall twice: the neck's grain, unreadable; a settling site, coupled and not kept in place. The equivalence, both halves: a settling site reads what a flat landscape gives; a held site reads what a pushed site reads; neither reads the landscape from inside, at one slope. The fence ruled, with the picture's reason. What is not derived, named.

Section 3. RULED; DERIVED; NAMED. Light redirected by the pile, ruled. A changed route is a changed distance, derived. The symmetric delay, derived. The change of slope as curvature, ruled. Dilation named, not derived. The motion law not here.

Section 4. RULED. The source is what has landed, as mass and as actualised energy. Mass and held down two faces of one grain. The rate and the full source law refused.

Section 5. RULED. The 1:1 at the neck is potential, not number, not an equality of measure. Before the gates both wholly present. After, twenty powers. The two pulls as the two sides, a reading offered for ruling.

Section 6. STATED. The dent that swallows. A conjecture, opened.

Section 7. AP08 verified: the form derived, the coefficient and source identified, the manifold accumulated record structure; read as the landscape. AP43-D1, the dual, OWED; its place in the picture named.

Sections 8–11. Plain words. Refusals. Three switches armed at lock. Dated notes.

Conditionality Footer

Everything above is conditional on the axiom and its locked developments. It is exactly as strong as they are. If AP52's ruler falls, §3 falls. If a site can read the landscape from inside at one slope, §2 falls. If AP50's two roles fall, §1 falls. If AP08's source identification (KS-I.5) falls, §4's source is named and not sourced, and nothing else moves. The switches are armed at lock. There is no number to move.

Dependencies. AP28. AP44. AP50. AP51. AP52. AP43. AP08. AP48. AP03. AP25. AP30.

Dependents. The tubes paper, if one. AP43's dated note (§11). The Museum's AP28 + AP44 entries.

Kill switches. KS-GRAV.1–3, armed at lock.

Provenance

Every claim, ruling and switch in this paper is mine. The five describings were given on 9 September 2026, in the returned primer, in reply to questions that named no formula. The desk read each into the work's objects and wrote nothing before it had them. Drafting under his direction the same day. He then supplied AP43, AP48 and AP03. The desk verified them and corrected §7 the same day: the field equation for records is reported as AP08's, and what remains is the dual. Five reviews of v0.2 were worked on 10 September. The equivalence was restated with both halves; the error was the desk's. AP08 was supplied and verified the same day. Locked in the wave of the four. The switches armed at lock. P-GLASS.1 frozen where the paper says.

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