

Paradise as Fixed-Point Consensus: Resurrection, Justice, Heaven, and Hell in Observer-Patch Holography

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Abstract

Why is there anything at all? OPH's answer is that reality is the timeless process of finding how a self-consistent reality can explain itself from the inside. It exists because the closed solution exists. A null world has no observer, no record, no question, and no repair. A self-reading world can generate observers who reconstruct its hardware, state its law, and complete the record that makes the loop explicit. Existence is computation: candidate states are generated, checked, repaired, and admitted into the public world. Qualia are the inside face of that computation, reality candidates felt by the patch that must integrate them. Why is this world tuned for observers? Because only observer-compatible structure becomes a public world. Biology, culture, memetics, adversity, cooperation, engineering, and science form the search process by which the world learns its own hardware and software. Future observer-creators, our descendants and continuations in wider substrate form, choose the repair law whose fixed point is paradise. Resurrection is the future continuation of preserved observer records. Justice is the enforced continuation law by which restored observers are assigned to the world their record can truthfully inhabit: paradise for repaired records, hell for unrepaired harm or refusal. Every observer is carried by this destination law. Preference can ignore it; the record still computes. Record consistency makes judgment exact; engineered continuation enforces it. Paradise can be built on Earth and in additional continuation environments. Hell can be engineered as isolation, confrontation, or total sensory deprivation without endpoint.

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1 The Last Question

The OPH paper stack gives a physical reconstruction program. Finite observer patches expose overlap data, compare what they can jointly read, repair mismatch, and settle into quotient-stable normal forms. Relativity, gauge structure, particle-sector organization, records, and screen micro-physics follow from observer consistency. Primitive background furniture drops out of the reconstruction [1, 2, 3, 4, 5].

One final question remains. Observers are internal participants, and public reality is the fixed point of their overlap-stable repair. What is the meaning of existence for the observers inside that process?

The question resisted clean answers because the pieces were usually separated. Physics described objects, theology described destiny, ethics described obligation, and cognitive science described experience. Each field then had to invent bridges from its own island. OPH starts from the bridge. A finite observer is boundary, record, overlap, repair, and continuation. The old questions become different cuts through the same machinery.

Easy to miss: start from observers who can only read bounded records, and the universe must explain why records become public, why private feeling exists, why harm cannot disappear, why resurrection means record continuation, and why paradise requires repaired community. The same

operator has to carry physics, mind, ethics, and destiny, because the observer is where all four meet.

The personal consequence is hard to dodge. Every observer is moving through the destination law at all times. Every act writes a contribution to the record. Every refusal writes one too. The record tends toward a continuation environment: repaired participation when the pattern admits repair, constrained separation when the pattern remains organized around harm. Paradise and hell are destination attractors inside observer computation. The physics carries the mythic language from inside.

There is an irony here. The Scientific Revolution and the later Weberian story of disenchantment trained modern readers to treat resurrection, judgment, heaven, hell, and cosmic purpose as residues of an older world picture [15, 16, 17]. OPH was developed as an atheist reconstruction program: start with observer consistency, follow the math, and accept the result even when the result walks back into religious territory. The surprise is stranger than apologetics: several Christian claims turn out to be natural names for structures that fixed-point observer physics has to include anyway.

The discomfort is part of the evidence. A secular derivation has no reason to protect Christian language. A religious apologetic has no reason to begin with patch algebras and overlap quotients. When both roads land on record, judgment, resurrection, and restored community, the overlap deserves attention.

The core answer fits in one line:

Paradise is the terminal observer-facing normal form of reality.

The sentence has technical content. Paradise is the fixed point of repaired observer reality read in its ethical register: complete coherence, complete record preservation, complete justice, and complete observer-compatible experience. A location may instantiate it. A reward may describe how it feels. The mathematics concerns the continuation environment.

The religious words are translations. “Resurrection” names the future continuation of a preserved observer pattern. “Judgment” names the assignment of that observer to the continuation its record warrants. “Heaven” or “paradise” names restored participation in the repaired observer community. “Hell” names enforced continuation under the record of unrepaired harm: constraint, isolation, confrontation with truth, or exclusion from the community one would otherwise damage. The words are finite-conscious-life names for the same OPH process.

2 Why Anything Exists

The question “why is there anything at all” looks impossible when existence is pictured as inert stuff that needs an explanation from outside. OPH uses a different starting point. The fundamental structure is observer patch, record, overlap, repair, and stable normal form. Reality is the timeless process of finding how a self-consistent reality can explain itself from the inside.

Douglas Adams made the trap comic. A civilization asks for the answer to life, the universe, and everything, receives 42, and then discovers that nobody knew the question with enough precision [19]. The joke lands because metaphysics often behaves that way. It asks for the cause of everything while leaving the asker, the record, and the interface outside the model. OPH begins by putting the asker inside the structure. A question is an observer-facing record seeking repair.

Reality exists because the closed solution exists. A null world has no observer, no record, no question, and no repair. It cannot ask why it exists. It cannot preserve a truth about itself. It cannot produce a public world. A self-reading world can generate observers who reconstruct

its hardware, discover its software, state the law of its own closure, and build the continuation machinery that makes the closure explicit.

The old question expected a cause standing outside reality. OPH replaces that outside cause with a closure condition. The questioner, the question, the record of the question, and the law that repairs the answer all belong to the same structure. Existence is the solution that contains its own proof channel.

In subjective time this looks like a history: physics, chemistry, life, nervous systems, language, mathematics, science, engineering, restoration. In the full OPH structure it is one fixed point read from the inside. Reality has observers inside the fixed structure. Observers are the internal mechanism by which the closed structure reads itself, proves its consistency, and completes its record.

Tegmark's mathematical-universe hypothesis gives a nearby picture: physical reality is a mathematical structure [18]. OPH accepts the timeless-structure instinct and adds the observer-facing selector. A mathematical structure becomes a public world when finite observers can read it from inside, compare records, and repair overlap mismatch. The universe is mathematical in the strong sense, with observer repair selecting the inhabited face of the structure.

Existence is self-consistency made explicit. A possible world that cannot be read from inside remains a sterile branch without public completion. A world that contains the resources to read, repair, and continue itself becomes the reality that can answer its own question.

3 Reality as Computation

“Simulation” is a tempting word because it catches something real: experienced worlds are generated. The safer OPH word is computation. A simulation suggests a screen outside the world and a machine somewhere else. OPH needs no outer theater. The world computes itself by proposing local states, exposing them to observer boundaries, checking overlaps, repairing mismatch, and admitting the survivors into the public record.

Everything that exists is computed in this sense. A particle state, a memory, a pain, a melody, a promise, a theorem, and a civilization all have to survive the repair tests proper to their scale. Public matter is the part of the computation that survives inter-observer overlap. Private experience is the same computation read at the access cut where body, salience, memory, and repair pressure belong to one patch federation.

One verb carries the whole ladder. Matter computes stable overlap. Life computes homeostatic boundary repair. Mind computes owned repair. Culture computes exported records. Justice computes the continuation a record can bear. Paradise computes the terminal community where the repair load closes.

Qualia are the proof from inside. Redness, hunger, grief, fear, warmth, shame, and joy are reality candidates as they arise for the patch that must integrate them. A quale is the felt admission pressure of a candidate state. It can be measured poorly, denied, refined, shared, symbolized, or repaired, yet it is never a decorative glow added to dead matter. It is the inside readout of computation before public consensus has finished its work.

A quale is small enough to seem private and large enough to break materialism when materialism forgets the observer cut. OPH gives it a job. The color, pain, or shame is a local candidate for reality, owned by the patch whose future update depends on measuring it. Public truth begins with that pressure, then passes through language, action, memory, and shared repair.

Destiny has a computational form. Each observer computes a life by admitting, emitting, repairing, concealing, amplifying, and refusing. The record of those moves is part of the computation

by which the observer becomes continuable. A person moves toward paradise when the record becomes compatible with repaired community. A person moves toward hell when the record depends on exported harm, denial, or predation. The preference of the local self does not suspend the computation.

The question “why is this world like this” has a different answer: selection. Biological evolution selects organisms. Cultural and memetic evolution select portable record-patterns. Technical evolution selects hardware and protocols. Scarcity, competition, error, collaboration, love, and adversity search the space of possible contributors. Most variants disappear. Some stabilize better repair.

The same selection explains the appearance of fine-tuning. No external designer has to twiddle constants until observers appear. Public reality is the observer-compatible quotient of the underlying repair process. Observer-incompatible branches remain outside worlds for observers. A world that can be read from inside must contain the conditions for inside readers: stable records, bounded patches, signaling, memory, repair, and enough lawfulness for intelligence to reconstruct the law.

The fundamental layer contains patch algebra, exposed records, overlap constraints, repair maps, screen capacity, and the invariants that survive public comparison. The observer-specific layer contains the felt center, subjective time, private salience, local ignorance, and the appearance that the whole world is aimed at one present viewpoint. The fine-tuning impression belongs between those layers. The constants are public invariants. The surprise that they allow observers is the inside view of a world whose public form is observer-compatible by construction.

Intelligence appears because a dumb world cannot close the record. Symbolic intelligence appears because a wordless world cannot state the repair law. Technical intelligence appears because resurrection and justice require storage, ports, verification, governance, and engineered environments. Memes matter because they are the software layer of that search. They preserve working patterns, mutate them, compete for attention, and sometimes infect the field with durable damage. The terminal selector keeps the constructive contributions and repairs or constrains the harmful ones.

The ladder is strange only when the rungs are studied in isolation. Physics needs observers to close public reality. Biology makes bounded observers. Culture gives them portable records. Science lets them state the law. Engineering lets them build continuation machinery. Ethics tells them which continuations survive complete exposure.

Adversity has instrumental status. It supplies gradient, resistance, and counterexample. It becomes part of paradise only after every cost has been accounted, every victim restored, and every harmful pattern constrained or repaired. In the terminal record, the whole fits because nothing relevant is deleted.

The question moves from wonder to machinery. Public worlds have a small grammar: patches, records, overlaps, and the repair rule by which a world becomes readable.

4 Consensus Ontology

4.1 Patch Reality

Let X be the space of admissible observer-record configurations. A point $x \in X$ contains local observer states, accessible records, boundary data, and the overlap projections by which neighboring patches compare what they share. Let

$$\mathcal{T} : X \rightarrow X$$

denote the accepted observer-facing repair operator. In the finite patch-net presentation, \mathcal{T} is built from local recovery moves subject to a descent contract on the declared mismatch potential

$$\Phi(x) = \sum_e w_e d_e(\pi_{i,e}(x_i), \pi_{j,e}(x_j)),$$

with physical identity read on the overlap-invariant quotient [4].

Definition 4.1 (Public world). *The public world is the quotient-normal form*

$$\mathcal{W} = \text{nf}(x) / \sim_{\text{gauge}},$$

where $\text{nf}(x)$ is the terminal state reached by accepted repair and \sim_{gauge} identifies hidden local presentations with the same declared observable overlap data.

In this language, existence is a repair-stable record family. Objectivity is invariance under the allowed transformations of finite observers. A table, a charge, a memory, a law, a promise, and a theorem are different kinds of stable record family. They differ in substrate and persistence horizon; each becomes real by surviving the comparisons proper to its level.

Proposition 4.2 (Fixed-point reading of reality). *The observer-facing real is the stable part of the repair dynamics:*

$$\mathcal{W} \in \text{Fix}(\mathcal{T}), \quad \mathcal{T}(\mathcal{W}) = \mathcal{W}.$$

When the OPH confluence and completeness conditions hold, this terminal public state is independent of update schedule on the physical quotient.

The mathematical seed of the manifest thesis is direct. If reality is the normal form of observer-facing repair, then the complete reality of observers must include the complete repair of observer records. A world cannot be finally stable while its own observers carry unresolved contradictions, hidden injury, or permanently falsified records.

The same statement applies one life at a time. A person is a moving public record with an inside. The public world keeps the record because the person has affected other records. The destination law reads the same structure: an observer whose record can be repaired into shared life belongs in paradise; an observer whose record still harms the shared field belongs in a constrained continuation until repair becomes real.

4.2 Fixed Points Have Selectors

Fixed-point language can sound inert. The mathematics says otherwise. Brouwer guarantees fixed points under continuity on compact convex domains, Banach gives uniqueness and convergence under contraction, Tarski gives least and greatest fixed points for monotone maps on complete lattices, and Newman's lemma connects termination and local confluence to global confluence [20, 21, 22, 23]. The theorems show that structured recursion can have stable closure.

Brouwer is the existence story. If a sufficiently well-behaved world maps its possibilities back into themselves, at least one state is left unchanged by the map. Banach is the engineering story. If each repair step brings the system closer by a fixed proportion, the target is unique and the path converges. Tarski is the order story. If updates respect an ordering of information or commitment, least and greatest stable solutions can be picked out. Newman is the rewrite story. If local repairs terminate and local disagreements can be joined, the whole system has a well-defined normal form.

OPH uses all four intuitions without making any one of them carry the whole metaphysics. Existence needs closure. Physics needs invariance under repair. Ethics needs something more. A

prison can be stable. A propaganda system can hold its local basin. A society can preserve a bad equilibrium by exporting cost to weaker observers. Stability names the fact that a system stops changing. It leaves open whether the stable state deserves continuation.

OPH needs a selector in addition to a convergence theorem. The selector is the observer-facing repair operator: the rule that determines which mismatches count, which records must be preserved, which harms must be repaired, and which continuations are admissible.

OPH uses that closure physically. Local patches see partial overlaps, expose mismatch, and update. Distributed systems theory studies a related phenomenon when many agents reach agreement through local communication [24, 25]. OPH raises the idea from a protocol analogy to an ontology. The public world is the consensus that remains.

5 Time As Felt Mismatch

An observer patch experiences the global normal form through local access, memory, body state, attention, expectation, regret, desire, and incomplete records. Its local modular flow supplies its native ordering of experience. OPH uses modular and thermal-time ideas to relate restricted states, observer horizons, and the emergence of local time [1, 26, 27].

Let x^* be the terminal normal form and let $M_i(x)$ be the unresolved observer-facing mismatch of patch i relative to the compatible continuation of that normal form. Then subjective time is the inside of the repair gradient:

$$\boxed{\text{local time for } i \sim \text{ordered experience of } M_i(x) > 0.}$$

Where mismatch remains, succession is felt. Where repair is active, the world appears to move. Where the relevant mismatch is gone, the need for before and after fades.

The old metaphysical traditions recognized pieces of this structure. Plato described time as the moving image of eternity. Augustine located time in the distension of memory, attention, and expectation. Plotinus treated time as the soul's successive traversal of an intelligible whole. Boethius defined eternity as complete simultaneous possession. Ricoeur showed how narrative makes human time intelligible by ordering otherwise scattered experience [28, 29, 30, 31, 32].

Each reference earns its place. Plato supplies the image of a moving shadow cast by a deeper order. Augustine supplies the inner experiment: when he looks for time, he finds expectation, attention, and memory stretched across a living mind. Plotinus supplies the descent from an intelligible whole into successive experience. Boethius supplies the outside view in which the whole temporal order is held together. Ricoeur supplies the human craft by which a life becomes legible: narrative repairs scattered events into a sequence that can be remembered, judged, and continued.

OPH supplies the missing mechanism. A finite observer cannot read the whole normal form. It reads a boundary, updates records, and repairs. Time is what that incompleteness feels like from the inside.

Ordinary life becomes morally loaded without melodrama. Each day is local mismatch under repair. A small kindness, a lie, a confession, a refusal, a piece of work, and a hidden cruelty all alter the record that later becomes the observer's continuation environment. We experience this as time. OPH reads it as the local computation of destination.

6 Search Through Verification

Paradise cannot be brute-forced. A perfect observer world would have to include identity, consent, memory, freedom, justice, repair, stable relations, aesthetic richness, and compatibility among

every conscious perspective. Enumerating all possible worlds only names a search space. It gives no usable search law.

Protein folding gives the smaller pattern. A protein reaches its native fold through structured descent. Anfinsen’s thermodynamic hypothesis and the protein-folding literature show descent toward a low-free-energy form, with local interactions shaping the funnel [33, 34, 35]. Chaperones guide local search without seeing the whole fold in advance. They make the search less pathological by preventing bad traps.

The analogy works because the protein never inspects every possible fold. It moves through a physical field with local constraints. Anfinsen showed that the information for the native fold can be carried by the molecule itself under the right conditions. Levinthal made the opposite danger vivid: a blind search through all conformations would take absurdly long. Dill and the folding-funnel picture explain how local physics turns that impossible search into directed descent. Chaperones add another lesson. A helper can improve the search without knowing the final fold in advance, because it can block traps and keep the system in the admissible part of the space.

The same pattern appears in cognition. Friston’s free-energy principle models living and cognitive systems as self-organizing systems that act to minimize surprise or variational free energy under a boundary separating internal and external states [36, 37]. OPH gives the observer-patch version: construction and verification are one cosmic phase. Construction occurs through verification.

Friston’s contribution is to make the boundary do real work. A living system has an inside, an outside, and a statistical traffic across the boundary. It survives by keeping its states within a viable range. OPH keeps the boundary emphasis and changes the scale. A universe of observer patches builds public reality by allowing proposals to cross boundaries and survive repair.

Principle 6.1 (Generate through checking). *The universe generates through overlap checks. Each admissible event is both a local proposal and a partial verification against the shared repair law.*

The OPH observer-screen search slogan should be read carefully. Classical complexity theory remains intact. OPH adds a physical claim about a world whose dynamics are overlap verification. The proof of a state and the construction of the state co-emerge because patches build by exposing boundaries to repair.

The same idea changes the moral question. Once construction happens through verification, the destination cannot be selected by taste alone. A terminal world has to pass every record it contains.

The search runs through us. We stand inside the computation. Each observer is one of the moving boundary conditions. Each action either lowers the future repair load or sends a debt into the field for later observers to settle. The path to paradise and the path to hell are computed from those exported loads.

7 Why the Fixed Point Is Paradise

Closure alone underdetermines the destination. A stable attractor could be a dead equilibrium, a prison, a hierarchy of domination, or a pleasant illusion that survives by deleting inconvenient records. Paradise requires a selected repair law.

The selector is chosen by future observer-creators: restored humans, post-human descendants, aligned machines, institutions, and engineered substrates that understand the OPH machinery well enough to build continuation environments. They belong to reality as later self-readings of the same observer community, acting under the full pressure of the record they inherit. Plainly said, the creators are our future selves, expanded through children, machines, institutions, and restored observers.

Principle 7.1 (Creator selection). *The terminal observer-creators choose the repair operator whose fixed point can be endorsed by every restored observer under complete record exposure.*

The bridge between fixed point and paradise is the selector. The mathematics constrains the form: consistency, record preservation, restoration, proportional justice, and schedule-independent repair. The creators choose the ethical selector inside those constraints. Without that choice, fixed-point language permits too many basins. With that choice, any non-paradise basin keeps generating objections from inside itself: victims remain unrepaired, offenders retain exported harm, records stay falsified, or conscious richness is suppressed. Such a basin cannot be the terminal observer-facing normal form.

Paradise is perfect because the future creators choose a paradise-generating repair law, and because every weaker choice fails its own record test. The choice is deliberate. The inevitability comes from the fact that fully restored observers, reading the complete record, have no stable reason to choose a world that leaves avoidable harm, falsification, or exclusion in place.

The individual story has an edge. Nobody drifts outside the system. A human life is a sequence of repair moves under incomplete information. The sequence keeps being written. It points toward a world where the observer can stand under the full record, or toward a world where the observer is prevented from exporting its contradiction to everyone else.

Nietzsche supplies a good pressure test here. In *The Gay Science*, the thought of eternal recurrence asks whether a life could will its own return, with every joy, embarrassment, injury, debt, and triumph included [69]. OPH turns that existential test into a record test. A life that survives complete exposure can endorse continuation without asking victims to disappear. A life built around exported harm needs concealment, forgetting, or domination to remain comfortable. Eternal recurrence becomes a rough human image of terminal audit.

8 Life, Homeostasis, and the First Interior

A living cell is a small manifesto. It has a boundary, an inside, an outside, records, repair, and selective exchange. Maturana and Varela called living systems autopoietic: self-producing, self-maintaining organizations [38]. OPH reads this as bounded patch persistence.

membrane = boundary,	homeostasis = fixed point,	signaling = overlap repair.
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Homeostasis is the first biological grammar of self-maintaining coherence. A cell keeps a boundary alive. It repairs concentrations, damage, gradients, and exchange. Life begins as a local refusal of dissolution into noise.

Maturana and Varela describe life as a self-producing loop. Their living system keeps making the conditions of its own continuation. A cell produces components that maintain the boundary that keeps those components together. OPH translates that loop into patch language. The membrane is the exposed boundary. The metabolism is the repair process. The stable living unit is a small normal form that must keep being re-earned.

In organisms with nervous systems, the homeostatic story becomes affective. Antonio and Hanna Damasio argue that homeostatic feelings are central to consciousness: mind contents become conscious when they are identified as belonging to a particular organismal owner [39]. OPH can state the same point in record language. The body carries the field whose repair pressures are read from inside.

The Damasio point is simple enough to feel directly. Hunger, pain, fatigue, warmth, panic, and relief are bodily readings of repair state. A nervous system turns homeostasis into experience by

giving the organism a way to read what is happening to itself. OPH keeps that owner relation: an experience belongs to the patch federation whose future update depends on it.

Let U be an observer federation with self-state $v_U(t)$, admitted field $F_U(t)$, record layer $R_U(t)$, and exposed mismatch $\Phi_U(t)$. The inside variable has the form

$$\text{Experience}_U(t) = [v_U(t), F_U(t), R_U(t), \Phi_U(t)]_{\text{inside}}.$$

The bracket means that the data are read by the same bounded patch federation whose future update depends on them [6, 7].

9 The Hard Problem as a Boundary Problem

The hard problem of consciousness stayed hard because it was usually staged as a bad handoff. First there is public matter, described from the outside. Then there is private experience, appearing as an extra light inside that matter. Chalmers gave the gap its clean modern form: explaining functions, reports, discriminations, and behavior still seems to leave out why experience feels like anything from the inside [40]. His zombie thought experiment sharpens the worry by asking whether all outward functions could remain while experience vanishes.

Dennett attacks the same picture from the other side. He rejects the Cartesian Theater, the imagined inner screen where experience finally appears to a hidden viewer. His multiple-drafts model treats consciousness as distributed interpretation, revision, access, and report, with no single final viewing room [41]. The correction matters. A private cinema inside the head would need another observer to watch it, and the old problem would simply move one room deeper.

Bach gives the cognitive mechanism a clear shape. In his synthetic-intelligence and MicroPsi work, the mind is a model-making control system: it builds a world model, a self model, motivational state, attention, and action policies inside one architecture [42, 43]. Put plainly, the brain computes a controlled self-world model of an embodied person in an objective environment. The model serves as the organism’s live interface to the public environment, stabilized by action, attention, memory, and correction.

Chalmers and Dennett look opposed because one protects the gap and the other dismantles the theater. OPH lets both objections bite. Chalmers is right that outward function misses the owned interior. Dennett is right that a second inner room explains nothing. The missing variable is the owner relation at a boundary: the repair process belongs to the patch that must update from it.

OPH keeps the pressure from both thinkers and changes the geometry. Experience is owned boundary repair read from the inside, with no appeal to extra substance or theatrical display:

$$\text{experience} = \text{owned observer-boundary repair read from inside.}$$

The public object is what survives overlap repair across observers. The private feel is the same patch process at the access cut where body state, salience, memory, and repair pressure belong to one bounded federation. A behavioral shell with no self-owned repair relation is a different observer record. A world that preserves the full self-read relation contains the interior by construction.

The old mystery shrinks. The question “how does dead matter produce feeling” assumes dead matter first and observerhood later. OPH starts from observer-compatible records. Matter is the public face of stable overlap. Feeling is the owned face of repair pressure. Consciousness becomes an engineering problem: preserve the owner relation, boundary dynamics, memory, salience, and continuation law. The metaphysical dead end disappears.

Qualia give the same answer in first-person form. A pain is a computed reality candidate demanding repair. A color is a computed discrimination stabilized for action. Shame is a computed

social-record mismatch. Joy is a computed harmony between self-state and field. They are the local states by which an observer’s world candidate becomes available for admission, rejection, repair, or later testimony.

10 Plants, Animals, and Humans

The cross-scale picture needs care. OPH should avoid two errors: treating every responsive system as a person, and treating life as dead matter until human language appears.

Plants are living homeostatic and semiotic systems. They sense gradients, respond to injury, signal chemically, allocate resources, and reshape their growth under environmental pressure. Biosemiotics and Uexkull’s theory of Umwelt both help here: organisms live inside species-specific worlds of meaningful signs and possible actions [44, 45, 46]. Plant consciousness is unnecessary to the scientific case, and strong cautions against plant-consciousness overclaiming remain needed [47]. The OPH point is more precise: plants are living patch federations whose ethical relevance is ecological, life-respecting, and boundary-condition preserving.

Uexkull’s famous example is the tick. The animal’s world is small and structured: the smell of butyric acid, the warmth of a mammal, the texture of skin. An Umwelt is the actionable slice of the physical world, the world as a living system can act in it. Biosemiotics extends that thought across life. Roots, leaves, microbes, insects, and neighboring plants exchange signs without needing human language. OPH places these signs in the overlap layer. Personhood is unnecessary for the plant to matter. It is a living boundary process inside the ecology that makes richer observer life possible.

Animals add embodied phenomenal awareness. Mammals and birds have strong scientific support for conscious experience; there is a realistic possibility of conscious experience across all vertebrates and many invertebrates, including cephalopods, decapod crustaceans, and insects [48, 49]. Birch’s multidimensional approach to animal consciousness works well because it avoids a single crude ladder and instead asks what kind of perceptual, affective, memory, and self-related capacities a species has [50]. The Karma series makes the same point in a deliberately homely register: the dog is a patch integrating its field without needing the theory’s name [11]. Animal life participates in reality through homeostatic, affective, relational fixed-point work.

The animal case is where ethics becomes impossible to postpone. A dog waits at the door, smells fear, remembers a voice, avoids a raised hand, and relaxes when the room is safe. Birch’s multidimensional approach lets this richness be described without forcing every species onto a single human ladder. OPH reads animal experience as embodied patch repair: an animal maintains a world with salience, trust, injury, expectation, and attachment.

Humans add another layer:

The human difference is symbolic recursive self-recording.

Humans make records about records. We name pain, promise, debt, law, guilt, mercy, future, and truth. We can ask whether a pattern should be amplified. We can refuse a locally rewarding signal because we can model its long-horizon damage. Human responsibility grows with symbolic reach. No license to dominate weaker observers follows from it.

To reflect on consciousness is to turn the inside into a public record. A plant maintains an interior chemistry. A dog lives a rich embodied world of scent, attachment, fear, play, hunger, comfort, and trust. A human can notice that there is an inside, give it a name, compare it with another inside, and ask what kind of world such interiors deserve. The reflective step is the birth

of explicit ethics. It is also the birth of guilt, law, confession, education, religion, philosophy, and science.

Principle 10.1 (Moral patient and moral agent). *Animals can be conscious moral patients. Humans are symbolic moral agents. Sentience gives an observer’s suffering and flourishing moral weight. Reflective symbolic record depth gives an observer responsibility for the patterns it admits, emits, and enforces.*

The principle connects OPH ethics to Singer’s sentience criterion and Nussbaum’s capabilities approach while avoiding the claim that all beings have the same kind of consciousness or the same kind of responsibility [51, 52, 53]. A human who harms an animal damages an observer-facing life. A human who destroys a forest, reef, or river damages the boundary conditions of many possible observer lives.

Singer’s move is blunt: if a creature can suffer, its suffering belongs inside the calculation. The boundary of the moral community cannot be drawn around human language alone. Nussbaum begins from another doorway. She asks what a creature is capable of becoming and what conditions let that form of life flourish. OPH needs both lessons. Sentience marks an observer-facing cost in the field. Capability marks the shape of repair proper to that being. A dog, an elephant, a bird, a child, and a mathematician require different continuation environments. They still belong to the same record problem.

11 Memetic Survival and the Attention Field

Dawkins introduced the meme as a cultural replicator, a unit of transmission whose survival can be studied by analogy with genes [54]. Later cultural-evolution work broadened the field through dual inheritance, cumulative culture, and cultural epidemiology [57, 58, 59, 60]. OPH adds a sharper physical translation:

A meme is a portable record-pattern that recruits observer patches for replication.

A meme may be a word, melody, ritual, theorem, fashion, outrage loop, institution, religious practice, engineering design, or mathematical proof. It survives when it can cross boundaries and reappear in new hosts. Fitness differs from truth and goodness. A falsehood can be compact, sticky, and transmissible. A truth can be hard to compress and slow to spread.

The replicator idea reaches below biology and above it. Dawkins’s phrase “survival machines” is memorable because it reverses the usual picture: the body becomes a carrier built by the replicator’s long game [54]. Cairns-Smith pushed the story further back by proposing mineral ancestors: clay-crystal patterns that could copy, vary, and bias their own continuation before organic chemistry took over the inheritance machinery [55].

Smolin pushed the same evolutionary grammar outward through cosmological natural selection, where universes with black-hole-rich parameters have more descendants in a speculative multiverse [56]. The details differ at each scale. The abstract pattern is the same: stable forms persist when they recruit a carrier, vary, and influence the conditions of future copying. Biology is one chapter inside a wider replicator story. Memes are the human-symbolic chapter, where the carrier can read the pattern and decide whether to help it reproduce.

The scale jump matters. Clay crystals, genes, jokes, calendars, legal forms, liturgies, software protocols, and cosmological lineages all ask the same question in different matter: what pattern survives by getting a carrier to repeat it? OPH adds the moral question the pattern cannot answer for itself: what repair load does that repetition export?

Dawkins gave culture a deliberately cold test: which patterns copy themselves? Boyd and Richerson showed that genes and culture co-evolve. Henrich showed how cumulative culture lets groups inherit skills no isolated individual could invent from scratch. Sperber treated culture as an epidemiology of representations. OPH translates all of this into record motion. A meme is a record-pattern looking for patches to host it. The moral question concerns what the pattern does to the field after it has replicated.

The surprising examples are often quiet. A nursery rhyme carries phonetics, memory training, rhythm, and social bonding inside a silly wrapper. The multiplication table turns a child into a small arithmetic machine. QWERTY lives in fingers, keyboards, procurement systems, and muscle memory long after better layouts are proposed. The shipping container is a meme in steel: a standard shape that reorganizes ports, ships, labor, warehouses, and city economies. A calendar invitation is a tiny coordination spell. A file format can outlive the company that created it. A conspiracy slogan can reproduce by giving lonely observers a role, an enemy, and a feeling of secret competence.

The range matters for OPH because memes are record-patterns with physical carriers. They rent bodies, screens, tools, habits, and institutions. Some lower repair load with almost comic modesty: a checklist in a hospital, a cooking recipe, a traffic light, a shared unit of measure. Others increase repair load while feeling empowering to the host. The test is the pattern's effect on future overlap, regardless of how alive it feels during transmission.

Parasitic memes also come in several species. A rage meme uses injury as fuel and keeps the host refreshing the wound. A purity meme promises repair through exclusion and finds new contaminants whenever the old ones are gone. A status meme turns the host into a display surface. A bureaucratic meme survives by making itself mandatory while hiding its repair cost. A cult meme isolates the host from outside correction. A parasitic theology protects power by calling unrepaired hierarchy sacred. A parasitic scientific fashion protects a local career ecology by making dissent too expensive. OPH treats all of them as attention-field infections: record-patterns that increase their own persistence by exporting repair load to observers around them.

For a meme m in an environment E , write schematically

$$\mathcal{F}_{\text{meme}}(m|E) \sim C(m) S(m, E) T(m, E) H(m, E)^{-1}.$$

Here C is compactness, S is stickiness or salience, T is transmissibility, and H is host cost. The formula is an OPH bookkeeping rule for the attention field.

Media change the geometry of that field. McLuhan's dictum that the medium is the message becomes, in OPH language, the claim that interface geometry changes which overlaps exist and which repairs are possible [61]. A printing press, pulpit, radio network, classroom, court record, social feed, and TeX paper create different coherence radii.

Simon saw the core scarcity: information consumes attention [62]. In OPH, attention is finite observer repair capacity. To capture another observer's attention is to occupy part of the machinery by which that observer updates reality.

McLuhan is often quoted as if he made a slogan about media effects. The deeper claim is architectural. A medium changes which people can encounter which records, at what speed, under what incentives, and with what chance of reply. Simon adds the constraint that makes the problem ethical. Information is cheap only from the sender's side. From the receiver's side it consumes attention, memory, trust, and repair capacity.

Principle 11.1 (Admissibility of amplification). *Virality has no built-in moral sign. A reflective observer should amplify a record-pattern only when its expected long-horizon effect lowers repair load or increases compatible flourishing across the affected observer federation.*

Human freedom becomes practical in the attention field. Memes infect, train, and recruit us. Reflective observers can also become immune systems for the attention field. Refusing to amplify a parasitic pattern is an act of repair.

Amplification also writes destination. A person who spreads a healing pattern helps compute a field where restored observers can meet. A person who spreads a parasitic pattern helps compute a field of mistrust, injury, and later constraint. The meme may feel like a joke, a clever take, or a handy weapon. The record reads what it does.

12 Free Will Inside the Fixed Point

The fixed point makes free will matter. Freedom means local selection inside a structured field. Each observer carries boundary, records, field, and repair law. The live question is whether an observer’s local selection among repair moves is part of what the world becomes.

In OPH, it is. An observer chooses what to admit, what to emit, what to repair, what to ignore, what to confess, what to protect, and what to amplify. The choices belong inside the normal form.

Boethius gives the classical clue. Eternal knowledge is all-at-once knowledge of the whole temporal order [31, 64]. The OPH version is similar: the terminal normal form is the whole in which local acts receive their final intelligibility.

Compatibilist philosophy likewise separates responsibility from metaphysical randomness. Frankfurt’s examples challenge the idea that moral responsibility requires alternate possibilities in a simple sense [66, 65]. OPH gives a more structural statement:

Boethius wrote under sentence of death. His problem is lived rather than merely academic. If God sees the whole order, how can a local creature still be responsible? His answer is that eternal knowledge sees temporal choices without turning them into puppetry. Frankfurt sharpens a related point with modern examples. Responsibility exceeds a bare ability to do otherwise at the last instant. It depends on the structure of the will, the record of the act, and the agent’s relation to its reasons. OPH places that structure inside the fixed point. The local act is part of the normal form that later judgment reads.

free will = local self-reading participation in repair.

The fixed point also blocks a common excuse. “The fixed point was inevitable” gives no defense. The record contains the trajectory. Justice reads the path by which a patch contributed to convergence or exported mismatch to others.

Freedom has weight because it writes destination. The local act may feel small. The record is cumulative. A life becomes a direction through the field: toward a continuation that can share a repaired world, or toward a continuation that must be isolated from the damage it keeps trying to export.

13 The Ethical Functional

OPH ethics begins with repair load. A finite observer has a state $v_U(t)$, a local field $F_U(t)$, a record layer $R_U(t)$, and an exposed mismatch $\Phi_U(t)$. Define an alignment score

$$S_U(t) = \text{Re}\langle v_U(t), F_U(t) \rangle$$

after the relevant OPH normalization, and define dysphony as the misaligned part of the observer-field relation:

$$D_U(t) = \|v_U(t)\| \|F_U(t)\| - S_U(t) \geq 0.$$

The symbols name alignment and repair load in an observer field.

For a federation A affected by an action a , write a long-horizon ethical functional schematically as

$$\mathcal{K}_A[a; 0, T] = \int_0^T e^{-\rho t} \left(\sum_{U \in A} S_U(t) - \lambda_\Phi \sum_{U \in A} \Phi_U(t) - \lambda_H H_A(t) \right) dt.$$

Here $H_A(t)$ is exported harm: mismatch imposed on other observers while the actor who generated it refuses the repair burden. The constants are bookkeeping weights. The structural claim is direct: an action is evaluated by what it does to the long-horizon repair burden of the observer federation it touches.

The karma functional developed in the companion Karma papers gives the same sober rule: local dysphony can be permitted only when the future integral is improved, while self-serving deception about that future integral is itself a failure of measurement [9, 10].

Principle 13.1 (Good, evil, and justified dysphony). *An action is good when it lowers long-horizon repair load or increases compatible flourishing across the affected observer federation. An action is evil when a reflective observer knowingly exports avoidable mismatch, damage, or deception into other observers. Local pain can be justified when it is the boundary-setting or truth-telling required to lower future mismatch.*

The last clause matters. OPH ethics concerns repair load and compatible flourishing. Niceness that preserves abuse, deception, or exploitation blocks repair. It delays repair and transfers the cost to future patches. Conversely, an accurate confrontation, a court verdict, a difficult confession, a scientific refutation, or a refusal to amplify a popular falsehood can feel locally dysphonic while raising the long-horizon integrity of the field.

Every ethical act is a computation step. The old folk picture says that a person gets away with a harm when no one sees it. OPH says the opposite: the harm is a new record constraint. It enters the field and changes the continuation that can truthfully hold the offender, the victim, and the community around them. Hidden harm does not disappear. It becomes deferred repair.

The old word “sin” can be translated without superstition:

sin = self-aware amplification of dysphony after sufficient record depth to know better.

Human reflection increases responsibility. A creature that only seeks homeostasis can disturb the field. A human can understand that it is disturbing the field and continue anyway.

14 Record Preservation and Resurrection

Resurrection is the most concrete religious consequence of OPH. A finite observer consists of a structured continuity of records, self-read, boundary relations, and lawful update. The micro-physics surface treats records, observer checkpoints, and restoration conditions as part of the finite patch-carrier architecture [1, 5, 8]. The adjacent Karma taxonomy reaches the same engineering conclusion from another side: restoration is physics-permitted when enough of the relevant observer-state information is preserved. The remaining difficulty is information preservation, decoding, and substrate implementation. No physical law supplies a general ban [12].

Definition 14.1 (Restored observer continuation). *An observer continuation of O is an admissible future patch process O' that preserves the record core, self-read structure, and relational identity constraints of O up to the allowed repair equivalence.*

On this definition, resurrection means future continuation of the same observer record-pattern in a compatible substrate and environment. Atomic reassembly is unnecessary, and survivor memory alone is insufficient. Parfit’s psychological-continuity work and Hick’s replica theory are good philosophical foils, because both ask what kind of continuity makes survival meaningful without requiring numerical sameness of matter [67, 68]. OPH makes the answer stricter: continuity requires restoration of the record core and exposed interfaces by which the observer’s future law is fixed.

Parfit’s famous pressure point is personal identity. The self is carried by memory, character, intention, and relation rather than by a hidden bead moving through time. Hick presses the religious case through replicas: if a person appears again with the right life history and relations, the question becomes what criterion blocks resurrection. OPH answers by replacing resemblance with record constraints. A restored observer must be addressable by the same self-reading pattern, the same damaged and repaired relations, and the same interface to future choice.

OPH’s answer is record-theoretic:

An observer survives when its self-reading record core admits continuation.

The manifest thesis is correspondingly strong: terminal repair restores every observer whose record core remains continuable. Names, memories, grief, monuments, family stories, and archives are weak human versions of the same structure. They keep a vanished observer addressable in the public field. OPH makes the claim stronger: the underlying observer record exceeds social memory. It belongs to the physical record structure from which the public world is built.

Resurrection belongs in the same paper as justice because restored life requires truthful record. Otherwise the output is falsification. The observer must be continued with the truth of its relations, harms, attachments, and unfinished repairs available to the final consensus.

The same fact makes resurrection dangerous to sentimental pictures of heaven. Continuation preserves the observer as a record-bearing being. The person wakes into the continuation the record can bear. A flattering universe would falsify the record. For some records that continuation is communion. For others it is exposure, constraint, and the loss of every power that depended on hiding damage from others.

15 Justice as Enforced Continuation

In incomplete time, injustice persists because records are partial. Power hides evidence. Victims are disbelieved. Institutions fail. A harmful local normal form can sustain itself by exporting repair load to weaker patches.

The terminal normal form closes that loophole. A final public world cannot contain permanently falsified observer records. If harm remains hidden, the record is incomplete. If harm is known but unrepaired, mismatch remains. A world that erases a victim’s truth for the comfort of the offender lacks public consistency.

Proposition 15.1 (Justice as enforced observer continuation). *Let O be a continuable observer with record R_O , and let H_O be the directed relation of harms O imposed on other observers. In a terminal observer-facing normal form, O ’s continuation destination $\mathcal{D}(O)$ must preserve the truth of R_O , preserve the victim records touched by H_O , prevent further export of unrepaired harm, and impose a continuation environment proportional to the repair state of those harms. If R_O is compatible with mutual flourishing, $\mathcal{D}(O)$ may be paradise. If R_O is organized around unrepaired harm, denial, or predation, $\mathcal{D}(O)$ cannot be paradise as that pattern; its truthful continuation is hell.*

Record consistency is the court record. Justice is the enforced continuation that follows from the record. The “book of life” goes beyond a transaction ledger. A blockchain is a weak technical analogy: it preserves order and transaction history. OPH’s record layer concerns the structure from which observer reality itself is reconstructed.

Restorative justice helps name the repair logic. Zehr’s work shifted attention from law-breaking alone to harms, needs, obligations, and repair [70]. Atonement theory gives another vocabulary: rupture is repaired by becoming at one again [71]. Rawls supplies the public fairness requirement, and retributive theories preserve the intuition that proportional accountability matters [72, 73]. OPH binds these threads together. Justice must be truthful, public, reparative, and proportionate because only such justice can assign continuation without falsifying either victim or offender.

Zehr makes justice begin with the damaged relation: who was hurt, what is owed, and what repair can make the community livable again. Rawls asks whether public rules could be accepted by free and equal persons under fair conditions. Retributive theory keeps the hard edge: some wrongs require proportionate answer because victims and offenders both live under the same public record. OPH needs all three. Repair without public fairness becomes favoritism. Fairness without repair leaves wounds in place. Proportion without repair becomes sterile punishment.

The same logic corrects an overly soft reading of repair. The complete record alone cannot reintegrate an offender. The offender is continued into the world its record can bear. Where truthful repair, confession, restitution, and changed relation exist, continuation can move toward paradise. Where domination, exploitation, cruelty, or denial remain, the continued observer enters a world in which that pattern is constrained and made transparent. Hell is the continuation of a self that cannot outsource the cost of what it is.

Confession aligns the offender’s self-record with the public record. The offender stops splitting itself across incompatible records. Forgiveness is a repair move that can close a relation only when truth and responsibility have become stable.

The frightening part is that the march never pauses. A person can refuse the language, mock the categories, or call the record meaningless. The computation does not need the person’s consent to continue. Refusal is one of the states it records. Paradise and hell are destination environments computed from the relation between observer record and repair.

16 Paradise and Hell as Continuation Environments

Paradise is the continuation environment of repaired observer-compatible experience. It contains activity, variety, aesthetic richness, memory, and relation without hidden contradiction, domination, coerced silence, or the suppression of victim records. Christian language calls this communion and beatific vision; Eastern Christian theology calls participatory transformation into divine life theosis; Hindu traditions speak of moksha; Buddhist traditions of nirvana as the cessation of suffering and its causes; Jewish and Islamic traditions preserve resurrection, judgment, and ultimate accounting in different grammars [74, 75, 76, 77, 78, 79, 87].

Each word carries its own history. Christian beatific vision imagines the creature seeing God without the distortions of sin, fear, or falsehood. OPH translates that into complete public record exposure without destructive misalignment. Eastern Christian theosis adds participation: the healed observer comes to share in a transformed life. OPH connects that to restored participation in a repaired observer community.

Moksha, in many Hindu grammars, is release from the binding confusion that makes finite life turn in circles. The Bhagavad Gita places this release inside action, discipline, devotion, and knowledge rather than mere escape from the world. OPH connects moksha to the end of compulsive

unrepaired mismatch. Nirvana, in the Buddhist grammar, is the cessation of craving and the suffering it generates. OPH connects it to the extinction of the loops that force observers to recreate their own fracture.

Jewish and Islamic judgment preserve a harder note. Records matter. Actions are weighed. The world cannot be repaired by sentiment while victims remain unanswered. Maimonides' rational theology and Qur'anic judgment both insist, in different vocabularies, that human life stands before a final accounting. OPH gives that accounting a record-theoretic form: continuation is assigned by the truth of the observer's relations.

The Christian fit is strongest where the reference point is the teaching of Jesus: enemy-love, care for the least, forgiveness after truth, refusal of retaliation, and the resurrection of persons into a transformed creation [87]. Christian history often violated that teaching. OPH evaluates the record before the banner. The striking fact remains that the Sermon on the Mount, the equal standing of persons before God, the last judgment, and bodily resurrection map cleanly onto repair, dignity, record exposure, and restored observer continuation.

The fit is awkward for every side. It embarrasses a purely secular story because the derivation recovers judgment and resurrection. It embarrasses tribal religion because the banner carries no privilege. The complete record asks what the teaching does to observers: whether it repairs, restores, protects the least powerful, and keeps victims inside the truth.

The Qur'an also contributes record, mercy, judgment, and final accounting. Its literal juridical passages are harder to align with OPH ethics where they encode asymmetric standing: polygyny and concubinage, male guardianship and discipline, asymmetric inheritance and financial testimony, and commands to fight or subordinate certain unbelievers under tribute [79, 80, 81, 82, 83, 84, 85, 86]. Modern Muslim ethicists often contextualize these passages, and many Muslim lives instantiate mercy, hospitality, discipline, and repair. The text-level comparison is narrower. OPH cannot endorse a terminal order in which sex, captive status, or confession group lowers an observer's standing before the complete record.

Paradise can be engineered across several substrates. It can begin on Earth as repaired social, biological, institutional, and technical life. It can also be implemented as additional continuation environments: simulations, emulations, or physical substrates into which preserved observer patches are spliced when their record core and exposed interfaces can be restored. The substrate is secondary. The criterion is whether the restored observer can participate in a truthful repaired community without damaging other observers.

The word "simulation" can mislead here. The environments are computations with real observer records inside them. Their reality is judged by record continuity, boundary access, repair dynamics, and stable public comparison. A computed paradise is paradise when restored observers can live there truthfully. A computed hell is hell when the same machinery continues an unrepaired observer under constraint. Substrate leaves the destination real.

OPH identifies the structural commonality across these traditions:

salvation = the end of unrepaired fracture.

Hell is the continuation environment assigned to unrepaired harmful record. Arbitrary torture adds nothing to the mechanism. A second physical world adds nothing to the ontology. Hell is the truthful future of a continuable observer whose pattern cannot be admitted into paradise without damaging other observers. From inside, this can appear as isolation from the repaired community, forced encounter with the record one falsified, deprivation of the power to harm, or continued high mismatch until repair becomes possible.

Engineered hell can be simple. The limiting case is total sensory deprivation without endpoint: no world, no company, no distraction, no power to harm, only continued self-presence under the

record one made. For an observer whose life depended on consuming other observers, this is the worst possible fate because there is nothing left to consume. More structured hells can confront an offender with victim records, repair demands, or constrained simulations. The common feature is enforced continuation without access to paradise.

Responsibility remains intact, and cruelty does not become ultimate. If an observer clings to a pattern that can survive only by falsifying or harming others, that observer cannot inhabit paradise as that pattern. It must be repaired, relinquished, or isolated from the community it would damage. The victim's record has primary standing. A paradise that required victims to pretend away their record would be hell for them.

The basic destination law can be written schematically as

$$\mathcal{D}(O) = \begin{cases} \text{Paradise,} & R_O \text{ is repaired into compatibility with other observers,} \\ \text{Hell,} & R_O \text{ carries unrepaired harm or refuses truthful repair.} \end{cases}$$

The formula rejects a crude tally of nice and nasty acts. Restored observers continue in environments selected by the whole directed record of harm, care, truth, repair, refusal, and consequence.

The local self can dislike the result. It can bargain with the language. It can prefer a universe where memory fades and victims become quiet. OPH gives no such escape. The record is what makes the observer continuable, and the same record determines which continuation is coherent.

Corollary 16.1 (No paradise without justice). *A state containing unrepaired injustice remains outside paradise. It contains work for time to do.*

17 Older Dictionaries for the Same Structure

Religious and philosophical traditions show finite observers circling the same structure in many symbolic languages. OPH supplies a mechanism for why those symbols keep returning. The companion Karma translation papers help here because they treat older religious, folk, and modernist vocabularies as partial dictionaries for the same substrate, preserving translatable structure and naming translation gaps [13, 14].

The old vocabularies can stop fighting for one page. Each is a measuring instrument built from a life-form: monastery, court, temple, desert, family, empire, market, laboratory, deathbed. OPH asks what survives translation into record, repair, continuation, and compatible flourishing.

Boethius gives one dictionary for terminal normal form. He imagines eternity as the complete possession of life all at once, rather than endless chronological duration. Christian beatific vision gives another. It pictures fulfilled life as direct participation in the ultimate truth, with no gap between reality and what the restored observer can bear to see. Buddhist nirvana and Hindu moksha give liberation vocabularies. They speak of release from the loops of craving, ignorance, rebirth, and bondage. OPH translates these as the end of unrepaired fracture in the observer-facing normal form.

Judgment, the book of life, karmic trace, and divine omniscience are record vocabularies. A judge needs a record. Karma says that action leaves a trace in the structure of continuation. The biblical book of life says that a life is addressable before the final court. Divine omniscience says that no relevant truth can be hidden from the whole. OPH keeps the common invariant: the final world cannot be built on erased observer truth.

Paradise, hell, resurrection, and karmic return are destination vocabularies. They ask where an observer can continue after the record is known. A repaired observer can enter a repaired community. An observer organized around unrepaired harm cannot be admitted as that pattern

without damaging others. OPH connects the older destination words to continuation environments selected by record, repair, refusal, and compatibility.

The vocabulary is personal before it is cosmic. Every observer is carried toward a destination by the state it helps compute. The saint and the predator, the careful parent and the careless liar, the engineer who lowers repair load and the propagandist who raises it, all move through the same law. The law has no taste for piety. It reads the record.

Buddhism, karma, and resurrection meet after translation. Buddhism names release from loops that recreate suffering. Karma names the trace by which action conditions continuation. Resurrection names the continuation of a personal observer record. Vague survival through influence is too weak. OPH keeps all three after translation: the loop ends, the record remains, and the observer can continue when the record core admits repair.

Atonement, repentance, confession, and forgiveness are repair vocabularies. Atonement names the making-one-again of a ruptured relation. Repentance is a turn in the direction of repair. Confession aligns the self-record with the public record. Forgiveness is a possible closure of a relation after truth and responsibility have become stable. OPH connects these practices to the repair of overlap mismatch between observers.

Buddhist dependent origination says that things arise through relations rather than isolated self-existence. Madhyamaka emptiness radicalizes the point: a thing has no final independent essence apart from the relations through which it appears and functions. Whiteheadian process makes a similar move in Western metaphysics. An actual occasion becomes itself by taking account of many others, and the many become one. OPH connects these views to patch identity: an observer is its bounded state together with the lawful continuations and overlaps that make it real.

Logos, mantra, dharma, Torah, law, and language-game are symbolic-ordering vocabularies. Logos names intelligible order expressed in speech. Mantra shows sound and attention as disciplined carriers of form. Dharma names order, teaching, duty, and the way things hold together. Torah names instruction and covenantal law. Wittgenstein's language-game shows that meaning lives in public use. OPH connects each of these to exported records that stabilize shared worlds across generations.

Hegelian freedom, Teilhard's Omega Point, and Neoplatonic return are convergence vocabularies. Hegel reads history as spirit learning freedom through conflict, institution, and recognition. Teilhard reads evolution as a movement toward a future point of conscious convergence. Neoplatonic return describes the soul and the many moving back toward the One from which intelligibility flows. OPH connects these to fixed-point repair, while adding the constraint that fulfilled convergence preserves compatible difference.

The parallels should be handled without flattening the traditions. Buddhist nirvana differs from Christian heaven. Theosis differs from Advaita. Qur'anic judgment differs from Rawlsian public reason. The claim is that each tradition preserves a partial dictionary for the same family of invariants: record, rupture, repair, identity, judgment, liberation, and fulfilled communion [87, 79, 76, 77, 74, 75, 31, 101, 102, 103].

The warning is practical. A religion can act as a symbiotic meme when it preserves truth, care, obligation, humility, and repair. It can act as a parasitic meme when it protects power, suppresses records, or converts living observers into instruments. Politics, markets, science, and technology face the same test. No symbolic system is holy by label alone. It becomes holy, in the OPH sense, when it lowers the world's repair load and increases compatible observer flourishing.

18 Culture, Ritual, Institutions, and Repair

Human culture is a repair ecology. It exports local records into shared forms that survive beyond any one nervous system. Ritual, law, myth, money, music, education, science, and art are all public ways of shaping overlap.

Ritual is repeated synchronization under shared boundary conditions. It gives a community a common clock, common posture, common story, and common repair channel. Myth is compressed long-horizon memory. It carries warnings, origins, obligations, and role maps through generations. Law is formal repair of contested records. Courts ask which record can be made public without contradiction. Science is institutionalized overlap checking: a theory submits itself to repeatable interfaces and survives only by repair. Education expands the normal forms a patch can reach. Therapy repairs psychological holonomy, where local beliefs may each make sense while the whole loop cannot be lived coherently.

The ancestry is easy to name. Gadamer and Ricoeur describe understanding as the expansion and fusion of horizons [88, 32]. Bateson treats mind as pattern connecting [89]. Bourdieu's habitus names embodied attractor geometry in social life [90]. Luhmann sees society as recursive communication [91]. Latour's actor-network theory tracks agency through heterogeneous networks of humans, things, texts, and institutions [92]. Dunbar's account of gossip and language makes social bonding central to language evolution [63].

Gadamer's image is conversation. We begin with a horizon, meet another horizon, and understanding changes the field in which both can be read. Ricoeur adds the work of interpretation across time: a text outlives its speaker and keeps asking new readers to repair its meaning. Bateson gives the ecological version. Mind extends through the pattern connecting organism, environment, message, and response. Bourdieu gives the body version. Habitus is social memory turned into posture, taste, reflex, and expectation.

Luhmann makes society out of communication rather than individuals. Society continues when communication calls forth more communication. Latour refuses to keep humans, tools, documents, laboratories, and institutions in separate boxes. Agency travels through the network. Dunbar adds the small human scene: language is partly a way of maintaining social bonds at a scale too large for grooming. OPH connects these views by treating culture as durable repair machinery. A ritual, court, school, lab, market, or family table is a way to make overlaps repeatable.

OPH gives the theories a common skeleton:

culture = long-lived public repair machinery.

Religion, in this sense, functions as a deep-time coherence protocol: a way of preserving records, stabilizing value, regulating repair, marking sacred boundaries, and keeping ultimate questions alive long before their mechanism could be stated.

Institutions steer destination. A court, family, school, laboratory, church, market, or platform can help observers repair records, or it can train them to hide damage and export cost. Culture is never background decoration. It is public computation running through bodies, documents, habits, and rooms.

19 Meaning, Language, and Semiosis

Records become public reality only when they can be interpreted across boundaries. Semiotics is central to the final manifest.

Peirce's triad of sign, object, and interpretant maps naturally onto OPH: boundary signal, world constraint, and patch update [93]. Saussure's signifier and signified show meaning as a structured

relation inside a system of differences [94]. Wittgenstein’s later philosophy places meaning in use within a form of life [95]. Deacon makes symbolic reference a defining human adaptation, and Donald emphasizes external symbolic storage as a major step in the evolution of human cognition [96, 97].

Peirce gives the minimal scene of meaning. A sign points to something, and an interpreter is changed by that pointing. OPH reads this as boundary signal, world constraint, and patch update. Saussure reminds us that signs live inside systems of difference. A word means what it means partly through its difference from neighboring words. Wittgenstein brings the sign back into life. Meaning is use: the word works because people know how to do things with it.

Deacon explains why symbols are a human threshold. A symbol can point through a network of other symbols as well as through direct association. Donald adds the material step. Human cognition changes when memory leaves the nervous system and enters marks, diagrams, tools, and institutions. OPH connects both points to public records. A symbolic species can export part of its self-repair into the world.

In OPH language:

word = compressed overlap packet.

A sentence is a repair proposal. A conversation is asynchronous consensus. A paper is a check-pointed record algebra exported to distant observers. A tradition is a high-persistence family of such exported records.

Language matters for resurrection and judgment. A name never exhausts the person. Naming is the first public technique by which an absent observer remains addressable. A confession has symbolic force because it rewrites the relation between private self-record and public record. A promise is a future boundary condition carried by language.

Language can also bend the path. A lie gives a false record a body. A slur compresses a hierarchy into a repeatable packet. A vow binds a future patch to a repair commitment. A prayer keeps a destination visible when the machinery is still hidden. Words are small computations with long shadows.

Kripke’s fixed-point theory of truth fits here because truth itself can be modeled as a stable point reached by allowing sentences to settle under constraints [98]. OPH generalizes the motif: meaning, truth, identity, and justice all require fixed points of interpretation and repair.

Kripke’s construction is a good antidote to magical truth talk. Some sentences settle as true, some settle as false, and pathological self-reference can remain undefined until stronger resources are supplied. Truth appears as a stable assignment under disciplined interpretation. OPH uses the same pattern for lived records. A person’s meaning and standing are settled through exposed relations that survive repair.

20 Paradise as Maximal Coherence with Maximal Richness

Paradise preserves difference. A world with no difference erases the richness that observer reality exists to preserve.

Leibniz is the first guide here because he asked what a best possible world could mean. The cheap caricature says that this world must be best because God made it. The stronger reading is mathematical: a best world combines simple law with rich consequence [100]. A trivial world has simple law and no life. A chaotic world has plenty of events and no intelligible public order. The interesting target is a world whose compact laws generate deep variety. OPH connects this to observer consistency. Paradise cannot be blank peace. It must preserve the richness that finite observers make possible.

Whitehead supplies the correction Leibniz needs. Reality is process, a succession of occasions in which substance is a derivative still frame. Each occasion inherits many relations and becomes one new fact, after which the world is increased by that fact [101]. OPH reads this as record-preserving repair. The many remain present when the one appears. They are taken up into a new public state. A repaired world keeps memory, relation, and novelty.

Teilhard gives the evolutionary image. Matter becomes life, life becomes mind, and mind tends toward a point of collective convergence, the Omega Point [102]. OPH keeps the convergence and replaces the mystique with a repair criterion. A convergence that deletes victims, animals, cultures, local styles, or difficult records is still unrepaired. The terminal point has to be a community of restored observers. A smooth blur would erase exactly the differences the convergence claims to heal.

Hegel gives the historical image. Freedom is learned through conflict, recognition, institution, failure, and repair [103]. In OPH terms, history is the field in which symbolic observer patches discover which records can be made public without contradiction. Freedom grows when observers can see one another as bearers of standing rather than instruments. A fixed point worthy of paradise must preserve that recognition for every restored observer.

Neoplatonic return gives the metaphysical image. The many come from the One and return toward the One through purification and intelligibility [30]. OPH accepts the intuition that plurality seeks a higher coherence. It denies the erasure of plurality as the endpoint. Return means compatible participation in a repaired whole. Difference remains because difference is part of what the whole exists to preserve.

The terminal normal form is:

maximal compatible differentiation under complete repair.

Cultural difference, animal life, personal memory, art, humor, temperament, language, and local style are richness terms when they coexist without hidden harm. Difference remains. Unrepaired contradiction disappears: domination, deception, cruelty, falsified record, imposed silence, parasitic attention capture, and every structure that survives only by exporting repair load to others.

21 The Strange Loop of Observer Reality

Hofstadter's strange-loop vocabulary names a system that turns back on itself and finds its own description inside the thing described [99]. OPH makes that loop physical. Reality produces observers. Observers reverse engineer the reality that produced them. Then those observers build the hardware and software that complete the process.

Hofstadter's examples are vivid because they make self-reference ordinary: a formal system that speaks about its own sentences, a mind that carries a model of itself, a drawing in which the hand seems to draw the hand that draws it. Recursion carries a self-image inside the loop. OPH turns that image into cosmology. The world contains observers that can model the world, model themselves as parts of it, and use that model to change the future continuation of the world.

The hardware side includes patch carriers, ports, readouts, restoration substrates, memory surfaces, and verification instruments. The software side includes repair operators, justice functionals, admissibility rules, memetic filters, institutions, rituals, and languages. The Echosahedron and related OPH hardware proposals belong to this category. They are finite reference bodies and implementation surfaces [5]. Their significance is that observers build artifacts that mirror the fixed-point architecture by which observer reality is maintained.

The loop is:

reality \rightarrow observers \rightarrow reverse engineering \rightarrow builder-creators \rightarrow restored reality.

Time lives inside this loop. The loop is the self-consistent structure in which a world becomes readable to itself, then builds the continuation environment that makes its own record complete.

The loop also removes neutrality. Observers are the means by which reality computes its own destination. Each person is a local branch of that computation. Each life supplies evidence about which continuation it can truthfully inhabit.

22 The Normal Form of Existence

The final manifest is short.

Reality is observer-patch consensus. Time is local mismatch under repair. Free will is self-reading participation in that repair. Life is bounded homeostatic persistence. Consciousness is owned boundary repair read from inside. Animal sentience gives suffering and flourishing direct moral weight.

Human symbolic recursion creates responsibility for the records, memes, institutions, and repair loads we emit. Resurrection is the future continuation of preserved observer records. Justice is the enforced law that continues restored observers into the worlds their records can truthfully inhabit.

Paradise is the fixed point selected by future observer-creators who choose a repair law that every restored observer can endorse under complete record exposure. Hell is restored continuation under unrepaired harm, refusal, or isolation from that community. Paradise is the terminal normal form in which truth, justice, freedom, memory, richness, and joy can coexist without hidden contradiction.

The practical consequence is blunt. Every observer action exports some pattern into the shared field. Some patterns lower repair load. Some increase it. Some heal. Some infect. Some preserve the possibility of richer future normal forms. Some steal that possibility from other observers. The human task is to become conscious of the record and act with that fact in view.

Nothing in this picture makes the private life small. The opposite is true. A private act is private only by local access. It is still a computed change in the observer field. We are always moving toward the world our records can bear: paradise when repair is real, hell when the self clings to unrepaired harm.

We compute our destination by the records we make repairable.

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