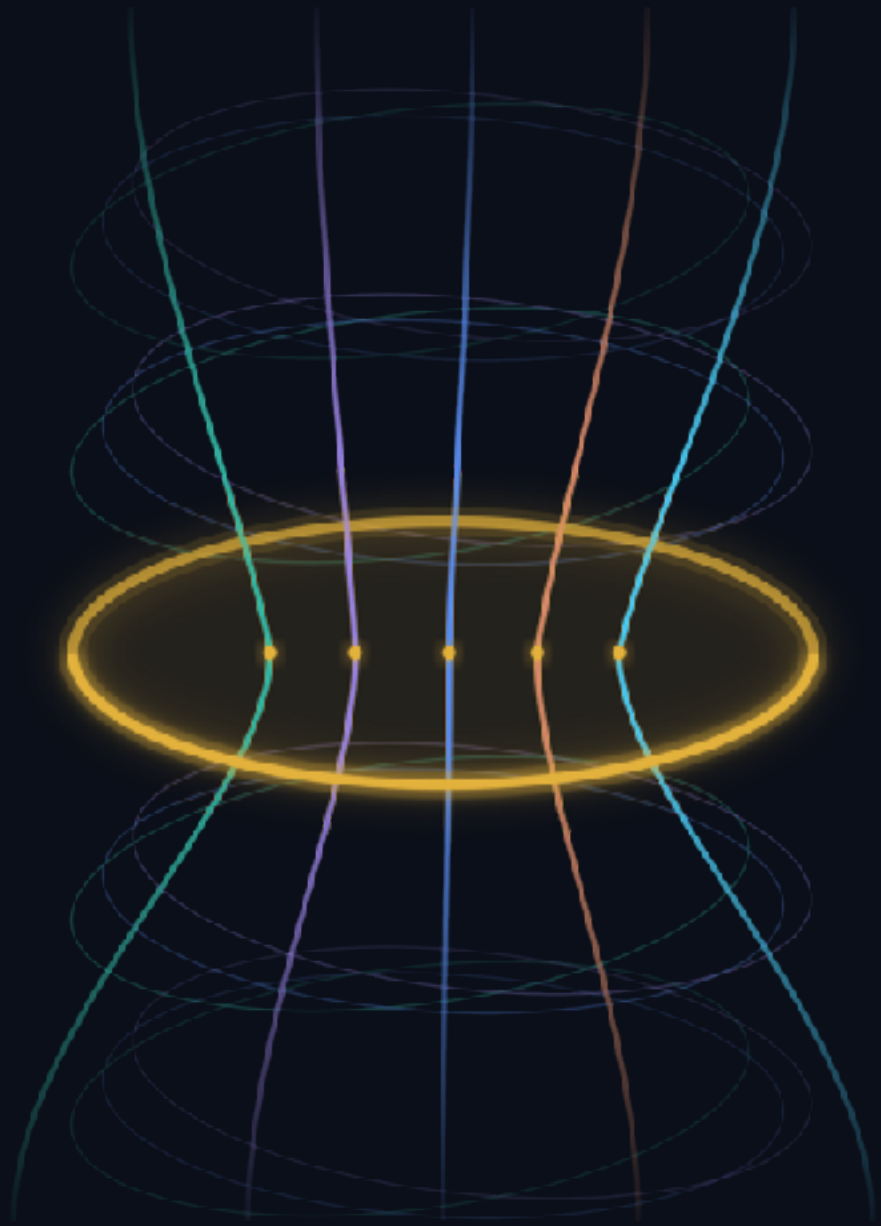
THE SCIENCE OF CONSCIOUSNESS · 2026

Phenomenology of Sedation

What the machinery of experience looks like when you slow it down enough to see it — and the geometry that falls out: a a time window with a base space at "now" where the streams are forced to agree, fibers where they are free, and a choice of who holds still.



Brad Caldwell · Journal of Ring Bank Phenomenology · theoriesofconsciousness.com

Twitter: @Caldwbr · Youtube: @BradCaldwellAuburn

1: the *schemas (ς)* content



R · real

Real. The room you see and the body you feel — your brain's model of the things, not the things themselves.



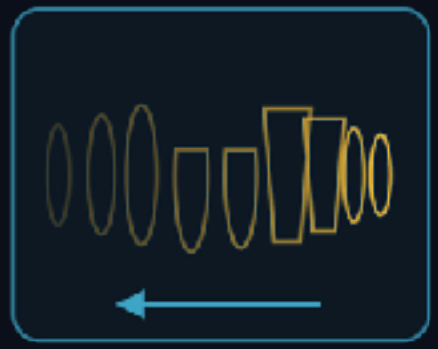
I · imaginal

Imaginal. Dream and thought imagery: just as volumetric, just not driven by the senses.



B · Bank

Bank. Raw geometric shape, in and of itself — mostly 1D and 2D manifolds: a Russian-doll set of sphere and cube with a near-infinity of shapes lightly attached. You have probably never seen it.



C · canvas

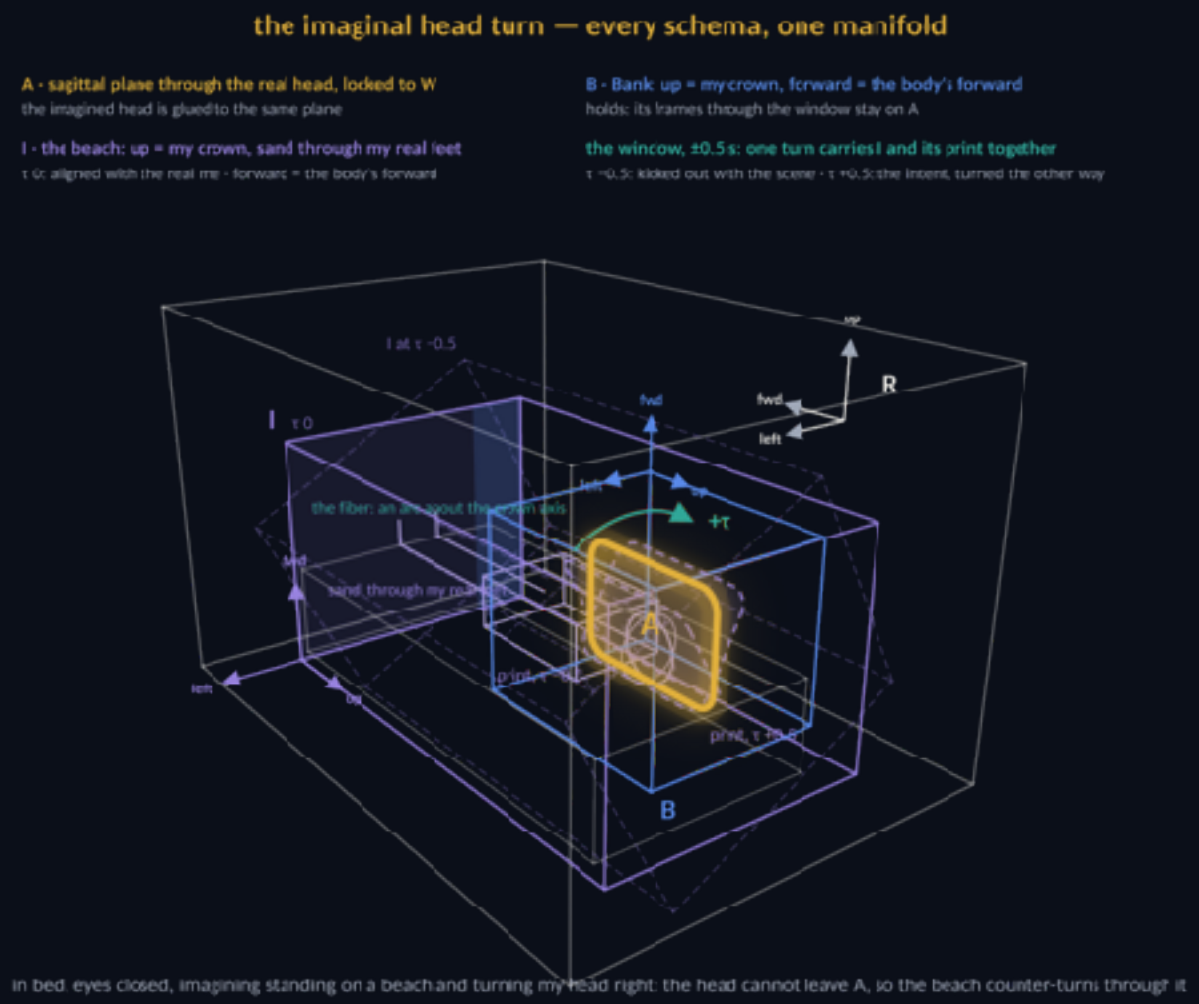
Canvas. An empty volume holding the pastward-flowing record of the access manifold's prints. What shows there is mostly how its shape and scale changed, and how fast the strobe ran; only when it walks across a schema does path replace artificial flow.



Attention may move locally in each, but attention stays bound as a single manifold across schemas for each new moment of clock time *t*. The result is a rolling time window: attention gives up one dimension in each schema — hidden, or set orthogonal — so that what is about to happen and what just happened can be tracked along it (modeled time **tau, τ**). About one second.

2: the *attention manifold (A)*

You can sometimes *feel* the movement of A, such as when acceleration or car turn qualia throw/displace A/PPS.



The kind of attention I'm describing is not a spotlight on a scene. It is one thin manifold through every schema at once — the place they are made to agree. Pictured: RB-09.2, imaginal head turn, mid-turn.

One manifold, not four. It may move locally inside each schema, but it stays bound as a single manifold across all of them — one per moment of clock time *t*.

Zero to two dimensions. A point, a ring, a plane or a surface; never a volume. Its shape is pulled from the Bank.

It lives at τ = 0. The present face of the window. The dimension it gives up in each schema is the one it tracks the near future and recent past along — modeled time τ.

The strobe prints it. Π flashes 7–10 times a second awake, about 2 in heavy sedation; each flash is one ringframe.

It moves against each schema's fibers. Rides them, holds while they feed through, or holds with them — ride, feed, hold.

It leaves a record. Its prints flow pastward into the canvas: mostly shape, scale and rate.

3a: the *strobing (Π)* of the attention manifold in sedation

24 fps

a movie. You see motion.

2 fps

the same movie. You see frames.

7–10 Hz

the waking cadence of the frames underneath your experience

Sedation is the projector slowing down. Under mild, legal sedatives — hemp gummies, the edge of sleep — the cadence drops to 2–5 Hz and the frames become visible.

The content stays ordinary: an elbow, a hotel heater, the colour blue. **The format goes strange — and the format is rings.**



frames, resolved

3b: the strobe's (Π's) *frequencies and modes*

7–10 Hz	3–5 Hz	~2 Hz	0.5 Hz
awake	light sedation	heavy sedation	edge of sleep (laps)

Sounds and smells briefly drive the strobe to 20–200 flashes a second — though it isn't really a frequency: the flashes land on the loudness maxima, so the strobe's texture over τ is the sound/smell profile. Faster frames, lighter frames.



Phasic
the bright spot sweeps smoothly around the ring

Compressed
it sprints, then waits — a jolt and a pause

Interrupt
the whole ring flashes at once; the shape arrives complete

Extrusion
no frames — a continuous, held surface

The zipper never stops. Π samples it — and sedation lowers the sample rate (and highlights certain times) until the frames resolve.

Strobe is the beam; attention manifold is the scanline; schemas are the content

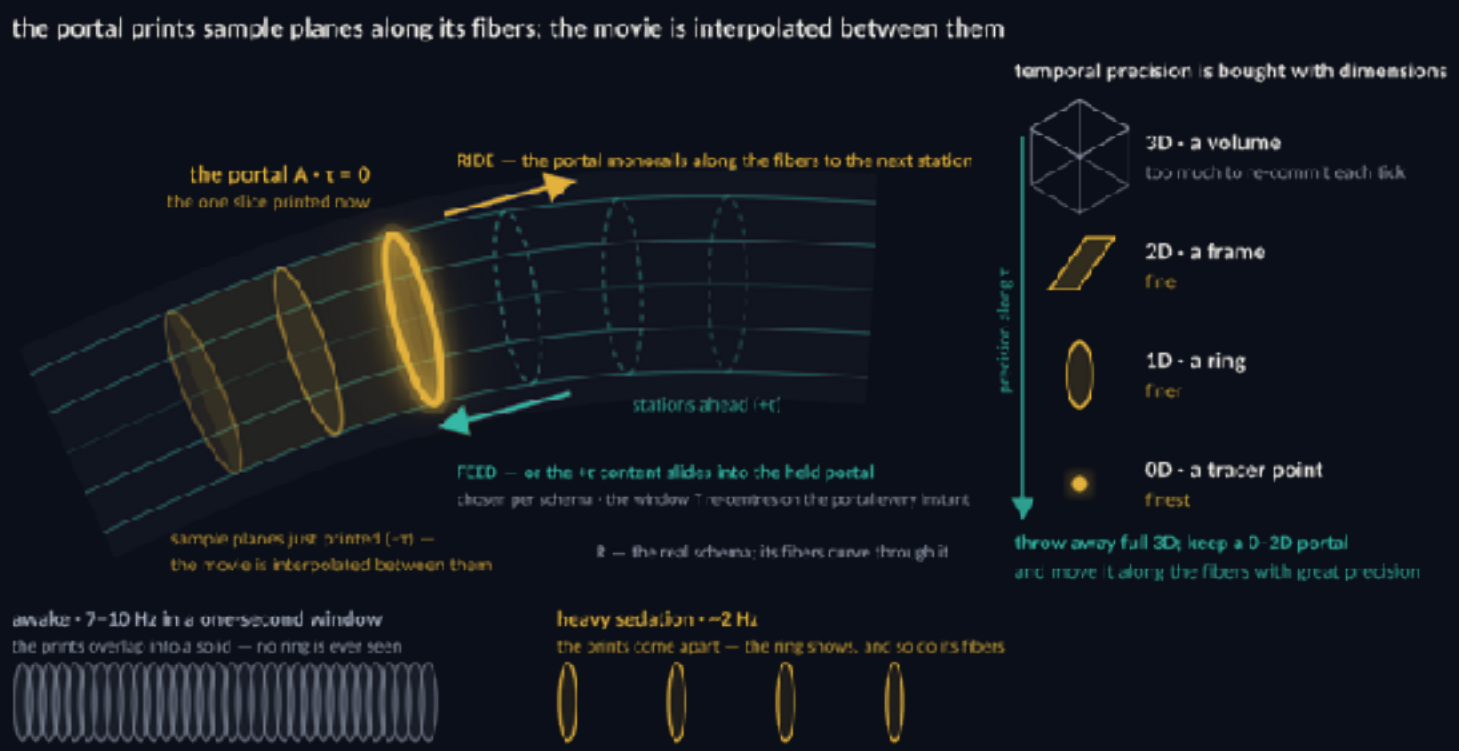


Just as with a movie on an old TV. You notice what is represented — horses, people, their interactions, a story arising. You never notice the electron beam scanning the picture in, line by line.

Same with consciousness. People obsess over the content and pay almost no attention to the render mechanism underneath it.

That is what this talk — and the theory — is primarily about: the behaviour of the attentional render system, not the voxel content it samples and floats when the successful.

Nobody sees the slice — only the movie interpolated between slices

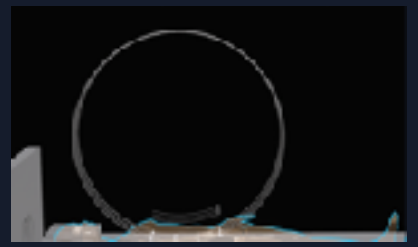


You haven't. Neither had I, awake. At 7–10 Hz inside a one-second window the prints overlap, and you get the solid, smooth world — never the slice that printed it. Heavy sedation drops the strobe to ~2 Hz and you notice the scratching more than the content revealed: a ring or a frame, and the fibers it rides, show up as separate things. It is a time-window/render engine phenomenon.

Why a slice at all? Temporal precision is bought with dimensions: attention throws away full 3D and keeps a 0–2D portal — a point, a ring, a surface. The window T re-centres on it continuously as clock time passes; per schema, either the +τ content feeds into the held portal, or the portal monorails along that schema's fibers — often curved through the real schema — to the +τ station. The prints are sample planes that scratch-to-reveal voxel content; the movie you experience is interpolated between them.

A line scanner, not a camera. A page from a line, a volume from slices, a print from layers — a present from relative movement b/w portal and τ.

Attention manifolds I have logged — points (0D), lines and rings (1D)



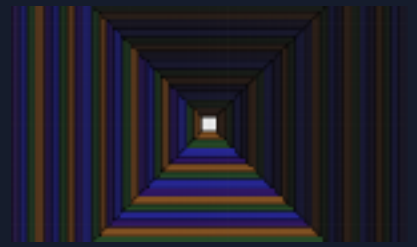
circular rings

RB-08 Italy rings, supine · 2023



ring, top third flattened

RB-04a cold, Chewacla · 2022



square rings

RB-08.9 kasina tunnel · 2024



rectangle, 13 Hz strobe

RB-08.9 kasina, Tucson · a rolodex of frames · 2024



V rings

RB-08.8, left of the shoulder · 2023



upside-down U

Croquet Hoop Orbit · swept at 0.33 Hz



upside-down trapezoid rings

RB-08.8 Σ waves · 2023



square crown ring

RB-10 shivering, Kingston · 2026



convoluted planar ring

a wandering perimeter in one plane



convoluted non-planar ring

RB-01a first ring · 2022



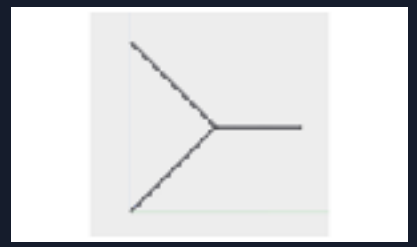
inner ring of a torus

RB-01b gear turn · 2022



a line, height modded by pitch

RB-07.2 Lollapalooza, Chicago · 2022



sideways Y, bistable

RB-08.7 · 2023

Also logged, not pictured

Horseshoe · taco shell · bead-chain rings · helical ramp · sphere shell · thick-line slab · tunnel · composite (RB-06 and others). Journal renders throughout, except the two drawn tiles (upside-down U, convoluted planar ring).

Attention manifolds I have logged — frames and surfaces (2D)



sagittal plane frame

RB-08.85 head turn · 2023



coronal plane frame

RB-08.85 · 2023



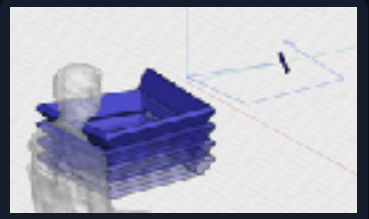
liquid-mirror plane

RB-04b hand through a plane · 2022



heartbeat plate

RB-07.5 impact frames · 2022



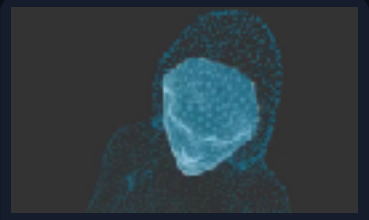
picture-frame section

RB-08.5 · leaves a helix in the record · 2023



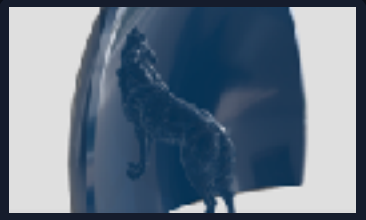
apple-peel tracer

RB-09a · a section through the peel · 2024



face surface frame

facial topology · point-cloud render



convoluted surface frame

RB-09c wolf frame · 2024



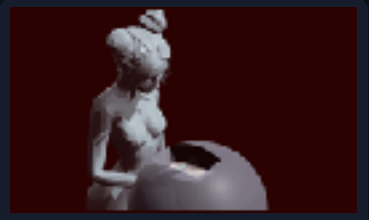
bucket scoop, jump

RB-09.5 two I's · 2025



i vs I cones — A uncertain here

RB-03c conic angles · 2022



phone frustum, Bank sphere

RB-03a · pressed into the eye-sphere · 2022



cube surface, scale hinge

RB-03e spectral dissociation · R shrank through it · 2022



the one volume: jello cube

RB-03d soft serve · a radial plane swept 0–2π · 2022



skewer: the letter b

RB-03b · at every scale at once · 2022



skewer: the kitchen door

RB-02b Dad's arrival · 2022



skewer: phone home screens

RB-01c Chattanooga · in order · 2022

Skewers, and the one volume

In a skewer, A appears multi-instantiated at many scales at once — a hotkey into any one memory of that type. The jello cube is the only volumetric A logged, and even it was printed in compressed phasic mode: at any instant only one radial plane of the cube, parameterized 0–2π, was current — a cube helix laid into the record.

Four and a half years. One template.

8
heavy-sedation tests

60+
full case files

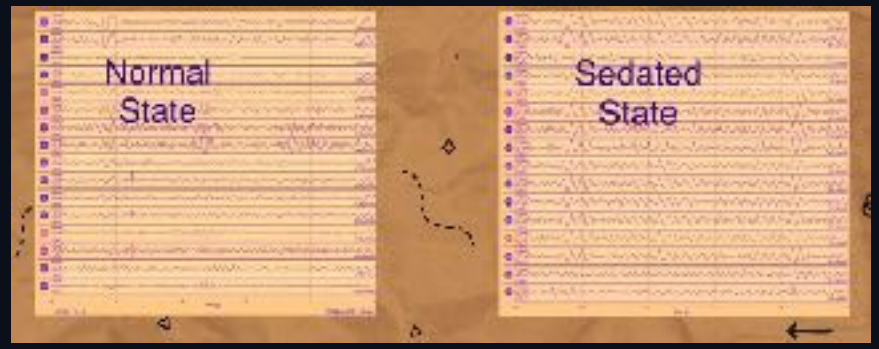
72
fingerprinted events

400
pages, published 2026



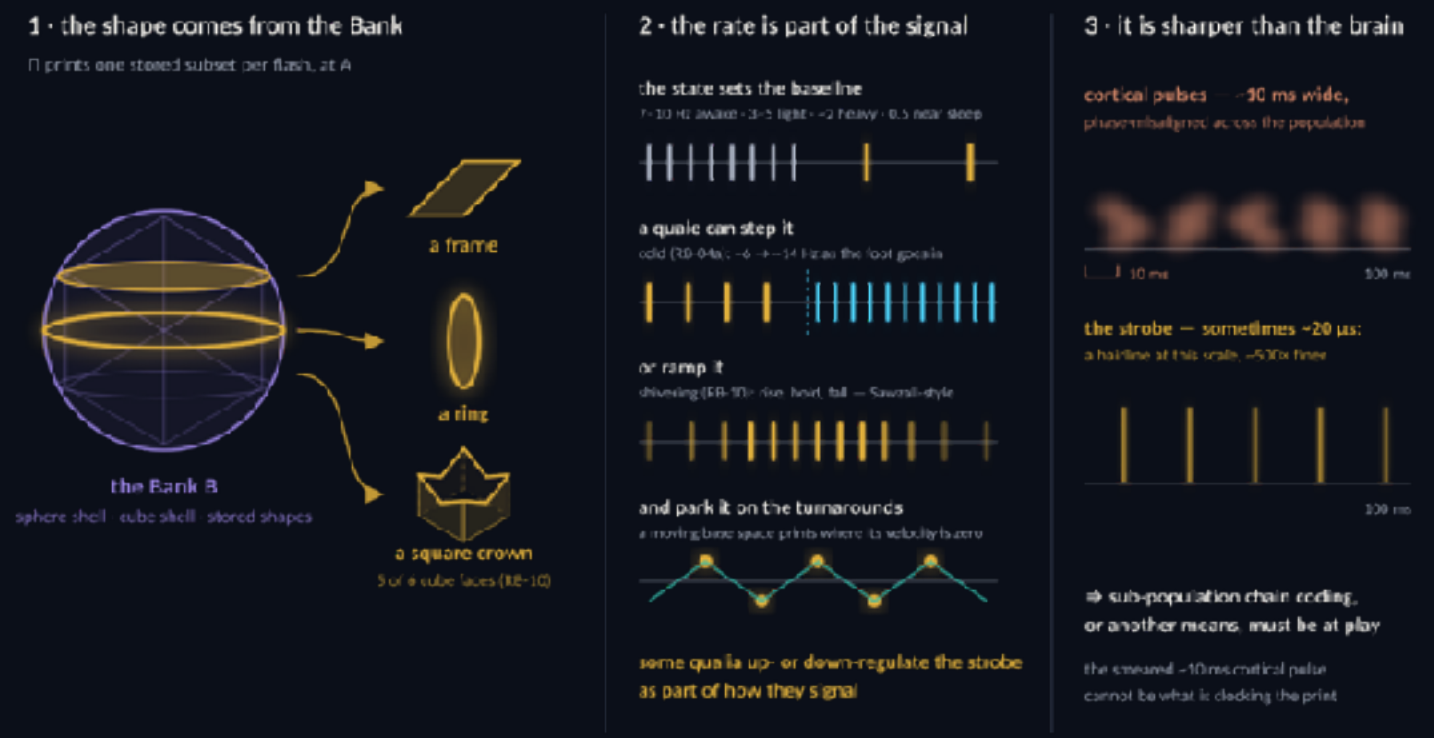
Heavy sedation causes the brain to burst in synchrony:

- Layer 5 of retrosplenial cortex (possibly also DMN in humans) contains high density of HCN1 channels.
- These channels open upon hyperpolarization.
- Hemp THC triggers hyperpolarization by activating pre-synaptic CB1 receptors and reducing the release of glutamate to post-synaptic neurons.
- The reduction of glutamate hyperpolarizes post-synaptic neurons.
- The entirety of RSP begins to pulse or fire 80 Hz bursts at about 2–10 Hz. This massive pulse swamps and entrains the entire brain, resulting perceptually in a strobed illumination of the base space ringframes and higher bank visibility.



Simultaneous 16-ch EEG (OpenBCI) on one 7-hour session — normal vs. sedated traces.

The strobe: Π, the printing operator



Π is the strobe. Each flash prints one ringframe: the base space's current shape, pulled from the Bank and stamped at A. Rings, frames, a square crown — all of them stored subsets of the Bank.

Its rate is not fixed. The state sets the baseline — 7–10 Hz awake, ~2 Hz in heavy sedation. A quale can step it (cold: ~6 → ~14 Hz), ramp it (shivering), or park it on the zero-velocity turnarounds of a moving base space. Some qualia up- or down-regulate the strobe as part of how they signal.

And it is sharp. Its timing is sometimes ~20 µs — three orders finer than the ~10 ms, phase-misaligned pulses of cortex. Sub-population chain coding, or some other means, must be doing the clocking.

The first ring

A hula-hoop-sized loop tilted through the body. A bright spot walked around it once per second, and at four angles it carried four different things:

- **0–60°** — the elbow will open
- **90–150°** — my mood, at that moment
- **180–240°** — the hotel heater, its sound
- **270–330°** — the blue of the blanket

Ordinary content. Impossible format.

Neural activity struggling to be about something — struggling to maintain the world simulation.



Schematic reconstruction · Journal fig. 7

The whole picture, in five words



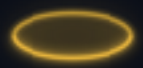
The Time Window T

About half a second of fading past and a sliver of orchestrated future, always sliding forward. The stage everything else stands on.



The Bodies ρR ρI ρB ρPPS (the "**fiber bundles**")

One per schema — the felt world, the imagined scene, the stored shape, the body-space. Each is a pre-formed, time-extended thread running through the window.



The Portal A — the access manifold (the "**base space**")

A thin surface that exists only at τ = 0, where every body is forced to agree, voxel for voxel. Point, ring, plane or shell — the shape varies; the role doesn't.



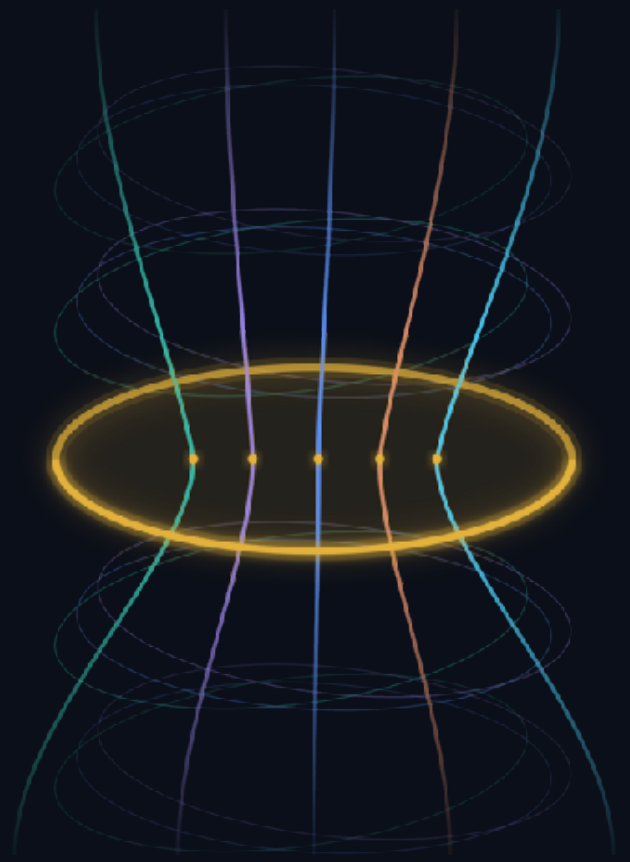
The Bank B

Every shape you have ever learned, nested like Russian dolls. The portal reads from it — and sometimes the Bank itself is what gets printed.

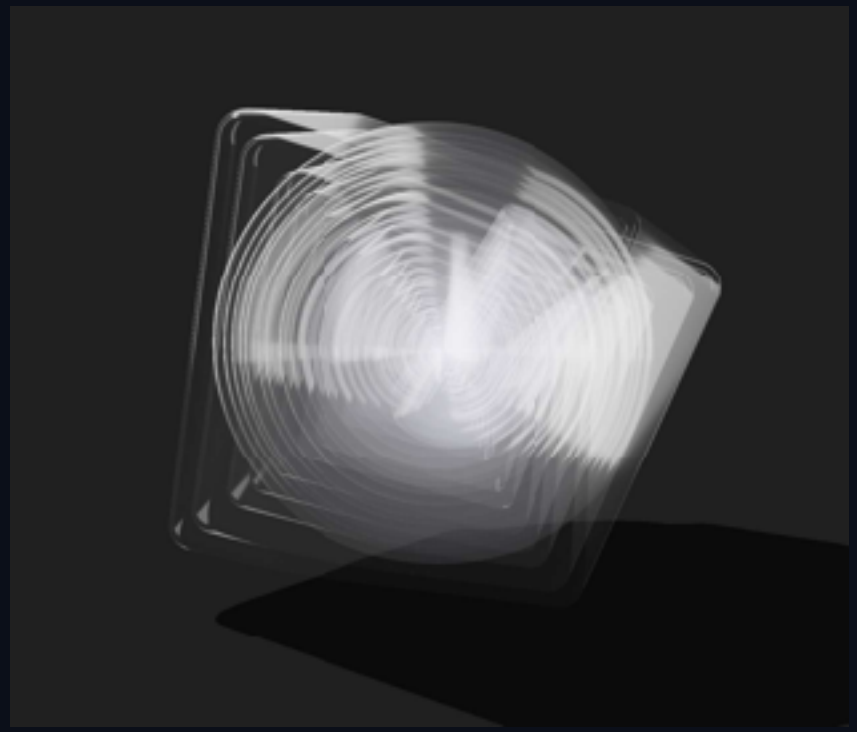


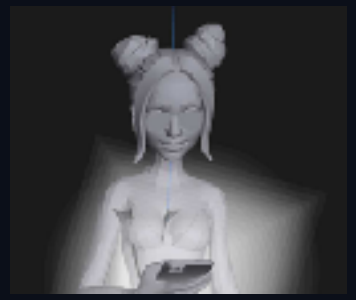
Who holds still W — world reference

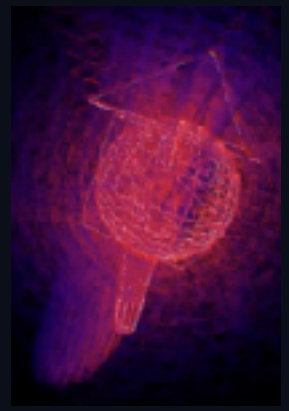
Bare stationarity. Whichever schema is locked to it is 'the reference' this moment. Awake, it is usually the Earth. Sedated, often the body.



The Bank: the shape library the portal prints from







Journal fig. — introductory renderings of the Bank: outer sphere-shell, middle cube-shell, inner broken drinking glass with the break facing you. Right: the Bank seated in the avatar's upper torso; below it, the pyramid-hat / single-leg variant.

the Bank — storage: nested shells holding centroid-addressable content
the Printhead of Consciousness — operator: the same structure, used as the instrument that commits content onto A

What it is

The substrate's shape library: every shape-class you have learned — sphere, cube, broken glass, a face, the letter b, your own body — stored so it can be scaled and overlaid anywhere in the world. The portal reads from it to commit content at A.

What it looks like, when it is seen

A concentric Russian-doll set: an outer sphere-shell, a middle cube-shell and, inside, a right-offset broken drinking glass tilted ~15° clockwise, break facing you. Sometimes a four-sided pyramid hat above and a tilted single leg below. It often sits a couple feet in front of your torso (occasionally locking to your torso, head, hand, phone, or other object).

Machinery or paint? Both — by role

Committing shapes *from* it, the Bank is the printhead and stays invisible. When its own body ρ_B is married at A, the Bank is what gets printed — and seen.

How it moves

- bobs like a buoy, ~0.25 Hz (Auburn, Jan 2022)
- a sphere rotor turning in a sphere stator, 3D-spirographic at 0.25–0.5 Hz (May 2022)
- precesses ~10° off vertical, once per gait cycle, when hiking
- spins in lockstep with a 13 Hz strobe (Tucson 2024)

Paper III: the Bank stores similarity signatures — shape recall is pose-, scale- and tempo-free by construction.

Many bodies through one portal



Journal fig. 1.6 — a black-snake firework

the flame = A, the mint site — where new material is minted

the ash body = one ringframe body ρ, printed in extrusion mode

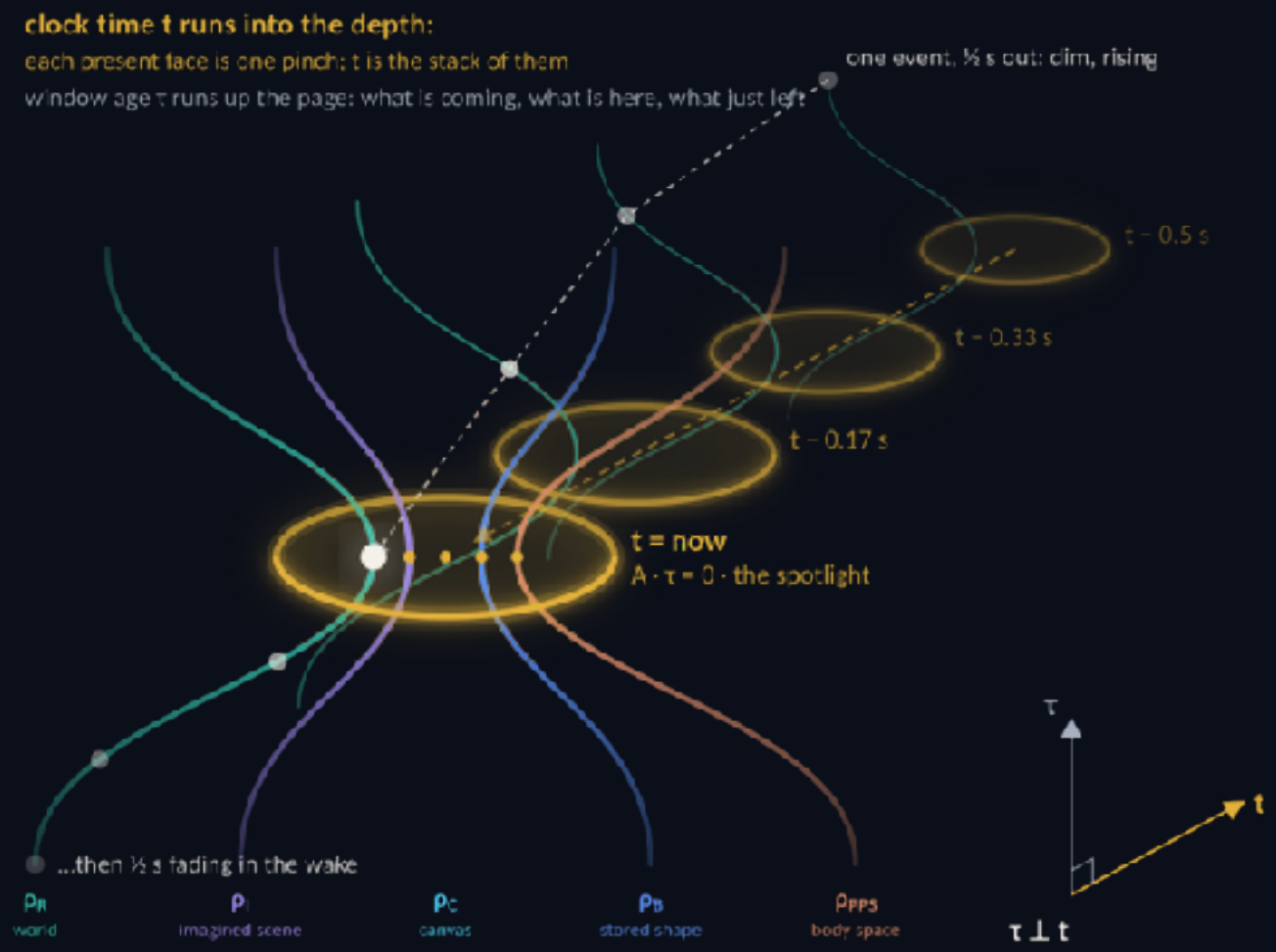
its twists = fixed before transit — the body carries its own ruler along its length

A black-snake firework looks as if the pellet is authoring the snake, inventing each twist as it goes. It isn't. The twists are fixed in advance by the chemistry of the medium; the glowing tip is only the aperture at which an already-determined shape becomes visible, segment by segment.

Now run the toy in reverse: picture the snake already fully formed, coiled in some hidden store, being fed through the glowing point as through a portal. Revealed, not created.

The portal manages passage. It may simultaneously shape-shift.

Concrescence: every body threads the one portal at once



At every instant all the active bodies thread the one portal together, their current cross-sections married voxel-for-voxel on A. Heads co-located; bodies free.

Away from the present face they owe each other nothing. Each runs its own approach in +τ and its own wake in −τ, and each feeds through at its own rate.

The advance of clock time t is the pinching: what was just up-window becomes the new present face, and the just-released moment slips into the wake and drifts apart. That drifting is all 'unzipping' means.

Unity is not given. It is enforced, once per moment, and paid for. Every event gets a half second of rising to the spotlight and then a half second fading away.

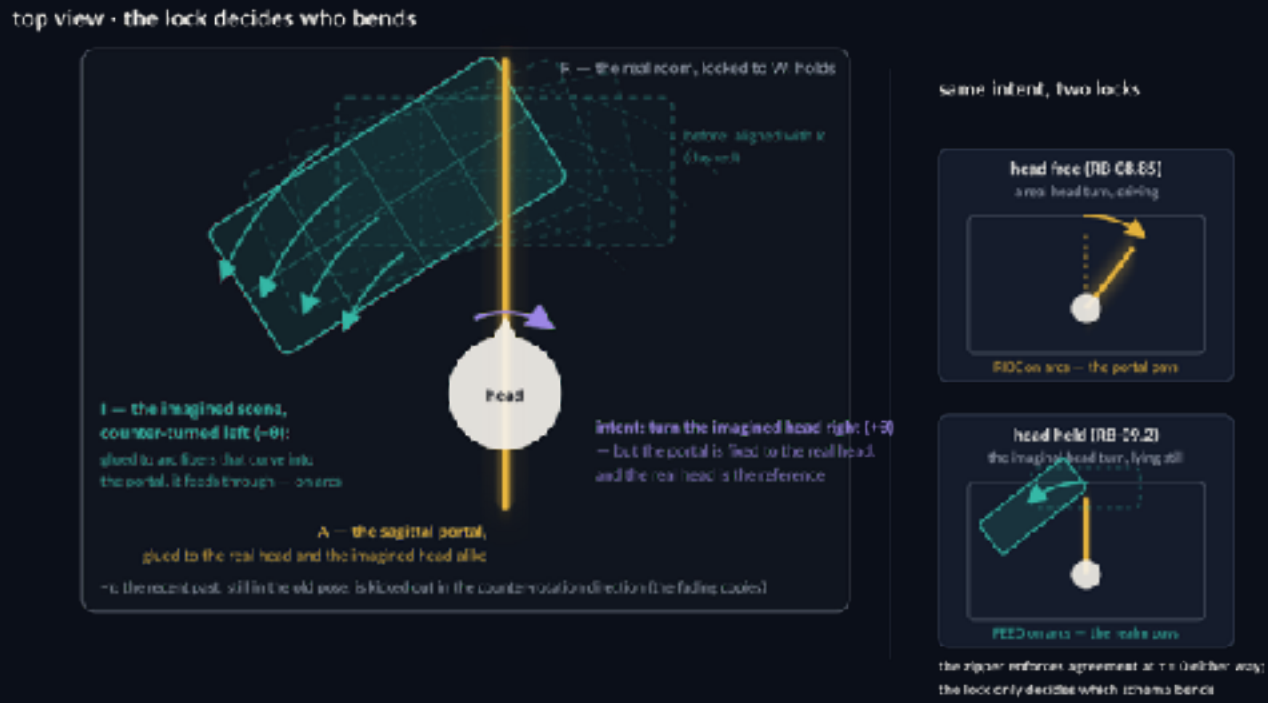
concrescence — Whitehead's word: a growing-together

Concrescence, worked: the imaginal head turn



Journal fig. — RB-09.2, cat stand-in, top view: the white head shell is the portal, fixed to the real head on the real floor; the imagined body on the imagined grass, before and after the imagined right turn — it has counter-rotated left.

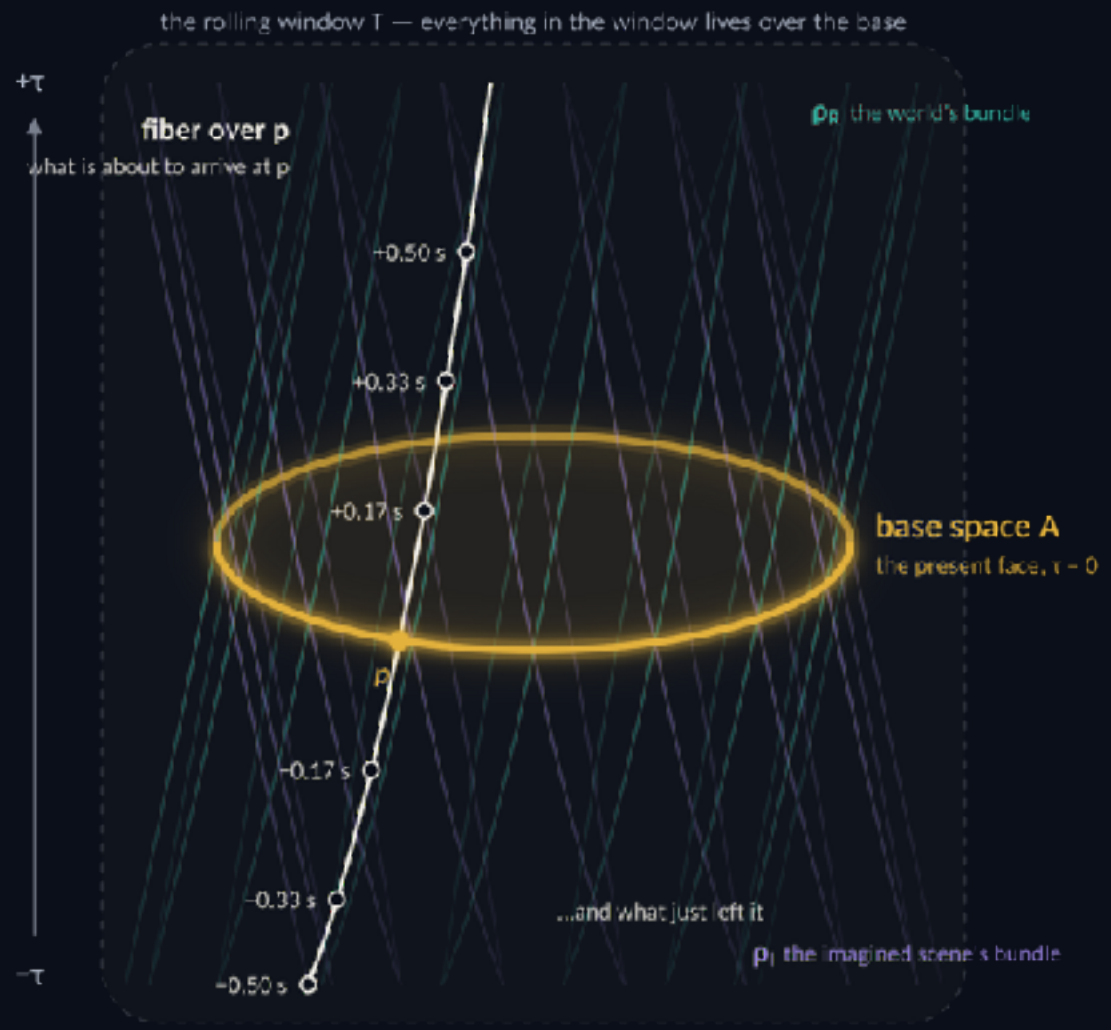
Fingerprint — Imaginal Head Turn. A ↔ I is the changes-edge (rare); A, B, R, PPS and T are reference; I is the displaced schema. Same constraint as the real head turn, opposite enforcement.



Two schemas, one portal, one intent. Lying still, eyes closed, I imagine standing and turning my head right. The portal is a sagittal plane fixed to my real head — the reference — and the imagined head is glued to the same plane, so the intent cannot move the portal across R.

Concrescence forces agreement at τ = 0 regardless, so the unpinned part of the imagined scene bends: glued to arc fibers that curve into the portal, it counter-turns left and feeds through the plane — feed, on arcs — and the recent past is kicked out the other way. Head free, the same intent is the real head turn: ride, on arcs.

Base space, fibers, and who gets to disagree



Base space

A, the access manifold: the present face, τ = 0. Zero- to two-dimensional — on most nights, a ring.

Fiber over a point p (at modeled time τ = 0)

the time-thread through p: what is about to arrive there (+τ) and what just left (−τ).

One bundle per schema

ρR, ρI, ρB, ρPPS — the ringframe bodies. Taken together over the same base, they are the rolling window T.

Glued along the zero section

concrescence. At τ = 0 every bundle must agree, voxel for voxel. Off it they are free — the fiber is where disagreement is allowed to live.

Structure group Sim(3)

translate · rotate · scale: the glue between a body and its schema. The clamp identity is the connection; the wake's distortion is its holonomy.

The formal version — the window bundle, its connection and curvature — is in Papers I–III. This is the picture the talk runs on.

Ride, feed, or hold



RIDE

the ring moves along the fibers

You move; the world stays put.

FEED

the fibers move through the held ring

The world streams through you.

HOLD

the fibers are points on the ring

No left/right, bigger/smaller, or rotation.

Which one is a lock to W — chosen per schema, per moment. Sedation changes the choice.

One equation keeps the books: $\omega_A - \omega_\varsigma = \mathrm{Ad}(J)\cdot d\tilde{\tau}^*/dt$ — relative motion of ring and realm = printed gradient × feed rate. Ride: the ring pays. Feed: the realm pays. Hold: nothing to pay.

One equation, two branches

$$\omega_A - \omega_\varsigma = \mathrm{Ad}_{g\lambda}(J_X) \cdot d\tilde{\tau}^*/dt$$

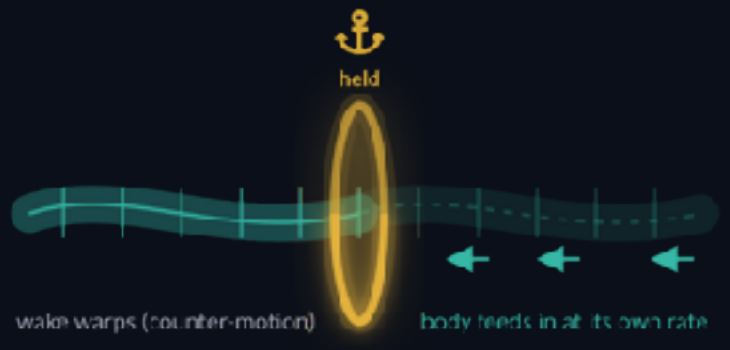
relative motion of portal and realm = printed gradient × feed rate

Disagreement arrives at the present face at a definite rate; the live factors move at exactly that rate to absorb it. Nothing is created — the books balance every instant. Who moves is a separate choice: the reference assignment.

"FEED" / Conveyor Belt

COUNTER BRANCH

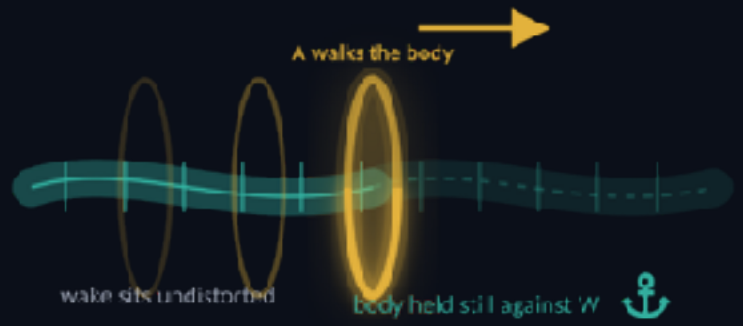
portal held · realm pays ($\omega_A = 0$)



"RIDE" / Monorail

TRAVERSAL BRANCH

realm held · portal pays ($\omega_\varsigma = 0$)



Counter branch, awake — riding in a car: the world streams past a held portal.

Counter branch, sedated — the walk on the last slide; and the dolly-zoom shrink of a scale-hinge.

Traversal branch — hiking; the apple-peel spiral, two slides on.

hinge taxonomy — which generator of sim(3) carries the mismatch

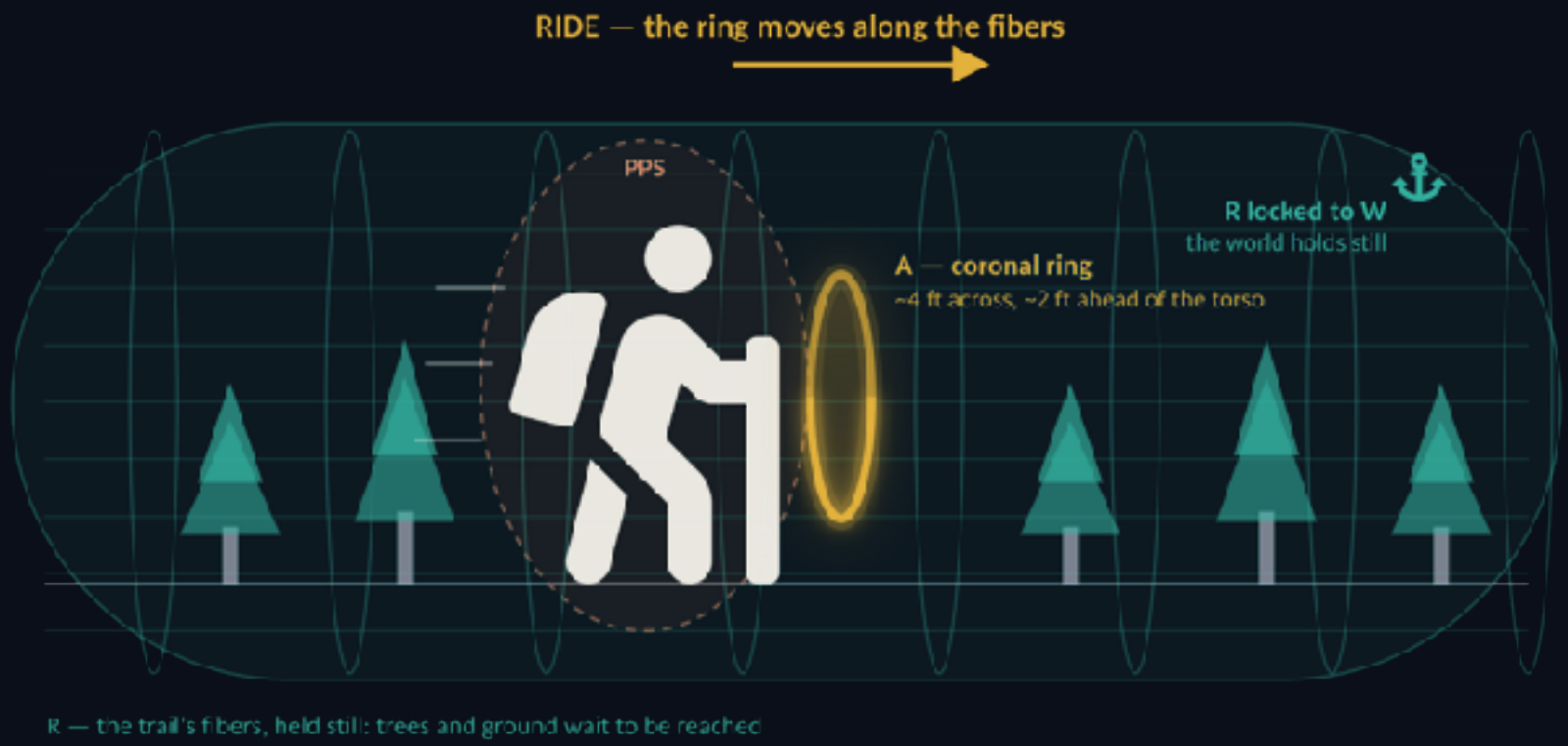
⟷ **translate-hinge**
the wake streams

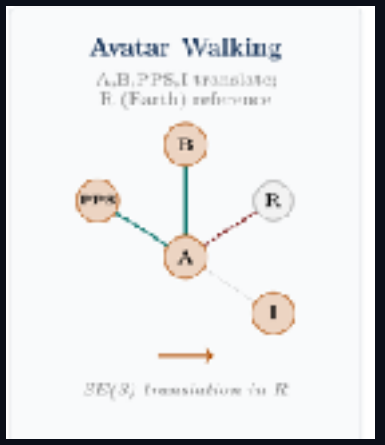
↻ **rotate-hinge**
about an axis

◎ **scale-hinge**
about a centre

The sedation swap is not a new mechanism. Constraint unchanged, coupling unchanged — only who is held as ground inverts.

Hiking, awake: ride (base space ring monorails along fibers)





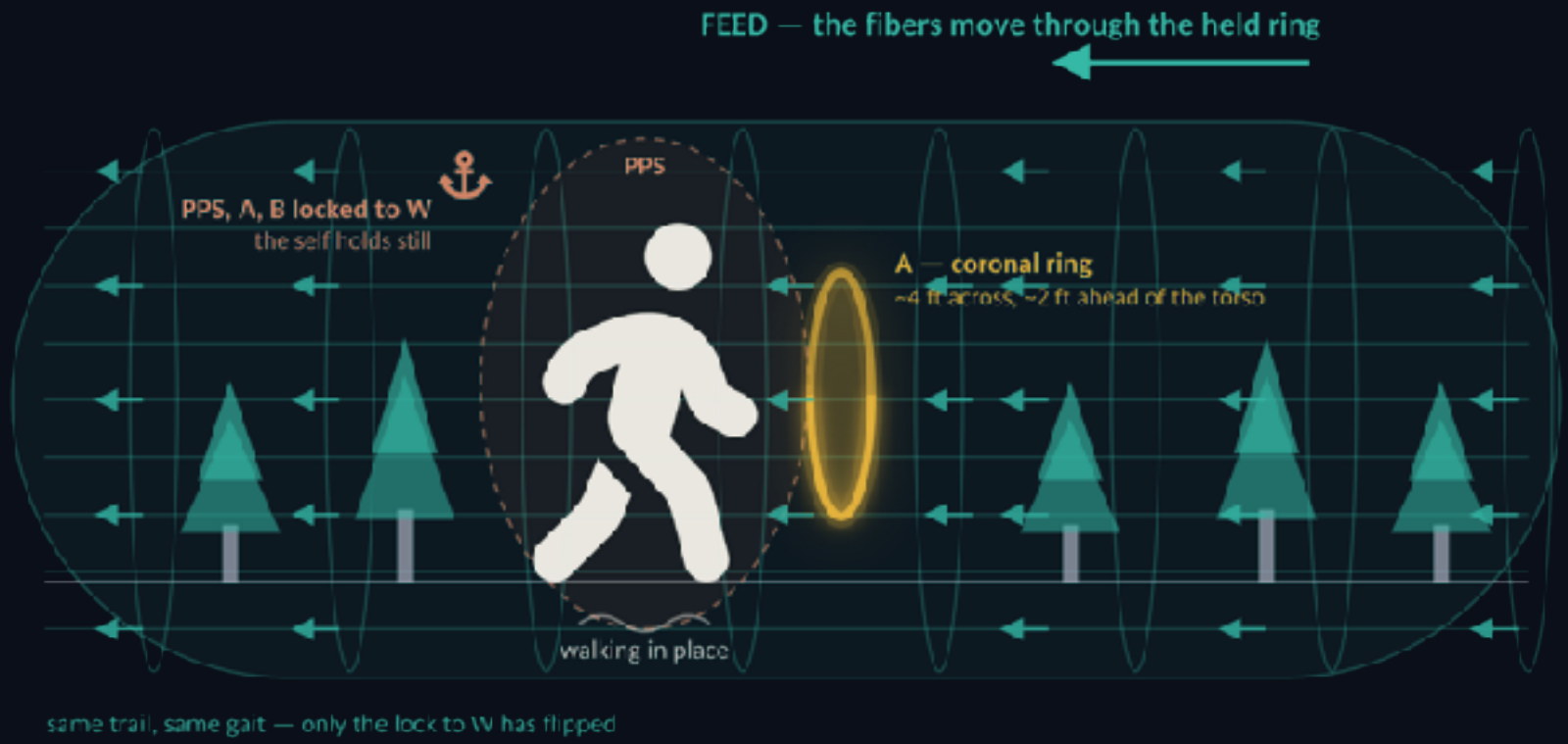
coupling fingerprint — Avatar Walking

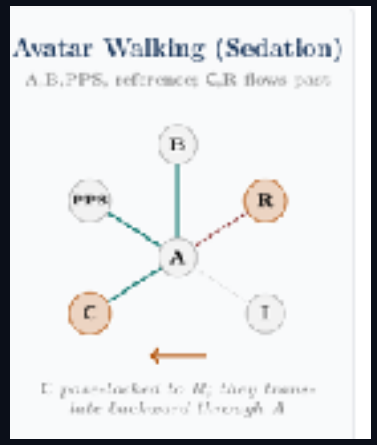


*RB-04a, Chewacla: the coronal rings, 2 ft ahead, 4 ft across; actually a **feed** case, not a **ride** case.*

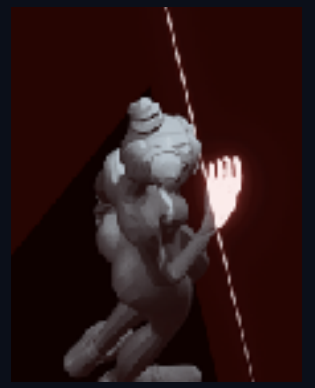
The trail is locked to W. The ring — coronal, ~4 ft across, ~2 ft ahead of the torso — rides the trail's fibers, cross-section by cross-section.

Hiking, sedated: feed (fibers feed through base space ring)





coupling fingerprint — Avatar Walking (Sedation)



Liquid Mirror: the ring as an 8 × 8 ft plane; the hand passed through at 20 Hz without tearing it

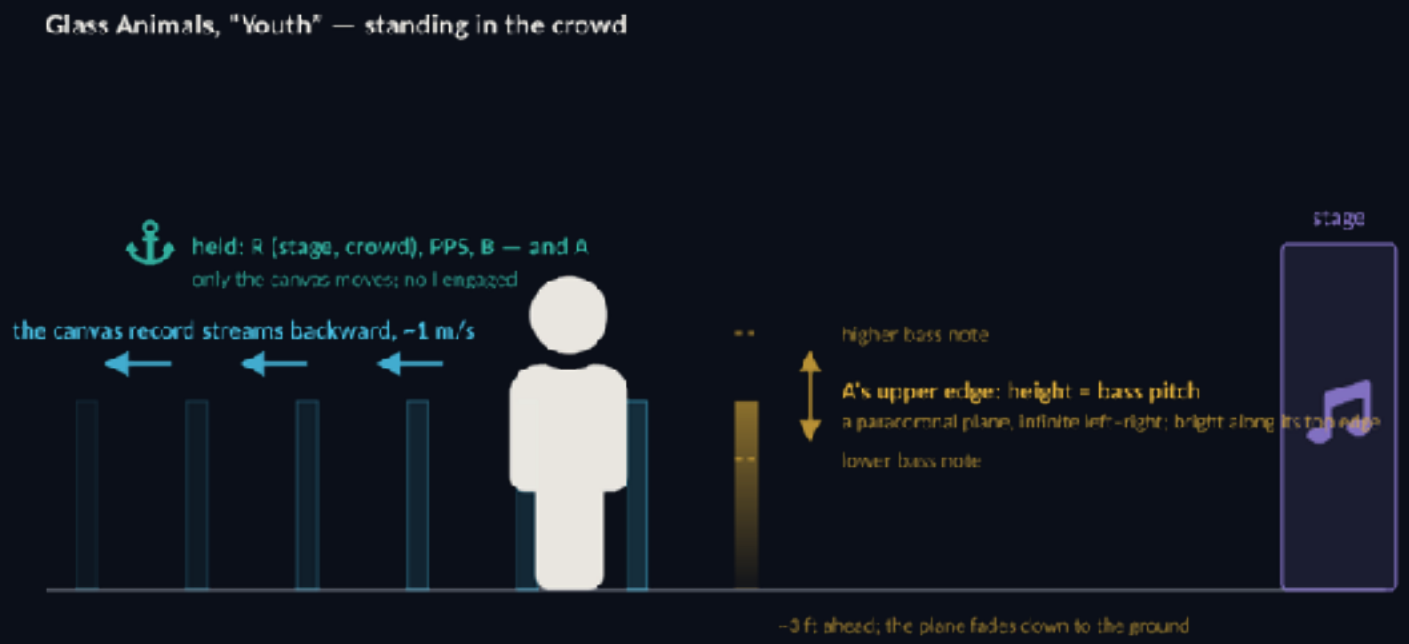
Now the self is locked to W. The trail's fibers feed through the held ring, the glued world riding with them — walking in place, world streaming through.

Music, standing: feed through a held plane





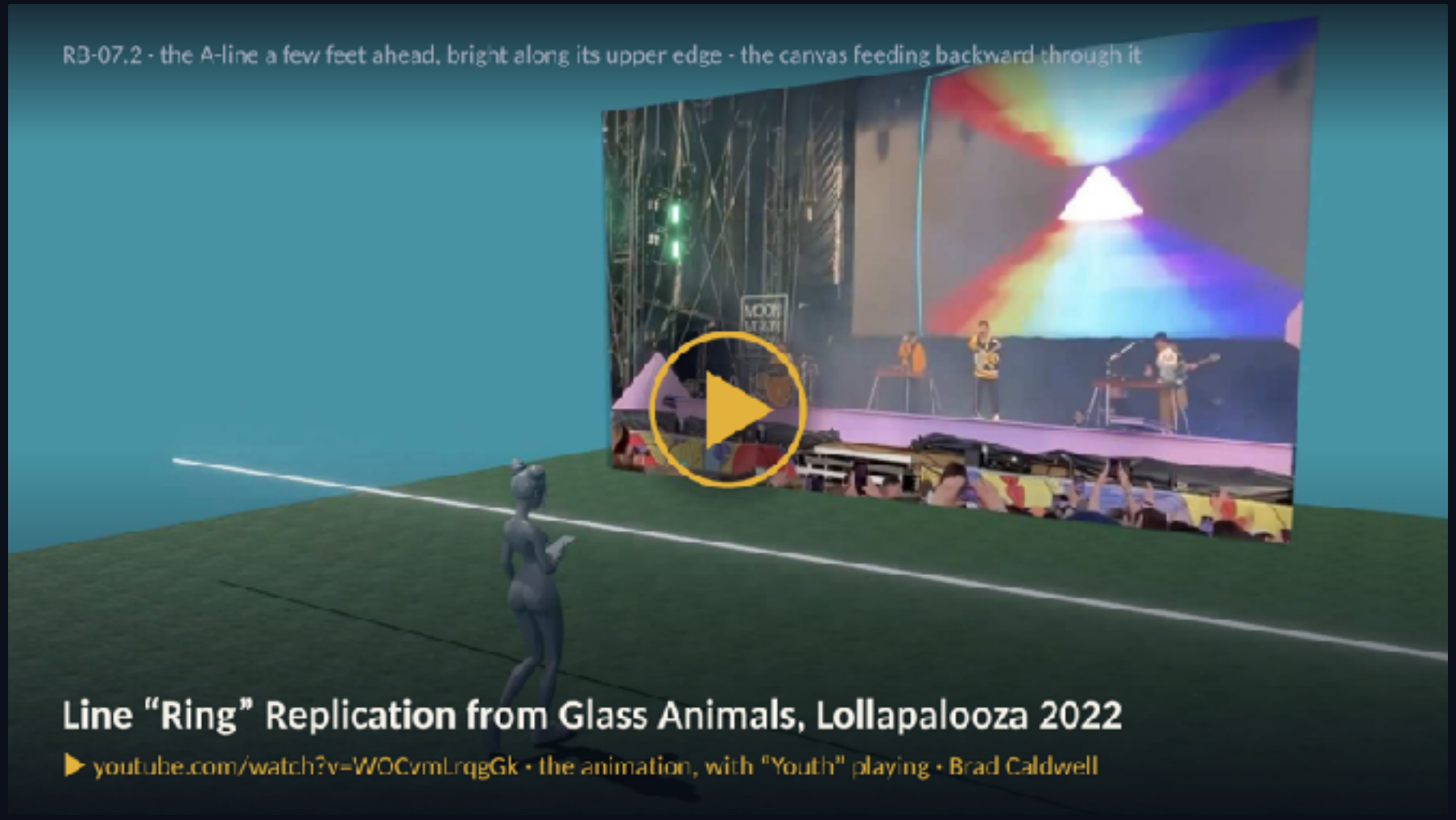
Journal figs. — RB-07.2: the bright A-line at one moment of "Youth"; below, the extrusion history — the canvas record laid down behind the author.



Everything holds — stage, crowd, body, Bank, and the plane itself. Only the canvas moves: it feeds through the plane at ~1 m/s and its record trails away behind me.

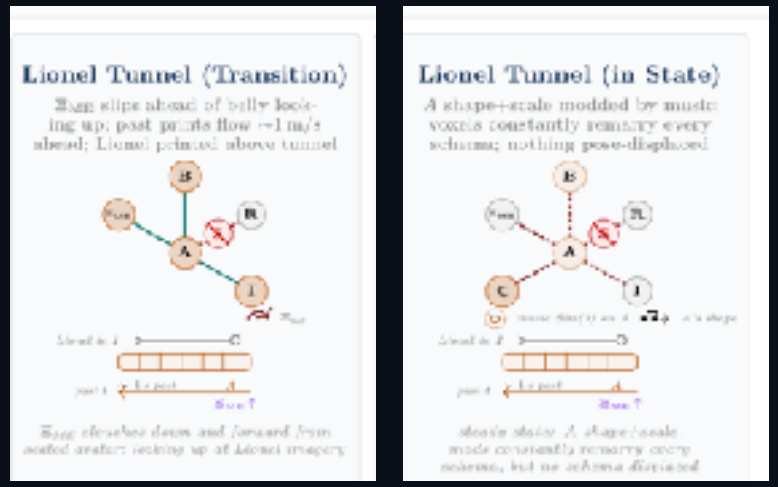
The bass line plays the base space: each note's pitch lifts or drops the plane's bright upper edge, a few feet in front of my chest.

The Lollapalooza line, animated — with the song

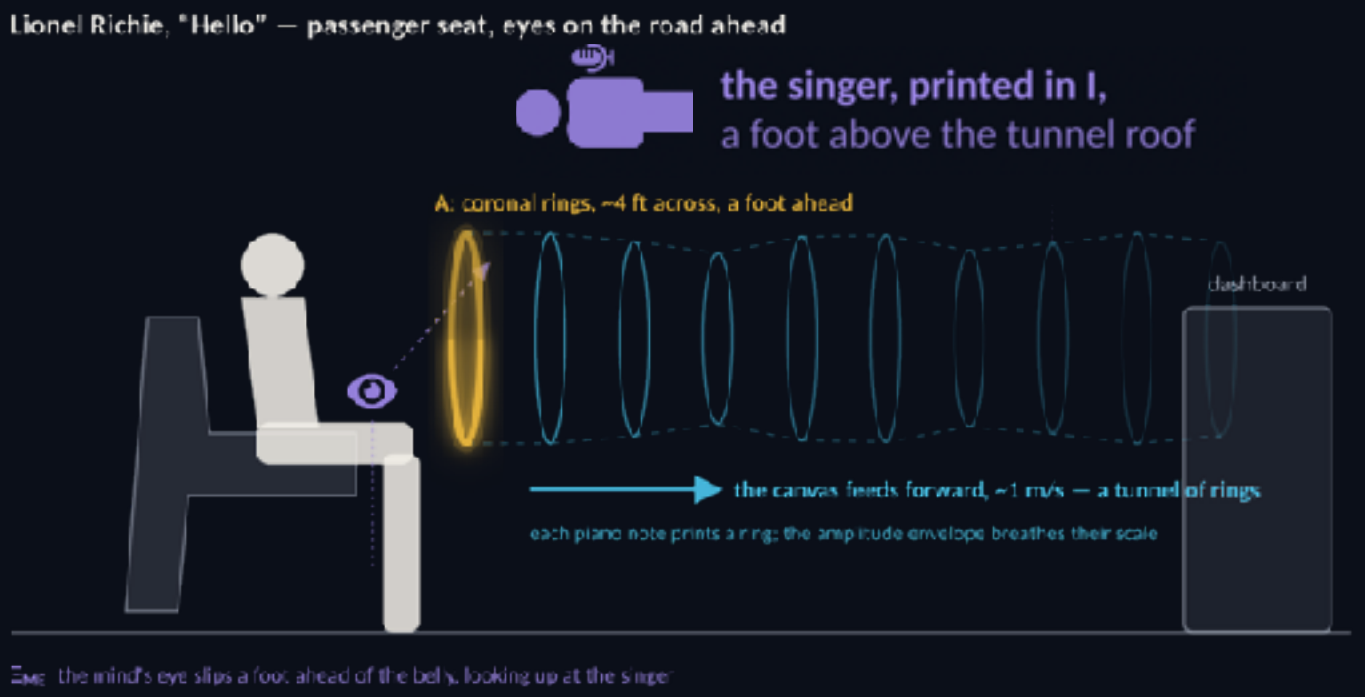


▶️ youtube.com/watch?v=WOCvmLrqgGk · Line “Ring” Replication from Glass Animals Lollapalooza 2022 · about a minute, sound up

Music, seated: a tunnel, and a singer on its roof



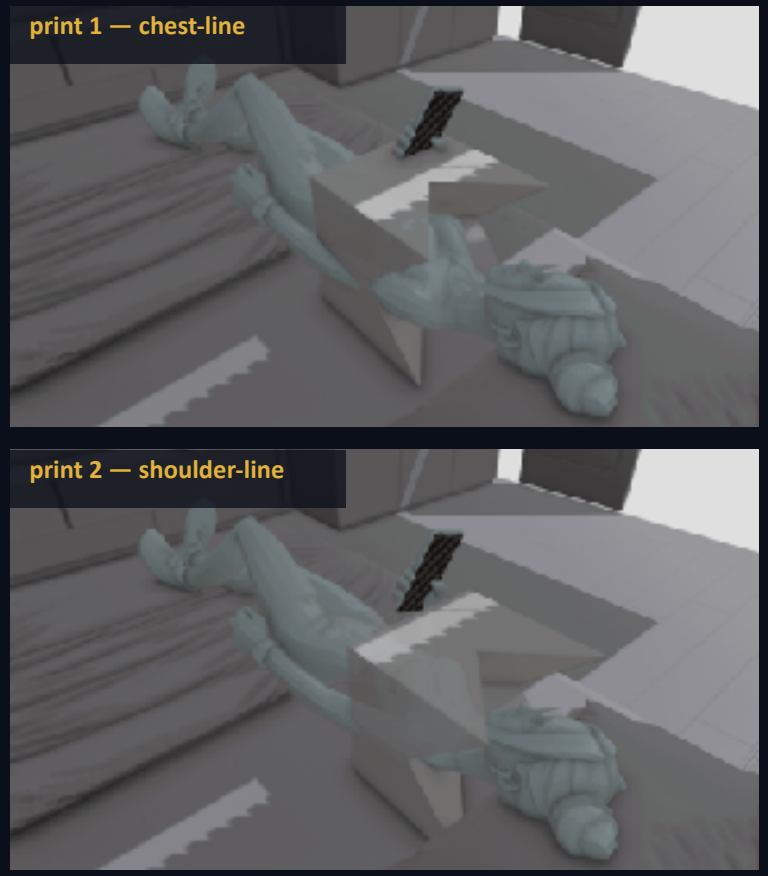
Coupling fingerprints — the transition (the mind's eye slips ahead of the belly; past prints flow ~1 m/s ahead; the singer printed above the tunnel) and the steady state (A's shape and scale modded by the music; every schema re-marrying each tick; nothing pose-displaced).



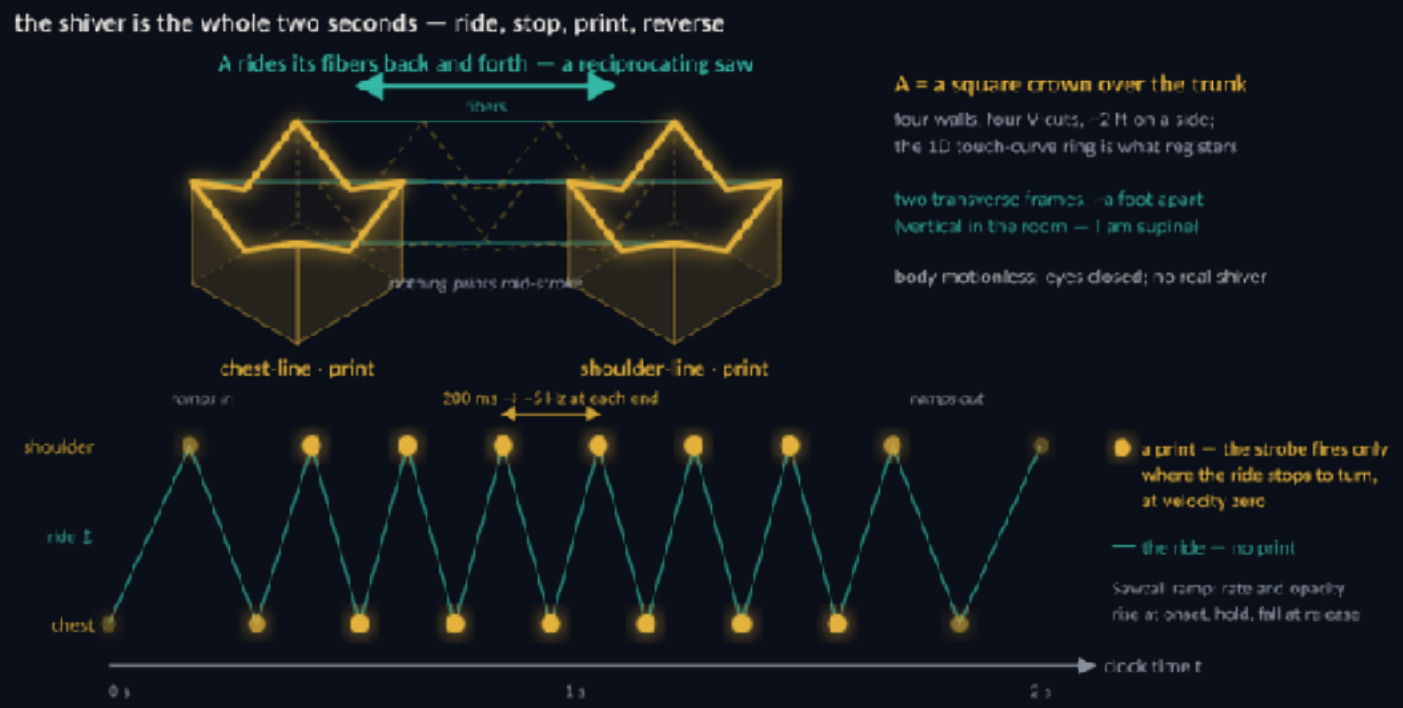
The mind's eye slips down to a foot in front of the belly and looks up. Coronal rings a foot ahead — a ring per piano note, their scale breathing with the amplitude envelope — and the canvas feeds forward through them at ~1 m/s, leaving a tunnel ahead.

The singer stands a foot above the tunnel roof, printed in I, nearly as vivid as life. Same machine as the sedated hike — feed through a held base space — with the music shaping the base space as it goes.

Shivering: a quale encoded as a behaviour over a duration



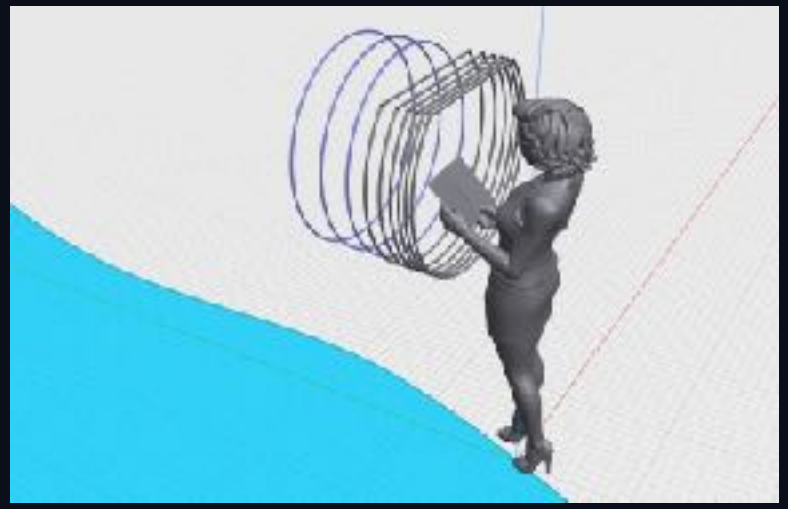
Journal figs. — RB-10: the square crown (four walls, four V-cuts, ~2 ft on a side) at its two print stations over the trunk. Nothing printed between them.



Ride, back and forth. The base space — a square crown over the trunk — rides its fibers between chest and shoulder like a reciprocating saw. The strobe fires only at the two turnarounds, where velocity hits zero: ~5 Hz at each end, nothing printed mid-stroke.

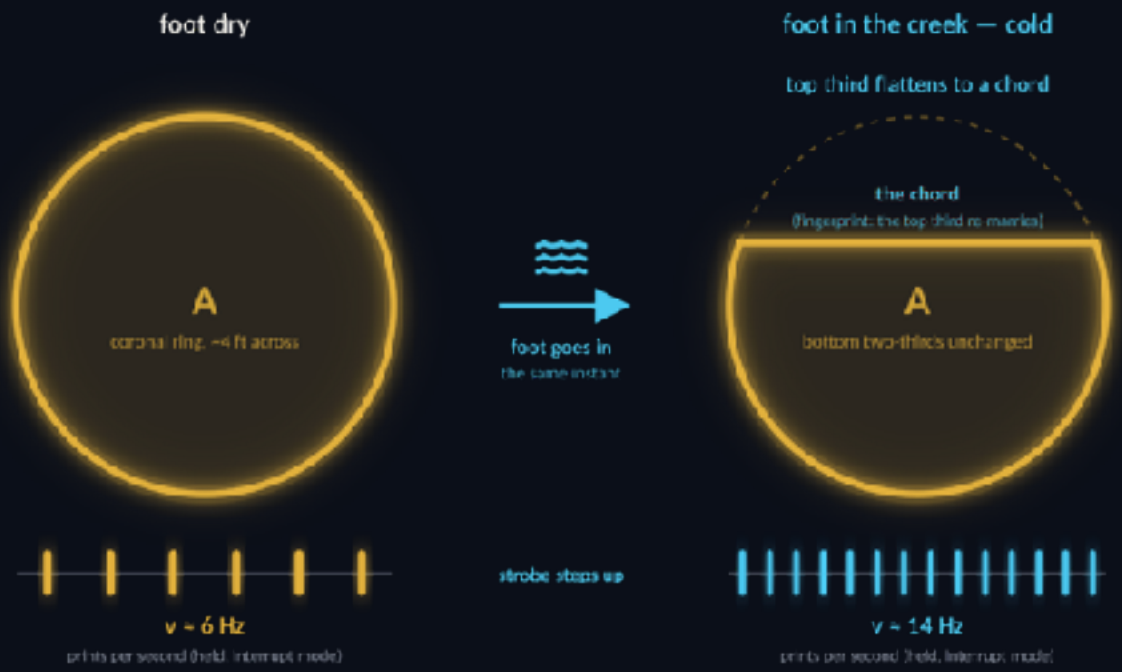
The body never moved, and no single frame is cold. The quale lives in the two-second behaviour of the base space — ride, stop, print, reverse — not in any one print.

Cold: a flattened ring and a faster strobe



Journal fig. — RB-04a: coronal rings a few feet ahead, ~4 ft across. Round while the foot is dry (violet); once the foot is in the creek, the top third flattens to a chord (grey).

Open question. Did some imaginal schema need a flat line there — a chord for the top third of the ring to re-marry to? The fingerprint card only logs it as "top ⅓ re-marries; the rest retains."



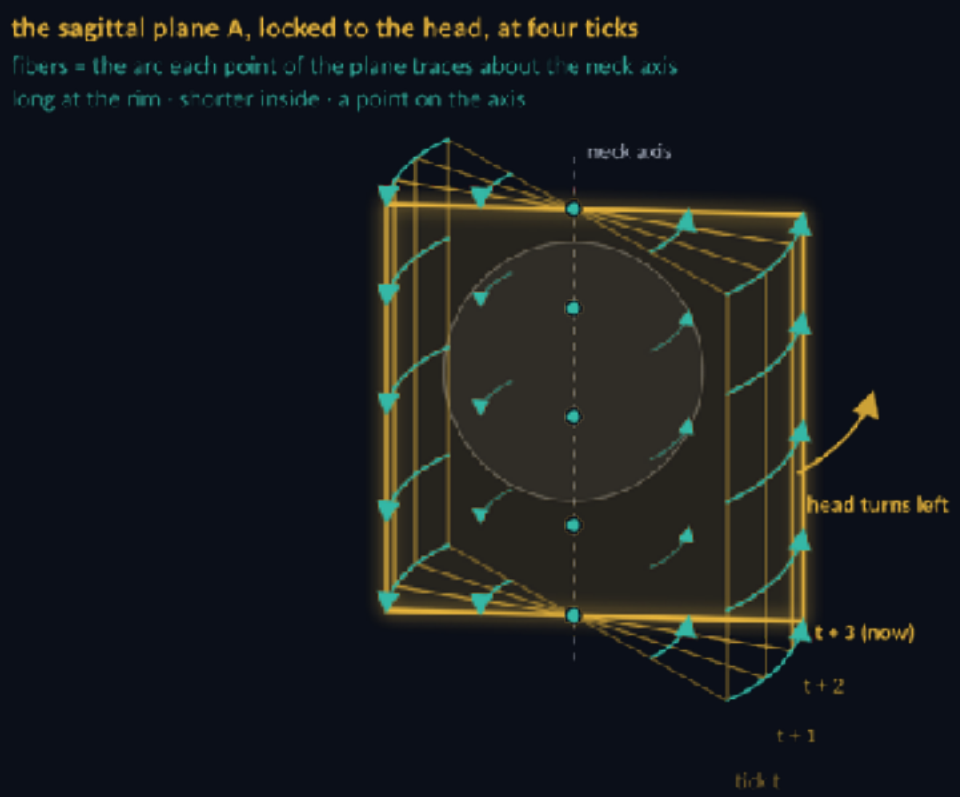
Hold — then a deformation and a rate step. The coronal ring a few feet ahead holds still. The instant the foot goes in, its top third flattens to a chord and the strobe jumps from ~6 to ~14 Hz — for as long as the foot stays in the water.

Same quale class as the shiver, a different geometry: a static deformation plus a rate step instead of a two-station oscillation. Cold is multiply realizable — it reads as an action-tag, not a primitive sensation.

Head turn: ride, on arcs



Journal fig. — RB-08.85: the sagittal A-plane through the head during a head-turn-scan (model stand-in).



The room is locked to W. The plane turns with the head, riding its fibers — arcs about the neck axis: long at the rim, short inside, a point on the axis. A rotate-hinge.

Lock the head to W instead and the room swings the other way — the imaginal head turn (RB-09.2).

The scale hinge: R shrinks to fit A



t_0 · R at PPS scale, 100%
A (red) inside it at 50%

t_1 · R at 75%
driven down toward A

t_2 · R seated in A, 50%
the hinge holds; R fits

Journal fig. 6.31, Mind's-Eye vantage, ~2 s: A held at constant size (red), PPS stationary, R collapses into A — a dolly zoom: the attempted growth in R met by an equal and opposite shrink.



A held its scale. As a cube surface, A's next stations in R were larger than it. But A was the hinge — scale-stationary — so R shrank into future clock time until the stations fit A's held scale. A dolly zoom: the approach cancelled by a zoom-out.

Each flick a Live Photo — but volumetric. A cubelet holding a little of me playing bass and my friend on drums. The cuts came about once or twice a second, aloof to the song's tempo; yet inside the live part, Brad was still playing to the beat.

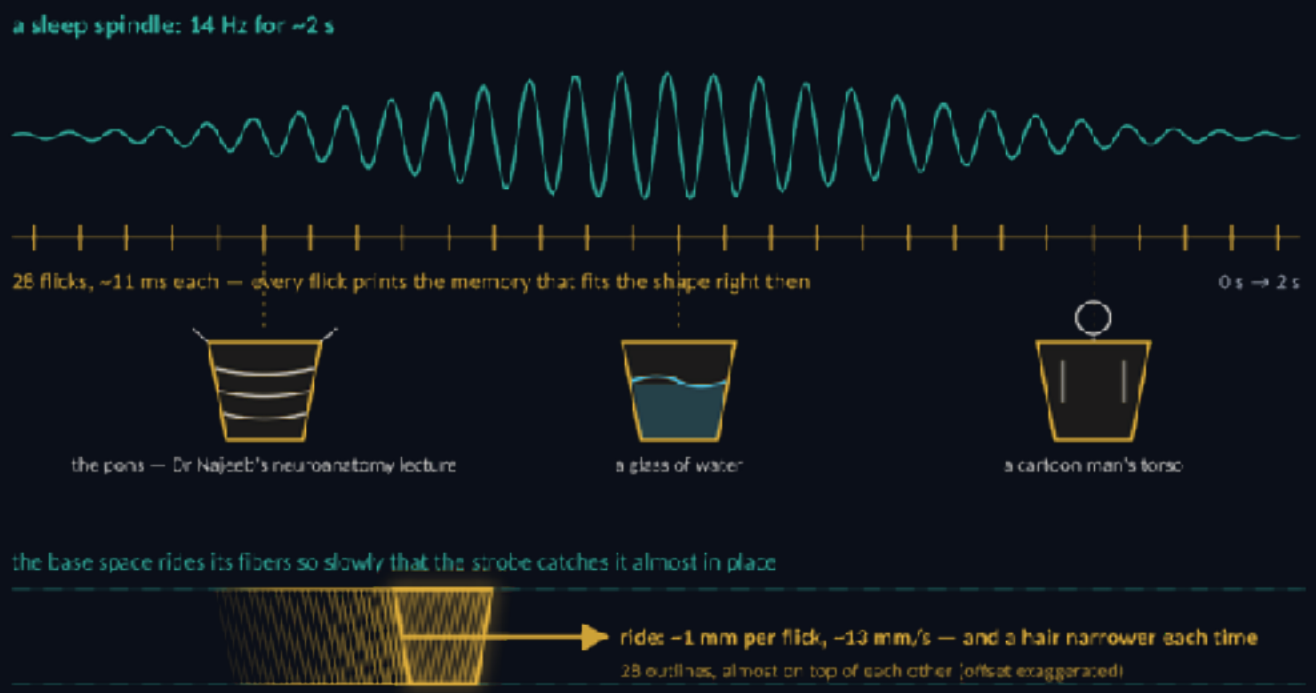
Peripersonal space stayed put. PPS kept its place and its scale, so the "I am here" self — the imaginal self, ΞME — sat outside, watching the smaller cube of R with Brad in it. No servo on A ↔ R: the avatar played on by itself.

Fingerprint — Dissociation (Spectral). A ↔ R on the clamp's counter branch, scaling: A at 50 % of PPS; R 100 % → 50 % in ~2 s; frames past the pinch halve each step. Π ~1–2 Hz, interrupt, time-compressed live-photo prints.

Σ waves: a slow ride, strobed at 14 Hz



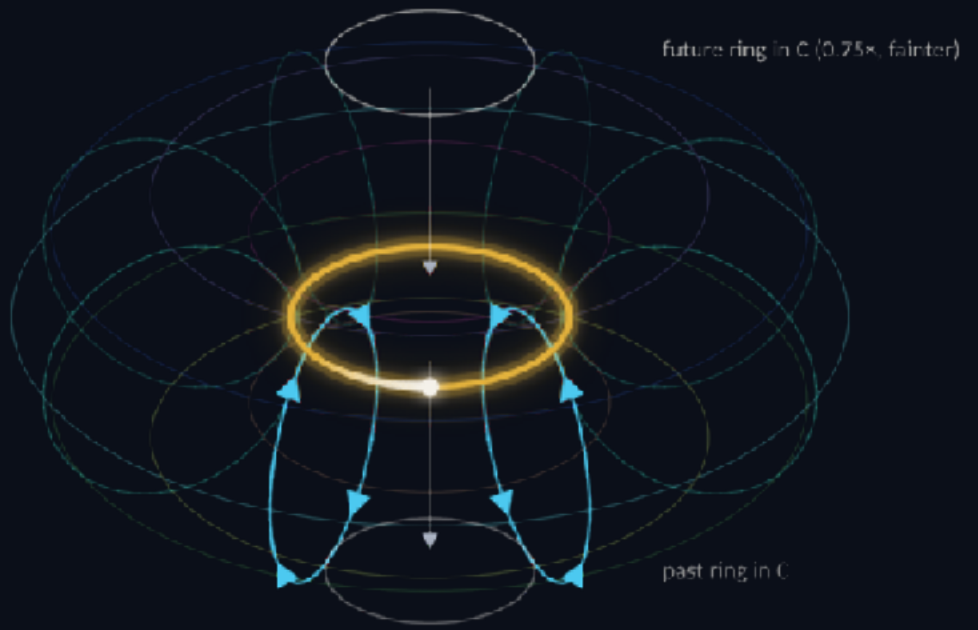
Journal fig. — RB-08.8, rendered: the trapezoid template a foot in front of the supine author; the stacked rings are successive flicks (offset exaggerated).



An upside-down trapezoid for a base space, a foot in front of the eyes, riding its fibers so slowly — ~1 mm per flick — that 28 flicks caught it almost in place, each a hair narrower. Each flick printed whatever recent memory fit that shape: shape-matched replay at spindle cadence.

14–15 Hz for ~2 s is a sleep spindle's signature; spindles travel across cortex — the morphing template may be its felt side.

The gear turn: feed, on circles



Fibers — poloidal loops: out of the ring, around the tube, back to the ring.

Base — the inner ring, held. A point tracer laps it in 800 ms.

Feed — the loops run through the ring, carrying the glued volume (R, or body-space). One inside-out turn per cog — like a sock.

Was meant to ride: 7–8 stations per cycle (the coloured rings). Flipped to feed.



Journal fig. — RB-01b, top-down: present ring, the station rings A was meant to visit, future ring above.

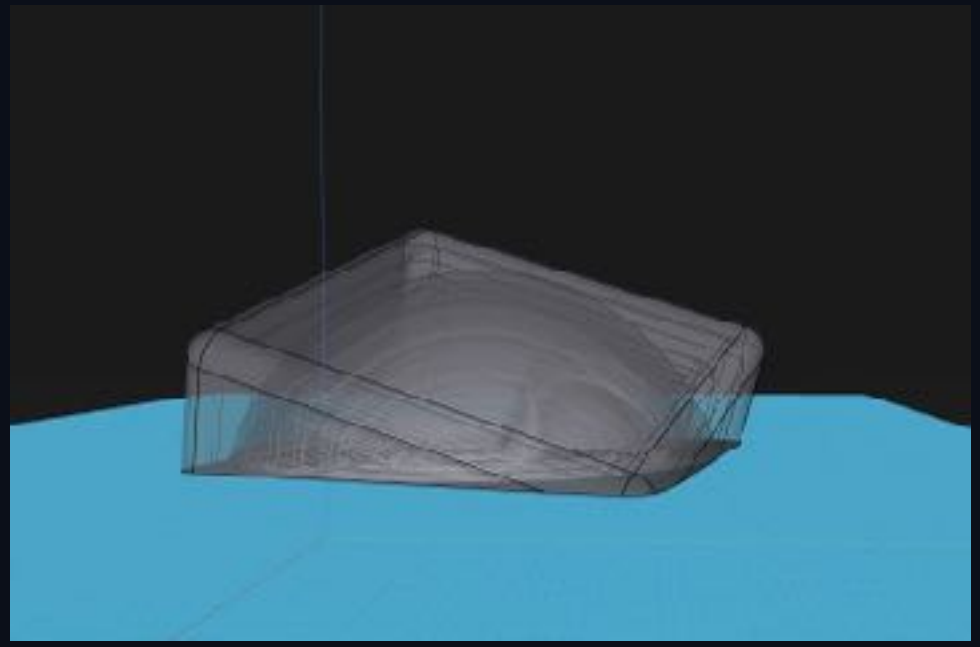
Same constraint — a poloidal cycle between A and R. Opposite enforcement.

The realm pays, by turning inside out. It felt like the clicks of a turnstile letting you into the next moment.

one cog ≈ 1.8 s · ~0.55 Hz

800 ms tracer laps the ring — compressed phasic | 200 ms | **800 ms** gear-turn: loops through the ring; future ring drops into the present

Two clocks, not one



Journal fig. 16 — bobbing Bank, heavy sedation

The lap would never show up as a brain wave — it is a trajectory, not an oscillation. The cards would. Look for the cards, and for a 0.5 Hz ripple in their brightness.



the LAP 0.5 Hz · geometry

Under a 13 Hz strobe the same machine ran at **13 laps/s and ~260 cards/s.** Ten to twenty cards per lap whether a lap takes two seconds or a thirteenth of one.

The invariant looks angular, not temporal.

A flash of light is a collision



- visual-field plane (held)
- a plane on the Bank, 13 rev/s
- soft print — 19 per revolution
- ✦ impact print — the flash

13 Hz
the strobe — and the Bank's rotation, in lockstep

260 Hz
print rate: ~20 cards per revolution

Once per revolution a plane on the Bank struck the visual-field plane. That impact was the flash. The other nineteen prints caught the same plane at angles where nothing struck, and were soft.

The brightness was not painted on. It was a geometric event — and for two seconds the mechanism was open for inspection.

In bundle words: a qualia-tag carried by a collision between two sections of the same base — printed, not painted.

The base space is not always a ring



Journal fig. — RB-09a rendered reconstruction (desk and iMac: CC0 / royalty-free assets)

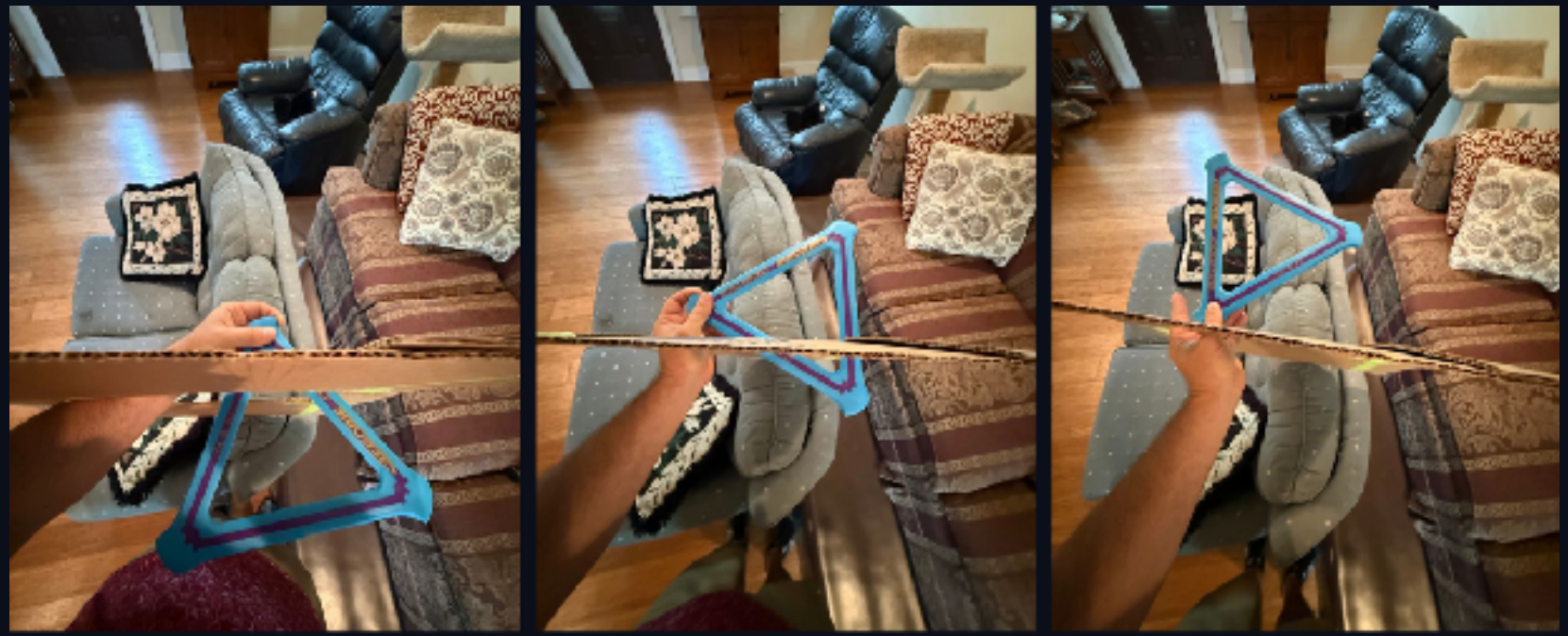
A 7-ft apple-shaped access surface, bottom flush with the floor, locked to the world. A peel-shaped tracer ran a Clelia spiral over it at constant path speed, holographically re-printing the room — floor, desk, iMac, my own hands and gear — from each new location.

Constant path speed on a shrinking circumference: the cycle rate rose toward the top of the apple and fell again toward the equator. ν and Π came apart in plain view.

I turned around in place. Body-space rotated with me; the apple and its tracer did not.

The traversal branch at a speed you can watch: the portal walking a stationary body and curving its own path — the same move as hiking, slowed to 1–3 Hz, on a base space that is a surface instead of a ring.

Lay yourself down by updating what A is touching across schemas (body, real)



RB-H1 — a cardboard stand-in for the ring, so other people can see what I see: three touchpoints of one throw

Frisbee: the plane rotate-walks across the room; at each touchpoint arm, hand and disc are pinned to it at once — a flash of full-strength marriage lasting a few milliseconds, with a softer zipper running underneath between touchpoints.

In bundle words: the base space walks across R, and at each touchpoint five sections are pinned to it together. Every voluntary act looks like this underneath.

> "Rings of touching Midnight goodnight, then rings walked over to my torso to print it… by touching certain points, you laid yourself down."
>
> — raw note, RB-09, EEG running

Motor control is printing.

Where this touches the brain

SEEN FROM INSIDE		KNOWN FROM OUTSIDE
A ring lap, content at fixed angles	→	a theta cycle with gamma bursts at fixed phases
Smooth sweep vs. whole-ring flash	→	thalamic tonic mode vs. burst mode
14 Hz flick trains, ~2 s, on waking	→	sleep spindles — same frequency, same duration
7–10 → 3–5 → 2 → 0.5 Hz	→	alpha → theta → delta → the slow oscillation
Two clocks: slow lap, fast cards	→	a population trajectory sampled by a fast rhythm
Base space held vs. fiber fed through (the sedation swap)	→	reference-frame switching — allocentric ↔ egocentric coding (proposed)

THREE TESTS, ONE 16-CHANNEL RIG

- My alpha peak frequency should equal my waking ring cadence — and slow together with it under sedation.
- The 0.25–0.5 Hz bobbing of the Bank should phase-lock to breathing.
- Two clocks should appear as a fast rhythm whose amplitude ripples at the lap rate — a rhythm that is not itself in the trace.

Three things to take home

1

Experience has a format.

A one-second time window with a base space and fiber bundle for each schema — normally too perfect to notice the strobed illumination of the base space.

2

Sedation makes the format visible.

Slow the cadence to 2–5 Hz and the frames — and their four printing modes — come into view.

3

The format is a bundle.

A base space where the streams are forced to agree, fibers where they are allowed to differ, and a choice of who holds still. Flip that choice and the world walks through you.



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