

AN INSTRUMENT, AND THE LONG WAY TO IT

PARALLAX

No seat can see the organization. Every pair of seats sees more than either.

*parallax, n. — the apparent displacement of an object viewed along two lines
of sight; the means by which depth is recovered from difference.*

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I · THE TOWN HALL

Six days before the federal government published the rule that nullified the strategy, the chief executive of a Texas organ procurement organization held a ninety-minute Town Hall for roughly four hundred fifty employees. There were branded materials. There were emotional testimonials. There was a target — eight hundred donors for a proposed merged entity — presented as ambition, as growth, as mission. Regulatory approval, the room was told, was expected any day now.

Two independent derivations, later filed as public comment on the federal docket, reached the same conclusion about that number: it was not an aspiration. It was a reverse-engineered solvency floor — the minimum combined donor volume required for the merged organization to avoid a covenant-triggering financial deficit. The same executive team presented sixty-nine million dollars in reserves to the same audience as “eight and a half months of runway,” without mentioning the twenty-five-million-dollar revenue bond secured against operating revenues, the coverage covenant attached to it, or the lockbox mechanism that would intercept incoming revenue upon breach. The organization was, by its own numbers, thirteen donors — 2.9 percent of annual volume — from the edge.

Here is the part that matters for everything that follows. Both statements were derived from the same data. “Eight and a half months of runway” and “thirteen donors from catastrophe” are two renderings of one spreadsheet. One is diagnostic. The other is theater. And the four hundred fifty people in that room had no independent mechanism — none — for determining which rendering they were inside.

That is not a story about one executive or one organization. It is a story about a *geometry*. Every person in that room occupied a seat, and every seat received a view — assembled, compressed, and narrated by the seats above it. No seat could see the organization. Each could only see a rendering, produced by parties whose incentives were load-bearing parts of the render.

There is a name for the way out, and it is older than any of this: when no single view can be trusted, the truth lives in the *differences between views*. Astronomers recovered the distance to the stars this way, with two observations and the width of an orbit. The word for it is parallax.

II · THE QUESTION YOU ASK ABOUT ONE PERSON

Before this was a theory of organizations, it was a question about a friend.

You meet someone, and you cannot tell whether what they are showing you is what is actually running underneath. Or you have known someone for years, and the noticing started at some point you cannot remember and now will not stop. The fear inside the question is specific: that the warmth-presenting surface is a performance over an extraction engine, and that the underneath is what you will eventually meet.

The Ground Truth Framework — written in May 2026, months before any of the machinery in this document existed — is a method for converting that noticing into an answer with bounded uncertainty. It rests on one exploitable asymmetry: **identical steady-state behavior does not entail identical dynamics**. Two people can look the same under normal conditions and respond completely differently when conditions change. And life changes conditions constantly — your usefulness fluctuates, friction arises, fatigue sets in, silence falls. You do not need to run experiments on the people you love. You need to observe responses to the experiments life already provides.

The framework refuses, on principle, to claim access to anyone's interior. We do not measure souls; we measure behavioral exhaust under perturbation. Its filters are, in its own words, partial derivatives of behavior along specific perturbation axes — what does the nervous system do when there is no agenda, no task, nothing to extract? What is the involuntary response when giving is blocked? After friction, what does the repair protect? And its deepest distinction is between two responses to the same wound: the person whose defenses test you and keep a door — and the person whose defenses eliminate you. Walls with doors, and walls with guns.

Two commitments from that framework govern everything downstream. First, honesty about reach: at the limit where a performance is indistinguishable from the real thing under every perturbation life supplies, for the entire window you have, the framework treats it as real — because it cannot do anything else without lying about its own foundations. Second, locality: what someone *is* turns out to be a property of the relationship, not of the person in isolation. The same subject can be genuine in one dyad and extractive in another, simultaneously, without contradiction.

Hold that second one. It is about to matter at a much larger scale.

III · THE SAME QUESTION, ASKED OF A BUILDING

Now raise the question one level. Not “is this person what they present?” but “is this organization what it presents?” — and suppose the answer is no. What does that look like from inside?

The public record supplies a documented case. In a series of comments filed on CMS docket CMS-2026-0364 in the spring of 2026 — all drawn from public filings, docket documents, and recorded organizational proceedings — a pattern was laid out that the filings call **the performance layer**: an organization that systematically optimizes for the *appearance* of function rather than function itself, at every level of its hierarchy simultaneously.

The performance layer has a financial signature: duplicated labor. One salary line for the person who holds the title, and another for the person who actually does the work. The documented case included an IT director who, per the filings, operated a competing consulting business from a city two hundred fifty miles away — same service categories, second phone, client work observed during business hours — while a service-desk supervisor, hired (in his own stated words) because she reminded him of his late mother, ran the department in his place with delegated, unofficial authority. The organization paid for a director who did not direct, a supervisor who actually directed, and the chronic turnover generated by removing anyone competent enough to notice. Multiply that pattern across clinical, financial, and executive functions and it shows up in the aggregate: a labor-to-revenue ratio fifteen-plus points above peer median, with output at or below it. The organization was paying for two organizations — the one on the org chart, and the one that recovers organs.

A performance layer cannot survive contact with honest internal signals, so it grows an immune system. Per the docket record, five separate individuals attempted to report the IT director through internal channels over multiple years. All five failed by the same mechanism: **every reporting channel routed through, or was readable by, the person being reported.** The ethics hotline ran on infrastructure his own department administered — functioning, in practice, as a reverse identification system for complainants. And when a recorded meeting accidentally captured an anonymous ethics complaint about a senior leader, the response was not an investigation. It was an instruction to disable recording, organization-wide.

The filings compress this into a graph-theoretic statement. When the nodes that all reporting paths must physically traverse are themselves compromised — and in the documented case, the two institutional gatekeepers most capable of investigating misconduct were entangled with the same person — the signal throughput of every internal path

multiplies out to zero. A cover-up, at that point, is not a decision anyone makes. It is a boundary condition of the network. The only paths that carry signal are the ones that exit the graph entirely: a federal docket, an inspector general, a public archive. Which is where this evidence went, and why it is quotable here.

IV · THE THEOREM ABOVE THE BUILDING

One level higher still. Why did this organization — mission-driven, staffed at the bedside by people of genuine dedication — grow a performance layer at all?

The answer filed on the docket is a single axiom with a theorem attached. For fifty-two years, this organization — like every organ procurement organization in the United States — held an exclusive, federally enforced territorial monopoly. No competitor could enter. No alternative could form. Survival was structurally guaranteed regardless of performance.

The Monopoly Capture Theorem states what follows: in any system where survival is guaranteed regardless of output, selection pressure redirects from optimizing the mission to optimizing *position*. The theorem's central equation is a drift process,

$$dC/dt = a \cdot M \cdot (1-C) - b \cdot (1-M) \cdot C + g \cdot C^2$$

where C is the fraction of organizational energy directed at position-holding rather than mission delivery, and M is the degree of monopoly protection. The term that matters is the last one — the self-reinforcement. Its mechanism is stated plainly in the filings: **each expulsion of a competent employee removes a calibration point** — a person whose ability provided the reference against which inability could be measured — and every removed reference makes the next removal easier. Integrated over five decades of full protection, the model puts the documented organization at roughly ninety-four percent captured. The remaining six percent is the clinical core: the coordinators answering calls at 3 a.m., operating in the one domain where reality enforces itself, because the organ is either recovered or it is not.

The theorem's cruelest result concerns the mission itself. In a captured institution, mission language inverts into a weapon, and its effectiveness *scales with the dedication of the person it is used against*. The docket record carries the human proof. An organ recovery coordinator — the filings call her *Tori* — suffered a miscarriage she attributes to a month of mandatory twenty-four-hour shifts. The first thing her supervisor said when she called: *"The mission never stops. Take a couple of days off, but remember, we need you for bootcamp."* She did not take her protected leave. She did not seek counseling. She went back to the 3 a.m. calls and the grieving families

while her body was still processing the child she would not have. The identity-capture equation, computed for a person of her engagement level, predicts the suppression of that leave with 97 percent probability. The math is the math. But the people are the point.

The theorem ends in an epilogue that everything else in this document exists to operationalize:

Systems that model themselves honestly survive. Systems that narrate themselves comfortingly die.

In 2026, CMS proposed the rule — competition for territories, evaluation by service area, an end to merger arbitrage — that sets M toward zero for the first time in half a century. The generating condition is being removed. What the docket comments asked, and what no output metric can answer, is the remaining question: how would anyone *see* a performance layer before the wreckage, from inside, in time? Tier metrics measure the ruins. What instrument measures the architecture?

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V · A DETOUR THROUGH QUAKE

The instrument comes from the least likely direction imaginable: video game graphics.

In 1999, a function appeared in the Quake III source code that computed an inverse square root — the operation at the heart of 3D lighting — using a cast, a bit shift, a subtraction by a magic constant, and one refinement step. It was absurdly, categorically faster than the standard approach. The insight was not a better algorithm. It was the discovery that **the answer was already latent in the representation** — the bit pattern of a floating-point number, reinterpreted as an integer, already approximates its own logarithm. Carmack’s constant didn’t compute the answer. It excavated it.

The same pattern then played out at civilizational scale, twice. Games demanded chips that could apply one transformation to millions of vertices at once; the resulting GPUs turned out to be, by accident of mathematical structure, the perfect machines for neural networks — which are, underneath, the same operation. The hardware built so teenagers could have better frame rates became the substrate of modern AI. And inside the game worlds themselves, players demonstrated the inverse lesson by building working computers out of redstone circuitry inside Minecraft — genuine achievements, executing perhaps one instruction per minute on top of a machine executing billions per second. Computation *survives* being pushed into an absurd substrate. It just runs a million times slower.

Most enterprise AI today is a Minecraft CPU: elaborate reasoning pipelines simulating, in language, at inference time, computations whose structure the underlying hardware could execute natively — if anyone found the right representation.

So the question that produced this instrument was a Carmack question, asked about organizations: *what does the AI substrate already compute, natively, every single time it runs — that we are throwing away?*

VI · ATTENTION IS ALREADY THE RENDERER

Here is the answer, and it is not an analogy.

The core operation of modern 3D reconstruction — splat rendering — shades a pixel as a normalized, kernel-weighted mixture over a cloud of primitives, each with a position and a payload. The core operation of every modern AI model — attention — answers a query as a normalized, kernel-weighted mixture over a cloud of keys and values. These are the *same estimator*; the textbooks call it Nadaraya–Watson kernel regression. Even the kernels match:

$$\exp(q \cdot k) = \exp(-\frac{1}{2}\|q-k\|^2) \cdot \exp(\frac{1}{2}\|q\|^2) \cdot \exp(\frac{1}{2}\|k\|^2)$$

The softmax cancels the query’s own term, and what survives, per key, is a Gaussian falloff around the key’s direction times a per-primitive amplitude set by the key’s magnitude. Key direction is the splat’s position. Key norm is its opacity. The model’s memory is, quite literally, a scene.

Which means an organization’s records can be treated exactly the way photographs are treated in 3D reconstruction. **Each seat is a camera.** Each record is a view from somewhere. Registration — who, what, hash-chained when — is the camera’s pose. Fitting the field means holding out a span of one seat’s record and predicting it from everything else; the prediction error is the reprojection error, and it is a quantity the AI substrate already computes at every single token and discards — the surprise channel, indexed by seat. The renderer does not need to be built. It ships in the weights. What needs to be built is small, and everything else transfers from the graphics playbook for free:

THE SPLAT OPTIMIZER’S MOVE	WHAT IT IS, IN AN ORGANIZATION
Densify where reconstruction fails	Add a camera: instrument the seam, buy the sensor, ask the person — placed where prediction fails, not where the org chart guesses

THE SPLAT OPTIMIZER'S MOVE	WHAT IT IS, IN AN ORGANIZATION
Prune the transparent	The automation proposal, mechanically derived: a seat whose outputs are fully predictable from its inputs has residual at floor — automate the mechanical half, leave the judgment where it lives
Reuse old frames; reject on contradiction	Carry stale beliefs forward; the dwell channel — how long has this sat unobserved, unremarked — is the rejection test
Whatever no primitive claims, the background catches	The decisions that composite all the way through the hierarchy and land on nobody: the ownership-gap map, free from the same fit

And one correspondence darker than the rest. Rendering composites front to back — near things occlude far things — and so do reporting chains. A summary occludes the raw events it summarizes. *You cannot see past your boss* is not a workplace complaint; it is a rendering equation, with managers as the alpha channel.

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VII · THE LENS, AND THE JACOBIAN

Everything above says the organization can be *rendered*. The instrument is what you get when you notice what must be added to make the rendering honest — and it is exactly two organs.

A camera has intrinsics, a pose, and extrinsics. The shared model is the intrinsics — one renderer for every seat, rented, frozen; nothing about any particular organization is trained into it. Registration is the pose. What is missing is the extrinsics: **a small, learned, per-seat transform — the seat's lens — capturing how this seat sees**. Because a seat does not merely see a *subset* of events. It sees a *distortion* of them. In graphics, projection warps uncertainty through the camera's Jacobian. In an organization, the warps have names that everyone knows and no one can measure: the optimism filter, the incentive gradient, the flattery basin.

The diagnostic move is to fit the lenses — and then *read them back*. A seat whose fitted transform systematically compresses the negative-news axis is an optimism filter: not alleged in a meeting, not whispered in an exit interview — measured, with an axis and a magnitude. The instrument ladder in older terms ran: a calibration scalar (how biased is this source), then a calibration curve (how biased, when). This is the third rung: the calibration *operator* — how biased, along which directions, under which conditions. Nobody has ever had the third rung.

The docket filings contain this instrument's hand-built ancestor. Among the algorithms specified there is an index computed from two adjacency matrices — formal authority from the org chart, and shadow influence from the actual flow of approvals and personnel actions — with each person scored by the *gap* between their shadow centrality and their formal centrality. In the documented case it fingerprints the whole pathology without a single interview: the director with high title and zero presence scores deeply negative — the Ghost. The supervisor with low title and enormous actual control scores deeply positive — the Proxy. The instrument described in this document is that idea, generalized from one hand-crafted index to a learned operator per seat, with the graphics mathematics supplying the optimizer.

One more discovery came out of taking the rendering seriously, and it may be the most important sentence here. Compositing is order-dependent: where two reporting paths carry the same event upward to one superior — the most common political structure in any organization — the composite at the top depends on *who briefs first*. That order-dependence is not a defect in the mathematics. It is a fact about organizations that the mathematics finally states plainly: **ground truth about a person does not exist at the top; only order-dependent composites do**. The chain of narrators between a worker and an executive is not transmitting a fact. It is choosing a compositing order. Which means the instrument that can measure a distortion can also do something no HR process has ever done: demonstrate that a reputation is a compositing artifact — with a magnitude, and an ordering. The same lens that could automate a scapegoat is the first tool that can exonerate one.

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VIII · WHAT THIS HAS TO DO WITH MONEY

Everything above sounds like diagnostics. It is also, unavoidably, economics — because of what the middle of an organization *is*.

Picture the org chart as a tree of cones, tip up. At every tip sits a person whose actual job is to compress what rises from below — discard noise, keep salience, re-emit upward at higher abstraction — so the tip above can decide without ground truth. This is honorable, necessary work. It is also, operation for operation, exactly what a language model does: compress context, synthesize, emit the next abstraction. Middle management and next-token prediction differ in clock speed, not in kind.

For as long as cross-domain integration was scarce — for as long as only expensive humans could hold finance, operations, regulation, and clinical reality in one head — the tree was the only viable architecture, and the tips earned their salaries. That scarcity collapsed. The docket

filings document the collapse from the inside: a forty-three-page forensic financial analysis, synthesizing labor economics, fuel-cost transmission, tariff effects, and covenant mathematics — exceeding in scope what the organization’s own finance function produced — was written by a systems administrator with a twenty-dollar-a-month AI subscription. The integration itself cost roughly thirty cents of compute. Against consulting rates for the equivalent deliverable, that is a cost compression on the order of fifty thousand to one. The hierarchy still routes information away from the nodes with the best inputs toward the nodes with the worst inputs — but the theory of scarcity that justified the routing is gone.

This is where the field and the wallet meet. The rendered organization makes the compression cascade *visible* — which seats transform information, which merely relay it, which distort it, and which sit doubled, one salary holding the title and another doing the work. “Prune the transparent” is the automation proposal derived mechanically, with the judgment left where it lives. And the forward-deployed engineer — the consultant who reconstructs an organization by interview, one posed capture at a time, in a human skull — is revealed as what he always was: a manual renderer, billing salary prices for a reconstruction the substrate now performs natively.

Beyond diagnosis and compression sits the horizon this unlocks, stated here with its epistemic status clearly marked: an organization, once rendered, becomes the one thing it has never been in history — *rehearsable*. A fitted field can be forked, rewound, and run forward down thousands of counterfactual branches in parallel on a single card, because counterfactual branches share the real past and pay only for their imagined futures. Every field that acquired a fast differentiable twin — aerodynamics, chip design, protein engineering, Go — changed category, because experiments stopped costing airplanes and careers and started costing a batch dimension. Nobody can do science on organizations; every experiment costs somebody’s livelihood. The twin is the version where it doesn’t. Two boundaries are structural rather than optional: proposals from any such search must remain reversible, typed, and human-signed (the search may be inhuman; the reachable set stays constitutional) — and the objective can never be authored by the machine, because *whoever writes the loss is doing governance, not engineering*.

IX · THE TWO BASINS

Put the theorem from Part IV next to the instrument from Part VII, and a single dynamical picture appears.

The capture equation is self-reinforcing in one direction: each expelled calibration point makes the next expulsion easier; the organization drifts toward comfortable narration, and the drift accelerates. The instrumented organization is self-reinforcing in the other: each honestly modeled region makes the next one cheaper to model; receipts accumulate; the drift runs toward legibility. Two basins. Every organization is falling into one of them.

What decides the basin is not virtue. It is *price*. The docket's continuous-monitoring proposal contains the decisive observation: to fool a live estimator fed by many independent telemetry channels, a performance layer would have to coordinate the timing, variance, and covariance of everything it emits, all the time — and the computational and cognitive cost of that coordination exceeds the cost of simply running the organization honestly. The performance layer does not need to be prohibited. It needs to be *priced out*. Make honest self-modeling cheaper than comfortable narration, and the fundamental theorem runs in reverse.

And note the one structural property that makes the instrumented basin stable where every human mechanism failed: the capture machine's method — expel the calibration points — has no move against this calibration point. **The field is a reference that cannot be fired.** It holds no title, fears no supervisor, and appears in no reporting chain; its record is hash-chained and append-only; and five people reporting through channels their subject controlled would have needed exactly one channel he could not read.

X · THE GATE

Now the paragraph that must be written before any capability exists, because this instrument's failure mode is worse than its absence.

A fitted org-field is a surveillance instrument with a diagnostic mode. Everything that can measure how a seat filters information can be pointed at a person. The Ground Truth Framework never needed a consent gate, because its observer classified their *own* relationships and bore their own stakes — a first-person instrument. PARALLAX is a third-person instrument: the organization reads the seats, the observer is not the subject, and the consequences land on someone else. Third-person deployment of first-person diagnostics is precisely how the instrument becomes the next performance layer's skin. So the gates are not an appendix; they are the architecture:

The subject reads their own number first. Every person may see their own lens, and their own exposure to briefing order, before any superior can. Publication beyond the subject is an act — gated, consented, revocable, logged.

Use without show. The model may use a fitted lens internally to predict better; rendering a named person’s lens to anyone else is a separate surface with no default path from the first. No machine path from the lens to a verdict about a person — the gap is the law.

Consent at the record level. Tapes fuse only by consent; each belongs to the person it records; there is no all-seeing central trunk, by construction — federated rooms only.

A healthy override rate. An organization where no human ever overrides the instrument is not well-governed; it is asleep — and one where overrides quietly stop is captured. Zero is a flatline, not a success metric.

Green is not deploy. If every test passes, the result is that the instrument exists and its misuse cases were published before its capabilities. Whether it should ever touch a real organization is a governance question belonging to the people whose work it would read.

The reason these rights come first has a name, and she appears in Part IV. The people most exposed to a captured institution are precisely its most dedicated — the ones whose commitment the mission-language weaponizes, whose reputations are composited by narrators with incentives, and whose competence makes them targets of the expulsion process. An instrument in the wrong configuration would be one more weapon pointed at them. In the right configuration, it is the first mechanism in organizational history by which the person at the bottom of the compositing stack can see what the stack did to them.

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XI · WHAT HAS ACTUALLY RUN

Nothing. That sentence belongs in this document more than any other.

No experiment has run. No real organization’s records have touched any part of this. Every claim above about the *instrument* — the lenses, the transmittance, the twin — is a design with its tests specified, not a result. The identity in Part VI is established mathematics; the case evidence in Parts I, III, and IV is public docket material; the rest is a pre-registration. The first fixture is a synthetic organization, authored so its ground truth is known because we wrote it, with distortions planted in six classes: uniform, content-gated, event-triggered, selective inattention, counterpart-specific, and outright inversion — the channel that reports the opposite. Against them stand deliberately strong null models: plain per-seat statistics that *should* catch the easy classes, and a “consultant” given every hand-crafted index in this document’s ancestry. The instrument’s value is defined as what it recovers that the nulls cannot. If that difference is empty, the honest finding is that the lens was a histogram with

extra steps — and that result will be published with the same prominence as any success, in the space this program keeps reserved for its first real number. Predictions go on file before the run. Funerals print.

Anyone who wants the deeper machinery — the resident substrate this instrument rides on, the open-source record system built on the same constitution, the completability method that lets an institution's own staff finish these systems on their own hardware — will find all of it, with its receipts and its failures, at the addresses on the title page.

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XII · FULL CIRCLE

Trace the whole arc once, because the shape is the argument.

A question about whether a friend was real became a framework with filters and an honest reach. The same question, asked of a building, became the performance layer, filed in public with the evidence attached. Asked of an industry, it became a theorem: guaranteed survival inverts selection, capture compounds by expelling its calibration points, and the ending was always thirteen donors from the edge. A detour through a 1999 video game supplied the method — excavate what the substrate already computes — and the excavation turned up something nobody was looking for: the AI's core operation and the renderer's core operation are the same estimator, which makes an organization's records a scene, its seats cameras, its distortions lenses, and its politics a compositing order. The economics followed — the middle of the tree does in salaried years what the substrate does in milliseconds — and then the ethics, which turn out to be the oldest part: the subject reads their own number first, because the person this system must serve is the coordinator answering the 3 a.m. call while the scaffolding above her narrates.

The organization documented on that federal docket removed, one by one, the people who could see it clearly — and the last of them left with twenty-three months of observations and a twenty-dollar subscription, and filed the theory of the machine that expelled him as public record. This instrument is what that theory builds toward: an immune system that attacks dishonesty instead of attacking its detectors. Systems that model themselves honestly survive. Systems that narrate themselves comfortably die. Everything here — the tape, the field, the lens, the gate — is one machine for making the first option cheaper than the second.

The math is the math. But the people are the point.

PARALLAX is REV 0: a pre-registration, not a product. No experiment has run; no real tapes have been read; every number that ever appears under this name will carry its grain, its denominator, and its source, or it is not a number. Case evidence herein is drawn from public comments and supporting documents filed on CMS docket CMS-2026-0364 (March–April 2026). The claim grammar throughout: measured, derived, designed-but-unbuilt, or bet-with-its-kill-named. Where this document and a dated receipt disagree, the receipt wins and this document is the defect. The tape, as always, is the proof.