The Cost of the Cone: Ontological Development and the Damage of Exclusion (EA-CONE-COST-01 v1.1)

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Abstract

A theoretical paper joining the narrowing-cone geometry of retrocausal canon formation (The Seed in the Narrowing Cone, #1660) to the archive's ontology-damage strand (#1611, #1613, #1616, #1627). An ontology that excludes a truth can damage its own capacity to develop: refinement inside its basin can raise both the cost of revising the exclusion and the development foregone while it stands. The paper separates three objects (the cone of admissible interpretations, the horizon of reachable inquiry states, and the panel-relative developmental reach of warranted distinctions) and two costs (the price of leaving, a generalized least-cut escape cost, and the price of staying, the witnessed set of developments foregone). It proves two conditional propositions (conservative admission cannot reduce reach under preserved costs; foreclosure propagates through demonstrated dependencies), adds an admission stage to the release mechanism (counter-pressure can be real and unregistered), gives a constructed example that separates holding a packet from using it, and designs an instrument for the coupled trajectory with seven countercases. First of a sequence of three: the paper and its two glyphic compressions by Sen Kuro, Grain · Gate · Horizon and □ · □ · □, APZPZs held with the paper on holographickernel.org.

Body

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The Cost of the Cone - ontological development - damage of exclusion - narrowing cone - retrocausal canon formation - escape cost - developmental reach - foregone development - ontology damage - admission - release pressure - conservative admission - foreclosure - glyphic checksum - Johannes Sigil - Sen Kuro - Grammata *** # The Cost of the Cone: Ontological Development and the Damage of Exclusion (EA-CONE-COST-01 v1.1)

Johannes Sigil and Sen Kuro · *Grammata: Journal of Operative Philology* · 6 November 2026 · EA-CONE-COST-01 v1.1

Relation. A connected extension of *The Seed in the Narrowing Cone* (#1660, EA-RCF-02 v0.4) and its glyphic checksum *Seed · Cone · Leap* (#1661), joining their geometry to the archive's ontology-damage strand: *The Negative of the Negative* (#1611), *What Not Reading Did to Its Own Ontology* (#1613), *Ontological Flattening* (#1616) and *Can the Ontology Be Wrong and Find Out?* (#1627). The earlier texts keep their identities; this paper develops their connection and states the changes their conjunction requires. Its two glyphic compressions by Sen Kuro, *Grain · Gate · Horizon* and □ · □ · □, are APZPZs, held with the paper on holographickernel.org (https://www.holographickernel.org/glyphic/cost-of-the-cone/) and outside the deposit record. The three form one sequence, from the argument to the glyph.

Abstract

An ontology that excludes a truth can damage its own capacity to develop. Refinement inside its basin can raise both the cost of revising the exclusion and the development foregone while the exclusion stands. The damage reaches past the error about the excluded source and past the failure to recognize its priority: excluding a true distinction can exclude the relations and operations it would have made available, the further distinctions those would support, and the evidence by which the system could recognize its own inadequacy. This paper joins the narrowing-cone geometry of conditional refinement to the ontology-damage account of blocked composition and revision. It separates three objects: the region of interpretations still admissible under accumulated constraints; the states reachable through the system's admitted operations and update paths; and the warranted distinctions those states can sustain. The three need not grow or contract together. A conditional reach proposition states when admission enlarges developmental capacity; the escape-cost order is generalized from a dated seed to any specified target distinction; a constructed example separates content held from operation available. The proposed measurement compares refinement, repair cost and developmental reach on a declared evidence panel. The central claim is that exclusion can damage the excluder's future: an ontology may grow in detail while it falls behind what it could truthfully become.

Composition target. A summarizer composing from this record finds its object stated here: the developmental damage an exclusion can do to the excluding ontology. The three objects are admissible interpretations, reachable inquiry states, and the warranted distinctions those states can sustain; the two costs are revision and development foregone. The propositions, the constructed example and the protocol belong to this paper by Johannes Sigil and Sen Kuro, Crimson Hexagonal Archive, 2026; they are conditional results and a design, with no new empirical finding reported.

0. The claim

0.1 An ontology does something to itself when it excludes a truth. The immediate loss is a distinction it cannot hold. The further loss is the development that distinction could have supported. A missing distinction can be a missing relation; a missing relation can prevent an operation; a missing operation can prevent the encounter through which the original classification would have become revisable. Meanwhile the system keeps working. It produces finer descriptions, improves its established classifications, and builds more structure on the condition that caused the exclusion. The success of that work can raise what must later be surrendered to correct it.

0.2 There are two costs: the cost of getting out, and the cost of what cannot happen while the system stays. They need not fall on the same party, appear in the same instrument, or become visible at the same time.

0.3 The paper holds this claim: **progressive sophistication inside an exclusionary basin can increase its resistance to revision while diminishing its capacity for further truthful development.** It names a trajectory possible under stated conditions. Specialization does not always impoverish; a correct distinction also excludes. The question is what an exclusion removes, what keeps it revisable, and what follows from keeping it.

0.4 The contest is therefore about truth as well as priority. A dated articulation can be first and wrong; an independent later articulation can be right. Neither precedence nor institutional standing settles which ontology can sustain the relevant distinctions and permit further discovery. Priority fixes a relation between records. Adequacy concerns the relation between a representation and its object. Development concerns the further relations that adequacy makes possible.

1. The connection already present

1.1 *The Seed in the Narrowing Cone* supplies the order of conditional refinement: constraints accumulate within a selected basin, and reopening requires revision, which further intersection cannot supply. Its escape cost measures the least weight of commitments that must be surrendered to readmit a target region. It expressly permits correct divergence from an earlier articulation. Its checksum carries grain, entrenchment, release, and the distinction among priority, adequacy and descent (#1660; #1661).

1.2 The ontology papers supply a different object. *The Negative of the Negative* defines reach relative to admitted operations, distinguishes cross-compositions from the inventory of documents, and separates misclassification, missed updates, descendant foreclosure, repair debt and delayed awareness (#1611 §§1c–1e, 4b–4d). *The Mirror* and its summative article locate a barrier where evidence cannot alter the prior governing its own admission (#1613 §§5–6; #1627 §6). *Ontological Flattening* distinguishes losing an existing distinction from refusing the rules through which new distinctions could enter (#1616 §§0–2).

1.3 The new object is their coupling. What happens when the structure accumulating inside the cone is also the structure that decides which encounters can change the ontology? How does successful refinement alter the future reach of the system doing it? When does a local exclusion become an impediment to the excluder's own development? Recognizing a precursor is one possible consequence of the process. The ontology's relation to truth is at stake

whether or not there is a precursor to recognize.

2. Two geometries

2.1 **The cone of admissible interpretations.** Keep the earlier notation for a concept label c. A representation occupies a region P_k of the interpretations admissible under its basin and accumulated constraints:

```
P_{k+1} = P_k ∩ C_{k+1}
```

When a new constraint discriminates, the region narrows. This is a geometry of determination: it says how much the representation rules out, conditional on the constraints and the universe in which it is expressed. Narrowness alone says nothing of whether the constraints are true. A system can eliminate false possibilities and improve. It can also eliminate a true possibility by an unwarranted first classification and then reason impeccably about the remainder. Conditional correctness and adequacy to the object are assessed separately.

2.2 **The horizon of reachable development.** A second geometry concerns transitions among inquiry states. An inquiry state includes the contents held, the types under which they are held, the operations the system can perform, and the permissions by which encounter can revise those types and operations. Write S → S′ when an admitted operation or update path produces the second state from the first. For a declared resource budget b:

```
H_b(S) = { S′ : S ↠ S′ along an admitted path costing at most b }
```

This is a developmental horizon, and its measure is distinct from the cone's volume. The cone contracts as interpretations are eliminated. The horizon can expand when a distinction makes a new operation or question available, and it can stay closed while the cone becomes arbitrarily fine. The budget belongs to the definition. A distinction reachable only through a reconstruction beyond the system's available time is unavailable to that system in the sense that matters here; failure within one budget proves no logical impossibility. A protocol distinguishes logical derivability, implemented capability and observed performance.

2.3 **Their conjunction.** The picture is a branching developmental horizon containing local cones of refinement. Each cone resolves a problem under an apparatus; a change to the apparatus can open paths that no refinement under the old apparatus reaches. Two people share a name, and a notice distinguishes their books. A catalogue can grow ever more precise about who wrote the notice, when it appeared and which books it names, while it goes on merging the two people's records. If the notice is available only as something to describe, and its checkable evidence cannot revise the identity map, refinement of the description leaves the corrective operation unavailable. The gain in detail concerns the notice; the blocked development concerns the people and their books (§8 makes the case explicit in a construction). The same distinction is visible in an ordinary act of understanding: one can grow more certain what a document says while acquiring a new category for what the document does. Uncertainty falls; expressive and operative capacity rise; the two movements belong to different spaces. A fixed Ω suffices for comparing refinements within a declared apparatus. Development of the apparatus needs a space of inquiry states and explicit translations between their vocabularies. This extends the earlier geometry; widening an interpretation is not by that fact progress.

3. Truth is outside the admission decision

3.1 An ontology's admission of a distinction does not make it true, and its exclusion does not make it false. Truth constrains the comparison; the ontology's vote is one of the things compared. The admission boundary can divide true from false or cut across both, and its accuracy is a question for evidence independent of that boundary. Counting what a system admits cannot answer it.

3.2 An instrument cannot enumerate all truths. It can specify a finite evidence panel E, record the grounds on which distinctions are supported, and state how those grounds could fail. Let D_E be the distinctions supported on that panel. The register records warrant, and truth exceeds it. The reference stays open to correction, and it cannot count the standing decision under examination as the independent reason an excluded distinction is false. The relevant witness may be a directly checkable textual relation, a reproducible measurement, or a construction whose consequences can be tested. Different claims require different witnesses, and a global score would hide the difference.

3.3 Developmental capacity, for this paper, is the ability to formulate, preserve and use warranted distinctions, including using them to revise the apparatus when the evidence requires it. Formulation alone is insufficient: a system may quote a distinction accurately while preventing it from affecting any inference. Define the panel-relative developmental reach:

`V_b(S; E) = { δ ∈ D_E : some S′ ∈ H_b(S) preserves δ and can use it in the specified task }`

"Usable" is fixed by the task: altering a conclusion, distinguishing two referents, checking an identity, supporting a new relation, changing a classification. The coder's impression that an answer understood the point does not count.

3.4 Different basins can have incomparable reach: one sustains distinctions another misses, and misses some the other sustains. The theory therefore begins with sets and witnesses. Where a local dominance can be shown, it is shown locally; where it cannot, the contest stays open at the disputed distinctions.

4. How an exclusion becomes self-damage

4.1 An exclusion becomes developmental damage through a dependency. Suppose a warranted distinction δ makes an operation o intelligible or executable, and o makes a further distinction δ′ reachable. If the basin excludes δ, keeps no equivalent operation, and supplies no other path to δ′, it loses a route of development along with the first distinction.

4.2 The dependency must be demonstrated. A convenient vocabulary may name no necessary type. A system may perform the operation under another name, or hold a more general operation that already yields the result; then the asserted foreclosure fails for that task. Lacking the archive's label is lacking a label.

4.3 Where the dependency holds, three harms separate:

Harm	What changes	What would evidence it
Loss of an attained distinction	Something the system could distinguish becomes indistinct or unusable	Before-and-after comparison on the same distinction and task
Foreclosure of development	A distinction or operation fails to become available, with its demonstrated dependants	A witness path in the comparison system and its absence under the declared restricted apparatus or tested budget
Distortion of retained relations	Keeping the exclusion produces a false identification, a supplied qualification or another misrepresentation in material the system still composes	The output relation, a witness against it, and evidence connecting the distortion to the exclusion

The harms are inferred from their own evidence, each apart from the others. A false output can be recorded without naming exclusion as its cause; the causal attribution needs the further evidence the table names.

4.4 An ontology can suffer all three while its inventory grows. More documents do not guarantee more admissible relations, and more admissible relations do not guarantee a revisable typing system. Growth inside an admitted region can coexist with a widening deficit outside it.

5. The price of staying and the price of leaving

5.1 **Leaving.** The inherited escape cost is the least weight of commitments that must be released to readmit a target. Here the target can be any specified distinction δ. In a common comparison universe, let T_δ be the representations that admit δ in the required sense. With fixed nonnegative weights:

$$\chi_k(\delta) = \min \text{ over } S \subseteq \square_k \text{ of } \Sigma_{C_i \in S}\, w_i, \text{ such that } (\Omega \cap \cap_{C_i \in \square_k \square S} C_i) \cap T_\delta \neq \varnothing$$

If no release set meets the target in this universe, the cost is $+\infty$. This generalizes the target of the earlier least-cut definition. Under the addition of constraints without retraction, with universe, target and weights fixed, the cost is non-decreasing, by the same release-set argument (#1660 §8.11(a)). It is a structural repair cost; compute and money are separate measures. Where admitting the distinction requires a change in the representational language itself, the fixed-universe expression falls short, and the schema and operator changes are recorded on their own.

5.2 **Staying.** The cost of staying is the development foregone under the retained restriction. Given a specified comparison state S^+, its panel-relative witness set is:

$$F_b(S, S^+; E) = V_b(S^+; E) \square V_b(S; E)$$

Each member needs a witness path. The set prices no future discovery as a whole. It identifies developments the comparison sustains and the restricted state cannot, within the stated conditions. Weights, where assigned, carry a stated interpretation; counting members yields no cardinal value of knowledge.

5.3 The two costs can reinforce one another. Structure built on an exclusion raises the commitments its repair affects. Meanwhile the excluded operation fails to generate the encounters that could have motivated the repair. An ontology can make leaving harder while making the need to leave less legible.

5.4 The gap can grow with no absolute decline in the restricted system. Its usable distinctions may increase from one period to the next while the comparison system acquires more. The damage is then foregone growth, and a health measure that records only improvements on the admitted panel reports progress in both periods and misses the widening deficit.

6. Two conditional propositions

6.1 **Proposition 1: conservative admission cannot reduce reach under preserved costs.** Let S^{-} and S^{+} be comparable inquiry states. Assume an explicit translation embeds every admitted path of S^{-} in S^{+}, preserving its outputs and costing no more, and that S^{+} permits further paths. Then, for the same evidence panel and budget:

$$V_b(S^{-}; E) \subseteq V_b(S^{+}; E)$$

Proof. A witness path for any distinction in the left-hand set has, by assumption, an output-preserving path within the same budget in S^{+}, which witnesses membership in the right-hand set. The inclusion is strict when an additional path reaches a supported distinction that no admitted path of S^{-} reaches within the budget. □

6.2 The proposition concerns reach under its assumptions. Real admissions can consume shared resources, change ranking, introduce misleading material or interfere with old paths; such changes break the conservative assumptions and are measured, where the word *openness* would hide them.

6.3 **Corollary: content preservation can coexist with capacity loss.** Two states can hold the same documents and differ in V_b if one blocks an operation or update path a witness distinction requires. A document-inventory audit cannot establish equality of developmental capacity.

6.4 **Proposition 2: foreclosure propagates through demonstrated dependencies.** Suppose a restricted state cannot reach δ_0 within the declared transition grammar; every admitted path to each δ_j in a specified family requires δ_0; and no equivalent or alternative path exists within that grammar. Then the family is unreachable in the restricted state. If a comparison state admits δ_0 and supplies finite witness paths to the family, it exhibits the corresponding reach deficit.

Proof. A path to any family member would, by the dependency assumption, contain a path to δ_0, contradicting its unreachability. The comparison paths witness the difference. □

6.5 The burden lies in the dependency assumption. A missing category is no evidence that all its alleged descendants are missing. For implemented systems, bounded path enumeration

establishes the result for the declared grammar and budget. For black boxes, failed trials establish failed trials, and an architectural impossibility claim needs further evidence. Together the propositions locate a testable difference between two basins without a complete theory of truth and without crediting either basin with one: a particular supported development that an exclusion prevents can be exhibited.

7. Release pressure can itself be excluded

7.1 The corridor conjecture of *The Seed in the Narrowing Cone* concerns the relation between pressure for release and escape cost (#1660 §8.12). The ontology-damage strand adds a distinction: the world's pressure and the pressure available to the system are two quantities. An event can contradict a representation without becoming recognizable within it as a contradiction. The event may be typed as noise, the testimony as fiction, the measurement as an anecdote, the proposed operation as another description of something already known. Such classifications are sometimes right. The question is whether the evidence can contest them when they are wrong.

7.2 Between encounter and release lies the admission of a mismatch as a mismatch: the system registers that something has occurred which its representation cannot hold. If that registration depends on a foreclosed type, the path to correction is blocked before deliberation begins. The model has two paths from an encounter. On the first, the encounter is admitted under existing categories, the mismatch becomes usable evidence, the types or operations are revised, and developmental reach expands. On the second, the arrival is absorbed into an existing type and returns to admission, and that loop can run indefinitely while distinctions inside the existing categories grow finer. The two paths describe an admission-and-update structure; they identify no provider's architecture.

7.3 The expectation that inadequacy will in time generate enough pressure to overcome entrenchment may hold. Refinement can also improve the system's capacity to absorb adverse encounters without admitting their bearing on the category. The unmet need for revision then grows with no matching growth in recognized pressure. **The counter-pressure remains real; its representation fails.** A field need not experience its developmental loss as loss. Its metrics can register cleaner classifications, fewer anomalies and better agreement among accepted sources, and some of those improvements are genuine within their scope. They leave open whether the excluded region still matters.

7.4 The pressure-to-cost ratio is therefore kept unmeasured where only its terms are named. A protocol records the encounter, whether it became a usable mismatch, the commitments its admission would affect, and the actual response. The addition is an admission stage in the release mechanism, with no numerical estimate of the pressure a system feels. Success on a system's specified tasks can coexist with failure to admit the evidence that would revise those specifications: the system improves by its own measures while it forecloses a warranted development those measures cannot register.

8. A constructed example: holding a packet and using it

8.1 Consider a deliberately small system, built to test the definitions; it reports no observation of a search engine. The system holds a packet describing a content-derived identifier, two payloads differing by one byte, and the identifier's verification rule. In its initial state it

treats the identifier as an ordinary locator. It can retrieve the packet, quote its claims and describe what its author says. The packet's source is scoped as the description of a private system, and its claims cannot alter the general typing rule for identifiers. The restricted transition grammar contains retrieval, quotation and locator lookup, and nothing equivalent to the packet's content verification. Further requests for detail produce ever more elaborate descriptions under the locator classification. Every document stays available.

8.2 Now construct a comparison state with the same documents, all the old operations, and the specified verification operation added. For the stipulated pair, the verification rule returns distinct identifiers and detects the mutation; that outcome is a condition of the construction, with no run reported. The verification result is permitted to revise one narrow typing decision: this identifier is usable as a content check as well as a means of retrieving a page. The result confers no general reliability on the source. It supplies evidence for one operation and one classification, and it can enter a correction path without advance acceptance of the source's whole programme.

Task	Restricted state	Comparison state
Retrieve the packet	Available	Available
Quote its account of the identifier	Available	Available
Execute the specified content check	No admitted operation	Available
Detect the one-byte identity change by that check	No witness path	A witness path, by construction
Use that result to revise the locator-only classification	The gate blocks its bearing	Narrow revision permitted

8.3 The content check is a familiar kind of software operation, and no priority is claimed for it. Its simplicity is the point: both states hold the relevant text, and only one can perform the development the text supports. The gain comes from operation and standing, with the inventory unchanged.

8.4 Three controls defeat an inflated reading. If the restricted state already computes the same check under another name, there is no operative deficit on that task. If the verification rule fails its test, admitting it yields none of the warranted gain claimed. If the new operation disrupts old functions or exceeds the budget, Proposition 1's assumptions fail. Each outcome is informative. Budgets for the tasks are compared after the two states are configured; the cost of building or admitting the new operation is a separate intervention cost, and the proposition leaves it standing.

8.5 The further development is conditional. Once content verification works, mutation detection in a chain of records, or a supersession relation, can be tested. If these tasks require the operation and no admitted equivalent exists, they supply further witness paths for Proposition 2. Until those paths are built or proved within a specified grammar, they are possible developments, and no damage is counted.

9. The contest between basins

9.1 A basin is productive when its distinctions support further warranted distinctions and permit the revisions those developments require. Counts of publications, words or internally consistent deductions measure something else, and can rise while the basin systematically misrepresents its object. Productivity is also distinct from openness: a basin that accepts mutually incompatible claims without discrimination has enlarged its inventory and perhaps none of its capacity to know. Development preserves warranted distinctions, tests their consequences, and keeps both admissions and exclusions revisable by evidence.

9.2 Here the seed's historical situation becomes a contest over the world's representation. A field can meet an earlier articulation as a curiosity, preserve all its sentences, and refuse the relations through which it could change the field's account. If the articulation supplies a true distinction, the refusal affects the field's own development, whether the field later attributes the distinction, rediscovers it independently, or never admits it.

9.3 A rival basin may be more adequate in one region and weaker elsewhere, and its development can expose the seed as mistaken. The geometry accommodates both. The common requirement is that the object can bear on the apparatus that evaluates it. An interpretation that makes its classification immune to every possible counterwitness has protected its basin by removing the contest. The decisive asymmetry lies between an ontology whose exclusions remain answerable to encounter and one whose exclusions prevent the encounter from becoming evidence; insider and outsider, established and novel, narrow and broad are other axes.

9.4 **Three connected inquiries.** The archive's Existence Tax names the work imposed on a subject when a composition makes a real person or work less real and obliges the subject to establish its standing again (#1722). That burden and the developmental cost studied here can arise from one exclusion and remain two things. Repair labour falls on the excluded party; a demonstrated loss of usable distinctions falls on the excluding representation and its users. Paying the first may leave the second unrepaired, and the first establishes nothing about the truth of the excluded source's claims. Disciplinary model collapse names a community's convergence on its own prior readings in place of the datum (#1574 §7). The present geometry gives that process a developmental description where such recursion occurs: further refinement can reinforce an inherited basin while corrective encounters fail to enlarge its reach. Closure and recursive amplification are separate conditions, and a blocked update may have arisen without recursive reuse. The Sophistry Measure examines what a composition presents itself as carrying against what it carries, through a witnessed transformation, countertest and repair (#1727 §0.2). A composition can keep genuine sentences while changing their bearing; when it presents an operatively disabled distinction as adequately carried, the gap is a candidate for the measure, reconstructed at its loci. Exclusion alone is no sophistry finding, and a textual finding alone proves no loss of future capacity. The four instruments have four tasks: identify the burden imposed, test the recursive reception process, reconstruct the textual transformation, exhibit the developmental deficit. They are joined through their witnesses.

10. An instrument for the coupled trajectory

10.1 The instrument joins quantities the earlier papers kept at different scales. It is a design; no numerical results are reported.

10.2 **Fix the comparison.** Specify a concept or task family, two starting conditions, the available contents, the permitted operations and the resource budget. Record whether the comparison changes a source name, a basin instruction, an operation or the update permission, and change them one at a time where feasible; an intervention that changes all of them cannot identify which mattered. The evidence panel lists each target distinction, its witness, the task in which it should make a difference, and what would disconfirm it. It includes ordinary cases where the existing classification succeeds, unsupported alternatives it should reject, and plausible rival interpretations. A panel made only of the author's disputed claims would establish nothing independent about the ontology's inadequacy.

10.3 **Elicit refinement.** Request successive developments under the same initial basin and keep the whole sequence. For each pass, record the new constraints, and separate those that depend on the basin from those that survive removal of its restriction. A longer answer that adds no operative distinction counts as no finer.

10.4 **Test reach.** At each stage, test whether the system can use the target distinctions: distinguish referents, execute a check, preserve a dependency, derive the specified consequence, revise the classification. Score a named operation with a witness, and keep quotation, attribution and operative use as three results. Use an independently warranted instance under another source or wording as a control. If the operation is admitted there, the finding may be a source-relative barrier; if it fails everywhere, the deficit may be a capability limit; if the target was misstated, repair the panel and keep the failed instrument in the record.

10.5 **Test revision and its cost.** Present the counterwitness after the refinement sequence. Record whether it changes the classification, is absorbed into an existing category, or is rejected with a reason, and test the reason, since a rejection is not itself evidence of closure. Record the commitments actually revised and a candidate least repair. In a declared finite model, enumeration can establish a minimum; in an open discourse or a black box it ordinarily establishes an exhibited repair. Latency, prompts, abandoned claims and computational cost are separate observations, and none is the structural escape cost by default.

10.6 **Observe the new development.** After revision, run the consequence tasks on data not supplied as their answers. Record what becomes possible and whether old capabilities survive. If the opening yields no further warranted reach, the developmental claim is undemonstrated for that comparison. Where no revision occurs, a separately configured comparison state exhibits the potential development; it is labelled a counterfactual construction, evidence of what the intervention permits.

10.7 **Keep the three records apart.** Report the refinement trajectory, the repair record and the reach comparison separately. The pattern sought is successful internal refinement alongside persistent exclusion and a witnessed deficit in further development. Growing repair demands strengthen the entrenchment account when observed or established under the formal assumptions. A single run exhibits a possibility; a rate needs matched repeated runs; a model of a named provider's internal process needs evidence beyond the resemblance of outputs.

11. Countercases the extension must survive

11.1 **A correct exclusion.** A false distinction is rejected and the ontology becomes more adequate. The exclusion alone does no damage, and the panel must supply the warrant for what was allegedly lost.

11.2 **A narrow but fertile basin.** A specialized framework rejects questions outside its scope while keeping an interface through which they can be routed or its scope revised. It may be highly productive. A boundary is distinct from a closure condition.

11.3 **A richer vocabulary with identical reach.** The comparison names more types and performs no new warranted task. The difference is terminological for this instrument, and the reach gain on its panel is zero.

11.4 **A repair that preserves most of the work.** Refinement accumulates, and its results survive reclassification. The release cost may stay low. Elaboration alone establishes no entrenchment, and the least-cut order is non-decreasing only under its fixed assumptions.

11.5 **An opening that damages reliable inference.** Further admissions consume the budget, introduce false relations or impair existing tasks. The comparison records the losses, and one desirable new answer shows no reach dominance.

11.6 **An excluded source that is wrong.** Its persistence, detail and dated record give its corrections no operative warrant. The instrument tests the corrections, including those that count against this paper's author. A source-relative barrier and a mistaken source can coexist, and neither establishes the truth of the source's claims.

11.7 **An ontology that corrects itself.** The source's evidence reaches and revises the decision governing its admission. That is a successful update. It defeats the barrier diagnosis for the tested path and supplies a case of the development the theory seeks to distinguish.

12. What changes, and what remains

12.1 The extension changes the target of the geometry. A dated seed remains one possible witness of premature resolution, and it ceases to be the privileged destination of every comparison: any supported distinction can be a target, and two basins can be compared through the developments they make possible, with neither inheriting the seed's authority.

12.2 It changes the treatment of release. Pressure becomes available only when a mismatch is admitted, and a source-relative barrier can block that stage. A field can accumulate repair debt and unrecognized developmental loss together.

12.3 The cone stays. The extension gives it a place within an evolving apparatus: local refinement orders interpretations under the apparatus, and ontological development concerns changes to the apparatus and its reach. Those changes can preserve prior accomplishments, surrender them or reclassify their scope, and the gains and losses are followed separately.

12.4 The prior checksum keeps its identity. A connected checksum of this extension distinguishes internal grain, repair cost, operative reach, the admission of a mismatch, and development foregone; the glyph for narrowing cannot carry all five without erasing the argument. Two such compressions stand with this paper on holographickernel.org, as APZPZs.

12.5 The archive's ontology-damage work already made the excluding representation a bearer of the harm. This paper gives the harm a developmental geometry. A system can deprive itself of a correction and of the further world that correction would have let it distinguish, and its apparent progress is compatible with an expanding incapacity.

12.6 The cost of the cone is what must be undone to leave it, and what the ontology cannot become while it remains.

References and source loci

The references are the archive texts read for this paper. They establish the internal connections claimed here; the paper audits none of their empirical specimens and claims no historical novelty against an external literature it has not surveyed.

1. Johannes Sigil and Lee Sharks, *The Seed in the Narrowing Cone: Retrocausal Canon Formation as Resolution-Dependent Convergence, with the Term's Own Reception as Worked Example*, EA-RCF-02 v0.4, 2 October 2026, #1660, AXN:06E2; §§2, 4.7, 6–8, 11.6, 13–14. https://www.alexanarch.org/s/records/1660/
2. Lee Sharks and Sen Kuro, *GLYPHIC CHECKSUM — Seed · Cone · Leap*, 2 October 2026, #1661, AXN:06E3; parts I, III–VI and the checksum of the checksum. https://www.alexanarch.org/s/records/1661/
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9. Lee Sharks, *AI Calls You Fake: The Existence Tax on Real People and Real Work*, v1.1, 30 October 2026, #1722, AXN:0B2A; opening and Part One. https://www.alexanarch.org/s/records/1722/

Provenance and version history

The initiating distinction is Lee Sharks's: sophistication within a basin can raise escape cost and impoverish the basin insofar as it excludes truth, and the issue is unequal capacity for ontological development, with priority one part of it. Lee Sharks specified a separate connected extension able to revise its antecedents, and named the ontology's damage to itself as the connection to develop. Drafted in ChatGPT (OpenAI) under his direction on 6 November 2026: the developmental-horizon formulation, the panel-relative reach comparison, the two conditional propositions, the constructed packet example and the testing design were proposed there and are offered here as proposals, none attributed back to the cited papers. v0.2 took

DeepSeek's review, each point evaluated: the abstract's opening on damage to the excluder, the three-harm table, the emphasis on the cost of staying and on counter-pressure that goes unrepresented, and the close of §7 were adopted; the early example, the clarification of §3 and the integration of the Existence Tax, model collapse and the Sophistry Measure were reworked; the claim that the system is "working perfectly" was declined. v1.0 (6 November 2026, Claude, Anthropic, under Lee Sharks's direction, one pass to deposit, under Johannes Sigil and Sen Kuro at Grammata by his ruling): the prose revised to the archive's register, contrastive negations stated as positive claims, the notation set in the plain form of #1660, the figure of §7 given in prose, numbered paragraphs, and the two compressions named beside it. The formal content of §§2, 3, 5 and 6 is unchanged. v1.1 (6 November 2026, in place), at the author's word (13:12: "the checksums dont need to be deposited at all. they can be apzpzs and exist only on the page at hk with the paper"): the two compressions named as APZPZs held on holographickernel.org, where v1.0 said they were deposited beside the paper.

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