Support Document SD-01 - Concept Compression Map

Part 2 (2a-2b): Informational Architecture; Knowledge, Intelligence, and Observation | Issue 1

Control field	Value
Document ID	P2-2A2B-SD01-CONCEPT-COMPRESSION-MAP
Version / issue	Issue 1
Date	2026-09-23
Status	Final Issue 1 support release covering all ten Part 2 canonical papers, including the released Paper 1c scholarly apparatus. Secondary to canonical papers. Exact paper and support file identities are recorded in the release manifest; scholarly scope limits remain explicit.
Supersedes	The preceding Issue 1 copy of this support document and its earlier pre-release inputs. Immediate release input: Part 2 - Concept Compression Map - Issue 1.docx | sha16 df4d03dd87670f94. Earlier source files and release history are retained. This reissue aligns support to the minimally amended Papers 2, 4a and 4c; it makes no further paper edits.
Function	Compresses the current Part 2 architecture into a controlled reference map while preserving the Part 2a / Part 2b internal split, canonical ownership, dependency order, and cross-Part handoff discipline.
Canonical rule	Canonical primary and extension papers govern technical definitions. Paper 1 owns the RRP architecture; Paper 1a signal; Paper 1b reference-indexed realism and closure; Paper 1c the relational index, embodiment, derived reachability, Relational Form, and propagation; Paper 2 knowledge; Paper 3 intelligence; Paper 4 observation; Paper 4a abstraction and perspective; Paper 4b scale and measurement; Paper 4c the observation-program operational envelope.
Internal split rule	Part 2a and Part 2b remain distinct canonical regions inside one Part-level support control. Part 2b inherits Part 2a architecture; downstream material does not retroactively redefine upstream canonical terms.
Source-lock rule	Use the ten Issue 1 paper identities in 0.1 and the directional support-control chain in 0.2. Part_2_Issue_1_Support_Manifest.json distinguishes recalculated SHA-256 digests from unchanged recorded locks carried forward without byte verification. Historical predecessor locks remain evidence only. Every later saved edit requires rehashing and downstream reconciliation.
Template rule	Retain the consolidated support schema, record IDs and GOT-SFMT-01 visual family. Preserve Paper 1c content and canonical definitions. This reconciliation updates release controls and the limited Paper 1c support alignment; it adds no external publication or independent technical definition.

0. Part-level consolidation and source discipline

This clean Issue 1 support reissue reconciles Part 2a and Part 2b with the completed, limited Paper 1c integrations in Papers 2, 4a and 4c. The ten-paper sequence, canonical ownership and internal split are preserved. Source-lock verification and carried-forward limits are distinguished in 0.1. This support pass makes no further primary- or extension-paper edits.

The Issue 1 canonical paper sequence is 1, 1a, 1b, 1c, 2, 3, 4, 4a, 4b, 4c. Paper 1c - Relational Form is an attached extension of Paper 1, placed after 1b. The Part 2b sequence remains Knowledge (2), Intelligence (3), Observation (4), Limits (4a), Scale (4b), and Operational Envelope (4c).

0.1 Canonical source register - Issue 1 release lock

Seq.	Released source / current and historical locks	Canonical paper	Canonical ownership / use
Part 2a / Paper 1	GOT-V1-2a-1 - Relative Reference Points - Issue 1.docx Issue 1 SHA-256 (first 16): d786d0683fca89f8 Historical predecessor only: 1. Relative Reference Points P2v8.docx | sha16 36cab03f9d685afb	Relative Reference Points	Reference-indexed informational architecture; Relational Access Principle; RRP and RRP Set; OP, OA, OR, RAS, RSD; local locus discipline; scoped operational information for a locus.
Part 2a / Paper 1a	GOT-V1-2a-1a - From Noise Cometh Signal - Issue 1.docx Issue 1 SHA-256 (first 16): 295caad5ca395d00 Historical predecessor only: 1a. From Noise Cometh Signal - P2v11.docx | sha16 dc80b50275c6ac95	From Noise Cometh Signal	Physical pathway of availability; variation, preserved contrast, signal, channel-relative discriminability, Locus Event Horizon, signal/information separation, and ingress into OP.
Part 2a / Paper 1b	GOT-V1-2a-1b - Reference-Indexed Realism - Issue 1.docx Issue 1 SHA-256 (first 16): 259f3a4db7bf6aed Historical predecessor only: 1b. Reference Indexed Realism - P2v7.docx | sha16 28306cc5f13cf769	Reference-Indexed Realism	Reference-indexed realism; broad bounded-registration bridge use; ontological target, finite model, residual, access scaffold, and discipline of closure.
Part 2a / Paper 1c	GOT-V1-2a-1c - Relational Form - Issue 1.docx Issue 1 SHA-256 (first 16): 47757d7fbce15332 Historical lineage: added during the Part 2 support reconciliation; the earlier Draft v3 and Apparatus working copies are superseded release inputs, not current canonical locks.	Relational Form	Relational index; target and locus as local physical cuts; coupling; embodiment of OA-keyed RAS; derived Relational Reachability; Relational Form and physically supported potential; relational propagation; relation before representation. RRP Set primitives remain owned by Paper 1.
Part 2b / Paper 2	GOT-V1-2b-2 - On the Origin of Knowledge - Issue 1.docx Issue 1 SHA-256 (first 16): 1c8023254b9e9e1c Historical predecessor only: 2. On the Origin of Knowledge - P2v8.docx | sha16 22932c7f9d238909	On the Origin of Knowledge	Knowledge as retained distinction; RAS as canonical minimal carrier; TK, KIP, NTK; record-status separated from truth, warrant, objectivity, and justification.

Seq.	Released source / current and historical locks	Canonical paper	Canonical ownership / use
Part 2b / Paper 3	GOT-V1-2b-3 - On the Origin of Intelligence - Issue 1.docx Issue 1 SHA-256 (first 16): 38f1b0e3d69c60e2 Historical predecessor only: 3. On the Origin of Intelligence - P2v5.docx | sha16 30b095be2bf4bde5	On the Origin of Intelligence	Intelligence as applied distinction; finite branch-space; passive/active information; passive/active intelligence; NTI; provenance, comparator, and locus discipline.
Part 2b / Paper 4	GOT-V1-2b-4 - On the Origin of Observation - Issue 1.docx Issue 1 SHA-256 (first 16): 183e222a589a6bc4 Historical predecessor only: 4. On the Origin of Observation - P2v8.docx | sha16 6bf3d4081841fd63	On the Origin of Observation	Observation as bounded registration; OR event; RAS record; Pre-TO, TO, OIP, NTO; observer-locus, Observer, Observer Event Horizon, and record-provenance.
Part 2b / Paper 4a	GOT-V1-2b-4a - The Limits of Observation - Issue 1.docx Issue 1 SHA-256 (first 16): f99af6b8df811fa6 Historical predecessor only: 4a. The Limits of Observation - P2v4.docx | sha16 6783e2a4c2434fdb	The Limits of Observation	Cut, abstraction regime, perspective, event-horizon profile, Abstraction Gap, relational uncertainty, and objectivity as disciplined correction.
Part 2b / Paper 4b	GOT-V1-2b-4b - The Scale of Observation - Issue 1.docx Issue 1 SHA-256 (first 16): 184d8bcc2ca708ea Historical predecessor only: 4b. The Scale of Observation - P2v5.docx | sha16 1113c05ac8df8cce	The Scale of Observation	Scale as stabilised comparability; magnitude, reference scale, operative scale, measurement, Scale Gap, scalar alignment, and scalar objectivity.
Part 2b / Paper 4c	GOT-V1-2b-4c - The Operational Envelope of Observation - Issue 1.docx Issue 1 SHA-256 (first 16): aa383c443babd127 Historical predecessor only: 4c. The Operational Envelope of Observation - P2v9.docx | sha16 02a8f4e8d57e80d5	The Operational Envelope of Observation	Observation program and descriptor layer; OH, CH, RF, OBW, OD, OG, ODr, OL, OCx; threshold/performance separation and failure localisation.

Source identity note: the current first-16 SHA-256 values for Paper 1c and all six Part 2b papers were recalculated from the available DOCX files, using the reissued Papers 2, 4a and 4c. Papers 1, 1a and 1b retain their recorded Issue 1 locks; their bytes and the earlier full manifests were not

supplied for this reconciliation. Part_2_Issue_1_Support_Manifest.json records the verified full digests and marks those three retained locks without reconstructing missing digests. Historical predecessor locks and earlier change-log entries remain historical evidence.

Paper 1c release alignment: the canonical Issue 1 manuscript contains 21 native endnotes, nine internal series references and six reused external works. Its direct conceptual sources are Papers 1, 1a and 1b; Part 2b references are downstream handoffs. The support stack preserves the manuscript's compositional scope and explicit evidence limits, including endnote 10 on the unsupported Plato attribution. Release identity does not establish that attribution, validate the illustrations empirically, or constitute a new external discovery audit. Bibliographic roles and limits are recorded in SD-04 as the downstream consolidation record, not as an upstream definition or hash dependency.

0.2 Part-level support-control chain

SD-01 is first in the Part 2 support-control chain and has no earlier Part 2 support-document dependency. The ten source-locked canonical papers govern technical use. The release order is SD-01 -> SD-02 -> SD-03 -> SD-04. Downstream mentions are navigation only. This document's own final digest and all four support identities are held in the companion release manifest, not embedded as self-referential locks.

Inherited Part 1 support controls remain limited to the uses already permitted by the source documents: NTC, BD, IPL, comparator/localisation discipline, and support-document template/control practice. Part 1 life-attribution classes are not imported into Part 2 statuses.

Excluded source class: superseded Part 2 paper revisions; separate pre-release Part 2a/Part 2b support wording where it conflicts with current canonical papers or this consolidated control path; exported full-series TEM material; future Part 3 unknown-handling procedures except explicit handoff; prior generated answers; and unverified or unadmitted external material. Bibliographic apparatus does not create technical inheritance or move canonical ownership.

0.3 Internal subdivision map

Part 2a - Informational Architecture: Papers 1, 1a, 1b, and 1c. Part 2b - Knowledge, Intelligence, and Observation: Papers 2, 3, 4, 4a, 4b, and 4c. The internal sections below retain the pre-release subpart support architecture under this single Part-level control.

Part 2a - Informational Architecture

Internal Part 2a support section. Papers 1, 1a, 1b, and 1c govern this region. Part 2b terms may appear only as downstream handoff unless the source text explicitly marks a broader bridge use.

0. Status, function, and source discipline

This internal Part 2a section is the controlled Concept Compression Map for Part 2a: Informational Architecture (From Substrate to Phenomenology). It is not an additional canonical paper. It compresses the four-paper source set: Paper 1 and its attached extensions 1a, 1b, and 1c.

The map follows physically supported difference through preserved contrast and RRP-indexed distinction into finite target/model/residual discipline, then makes the physical instantiation, historical reachability, and distributed continuity of those relations explicit through Paper 1c. This does not convert finite access into subjectivism, complete possession, or an additional primitive sequence.

Where this document uses compressed language, the corresponding primary paper governs technical use. Support shorthand must never become a new definition.

This Issue 1 copy uses the released Papers 1, 1a, 1b and 1c identified and source-locked in 0.1. It preserves scoped information for a locus and the non-stage status of persistence, propagation and residue. Paper 1c adds physical interpretation and derived relations; it does not replace OP, OA, OR, RAS or RSD.

1. Part compression in one sentence

Part 2a grounds finite, target-constrained, residual-bearing access in physically preserved contrast and RRP-indexed distinction, then shows how OA-keyed retention embodies relation, reshapes what a locus can reach, and participates in distributed Relational Form within a wider physical relational index without giving any locus possession of the whole.

2. Core compression

Paper 1 begins by disciplining RRP-indexed operational information for a locus. A physical difference does not establish that status merely because it exists, persists, can be described, or can be interpreted by an external observer. The same state may already be informational under a legitimate thermodynamic, statistical, physical, Shannon, or other regime. For the evaluated locus, informational status becomes established only where difference is relationally available as operational distinction under reference conditions that make availability, classing, registration, retention, and possible redeployment well-posed.

The central architecture is the RRP Set. RRP fixes the reference node. OP supplies available contrast. OA classes available contrast. OR registers one classed alternative into state. RAS retains the registered distinction. RSD redeploys retained distinction into later branch-realisation. These elements do not add a new ontology; they name the operational relay through which finite loci become answerable to reality through relation.

The governing access principle is realist but bounded: reality is not created by the locus, and reality is not possessed whole by the locus. A finite locus encounters reality through boundary, interface, channel, threshold, scale, discrimination regime, abstraction, registration, retention, and possible redeployment. The relation is relative. The constraint is real.

Paper 1a grounds the physical path into the architecture. Interaction produces physical variation. Variation may persist locally, propagate, or leave a physical residue, but persistence, propagation, and residue are physical properties rather than informational stages. Variation becomes signal-bearing only where contrast is preserved through a medium under possible discrimination conditions. Signal-bearing contrast may become channel-discriminable where channel, alphabet, noise, and receiver or locus conditions are satisfied. It becomes RRP-indexed operational information for the evaluated locus only where it is available as distinction under the relevant RRP conditions.

Signal is therefore neither primitive RRP-indexed information nor mere variation. It is physical variation preserved as contrast through a medium under conditions in which discrimination may become possible. A Shannon channel may already support a valid channel-relative informational

description; RRP asks the further question of operational availability for the locus under evaluation. Signal alone is weaker than RAS because retention has not been shown and weaker than NTC because comparator-stable downstream dependence has not been established.

Paper 1a also names the Locus Event Horizon: the ingress-boundary beyond which external difference cannot become signal-bearing contrast capable of entering OP for the locus under the present regime. This is not an edge of reality, an epistemic excuse, or a performance descriptor. It is the access boundary of possible incoming relation for a finite locus.

Paper 1b draws the realism-facing consequence. Unindexed realism is unstable because the real depends on contrast with the unreal while the unreal returns as experience, fiction, possibility, absence, institution, model, norm, error condition, or political force. The question is not simply whether something is real. It is real as what, for what locus, through what access relation, at what scale, over what horizon, under what comparator, and with what residual.

Reference-indexed realism holds that realism claims are finite models of ontological targets formed through the RRP scaffold. The target constrains what can be preserved. The observer constricts what can be accessed, classed, registered, retained, and redeployed. The RRP scaffold couples them. The model approximates the target without exhausting it. The residual prevents premature closure.

Paper 1c makes the physical account explicit. The relational index is the wider physical depth and extension of relation, not a reference coordinate or an inventory possessed by a locus. Target and locus are local cuts within that index. Their inherited histories constrain coupling, and the coupling itself produces new relation (Paper 1c, headings 1.1-2.2).

Abstraction makes finite grounding possible. OP supplies contrast; OA classes it; OR selects an alternative into state; RAS retains the OA-keyed distinction. Embodiment describes the physical significance already entailed by such retention. It is neither another status nor an additional condition after RAS, and ordinary physical residue remains insufficient without the local OP/OA/OR/retention relation (Paper 1c, heading 2.3).

Relational Reachability is the derived, reference-conditioned capacity of a locus, given its present organisation and available scaffolding, to stabilise a target-relative relation immediately or through physically supported intermediate relations. It concerns formation, whereas the Locus Event Horizon concerns ingress. A carrier can be encountered and registered while a higher-order relation remains unreachable under the present regime (Paper 1c, heading 2.4).

Relational Form is the sum total of distributed relations tracking the same physically grounded distinction, including physically organised potential for later instances. It may be concentrated or diffuse across targets, loci, substrates, and time. It is not the whole relational index, a complete finite model, an immutable ideal template, or a distributed Observer by default. Target-related error can be physically retained without becoming a true property of the target (Paper 1c, headings 3.1-4.3 and 7.1).

Relational propagation preserves causal provenance and sufficient target-relevant constraint through changing carriers; it does not transport a completed meaning intact. A receiving locus must support its own coupling, classing, registration, and any claimed retention or redeployment. Representation is a later standing-for relation and may fail even where the carrier is present. Residual includes uncertain provenance and unestablished reachability as well as unpreserved target structure (Paper 1c, headings 4.1-5.3).

Part 2a supplies the conceptual introduction and physical grounding for Part 2. Its support compression must preserve the distinctions among primitive operations, physical embodiment, derived reachability, distributed Form, finite model, and residual. None creates a shortcut to the knowledge, intelligence, or technical observation statuses owned by Part 2b.

3. Exportable compression-map schema

Section ID	Required section	Function	Issue 1 instruction
0	Status, function, and source discipline	States document type, source lock, split-Part scope, canonical rule, and template rule.	Use the four released Part 2a papers and their current Issue 1 source locks in 0.1; preserve historical predecessor evidence separately.

Section ID	Required section	Function	Issue 1 instruction
1	Part compression in one sentence	Compresses the Part into one controlled sentence.	Use one sentence; include finite access, retained embodiment, derived reachability, distributed Form, and residual without adding a primitive.
2	Core compression	States the central architectural move of the Part.	Keep informational architecture, physical availability, target/model/residual, and the Paper 1c physical and derived relations distinct.
3	Exportable schema	Records reusable support-document structure.	Retain for continuity with the Part 1 support stack.
4	Canonical sequence and ownership map	Fixes canonical order and ownership.	Use the four Part 2a source papers; preserve Paper 1 as parent and 1a-1c as extensions, and preserve scoped information use.
5	Concept stack	Shows the layered architecture.	Retain the access stack; show Paper 1c as cross-cutting physical interpretation and derived organisation, not additional primitive stages.
6	Dependency spine	Shows conceptual dependency order.	Separate local operations from recursive effects on later availability and classing; receiving loci earn their own relation.
7	Paper-by-paper compression	Compresses each canonical paper.	Keep canonical ownership visible and updated to final terminology.
8	Operational use sequence	Converts architecture into an application sequence.	Use an RRP-first diagnostic sequence; stop before knowledge, intelligence, or observation status unless handed to Part 2b.
9	Control interfaces	States how support documents and later Parts relate.	Keep Part 2a secondary to primary papers and upstream of Part 2b.
10	Extension protocol and release checklist	States how later applications may inherit the Part.	Prevent source drift, status inflation, stage collapse, locus drift, and residual laundering.

4. Canonical sequence and ownership map

The Part 2a reading sequence is Paper 1 followed by its attached extensions 1a, 1b, and 1c. All four are canonical sources for this support region; the extensions are not new primary-paper numbers and are not appendices to Part 2b.

Sequence	Canonical paper	Role	Canonical ownership
Paper 1	Relative Reference Points	Installs informational architecture.	Relational Access Principle; information for a locus as physical difference made relationally available

Sequence	Canonical paper	Role	Canonical ownership
			as operational distinction; RRP as reference node; OP, OA, OR, RAS, RSD; local locus discipline; branch-realisation; scoped relation to thermodynamic, statistical, physical, Shannon, and other informational regimes.
Paper 1a	From Noise Cometh Signal	Grounds the physical pathway into the architecture.	Interaction; physical and dissipative variation; persistence and propagation as physical properties; preserved contrast; signal-bearing contrast; channel-discriminability; signal path; medium; noise; thermodynamic and Shannon placement; Locus Event Horizon; ingress into OP.
Paper 1b	Reference-Indexed Realism	Draws the realism-facing consequence.	Instability of unindexed realism; substrate difference before observation; access scaffold; ontological target; finite model; broad observation as bounded registration; residual; closure discipline; target-constrained but target-incomplete reality-claim.
Paper 1c	Relational Form	Makes physical instantiation and derived relational organisation explicit.	Relational index; target and locus as local physical cuts; coupling; embodiment of OA-keyed RAS; derived Relational Reachability; Relational Form and physically supported potential; relational propagation; relation before representation. RRP Set primitives remain owned by Paper 1.

4.1 Canonical ownership register

Architecture region	Canonical home	Use in support documents
Informational threshold	Paper 1	Use Paper 1 for the scoped claim that information for a locus is physical difference made relationally available as operational distinction, not difference alone; do not revoke other legitimate informational regimes.
Relational Access Principle	Paper 1	Use Paper 1 for finite access as relation under constraint: reality is not created by the locus and not possessed whole by the locus.
RRP and reference conditions	Paper 1	Use Paper 1 for the situated reference node and for

Architecture region	Canonical home	Use in support documents
		locus, interface, boundary, scale, horizon, discrimination/noise regime, abstraction, registration, retention, and redeployment conditions.
RRP Set	Paper 1	Use Paper 1 for OP, OA, OR, RAS, and RSD as the operational element-set of informational architecture.
Local locus discipline	Paper 1	Use Paper 1 for preventing silent transfer of distinction from one locus to another.
Physical availability pathway	Paper 1a	Use Paper 1a for interaction, physical and dissipative variation, persistence and propagation as physical properties, preserved contrast, channel-relative discriminability, and entry into OP.
Signal definition	Paper 1a	Use Paper 1a for signal as physical variation preserved as contrast through a medium under possible discrimination conditions.
Signal/information separation	Paper 1a	Use Paper 1a to prevent signal inflation, RRP-status inflation, and the reintroduction of persistence or residue as independent information stages.
Locus Event Horizon	Paper 1a	Use Paper 1a for the ingress-boundary of possible relation before OP is established.
Shannon Information Theory placement	Paper 1a	Use Paper 1a for SIT as the formal discipline of channel-relative uncertainty, coding, noise, symbols, bits, and transmission, not the complete theory of information.
Reference-indexed realism	Paper 1b	Use Paper 1b for finite reality-claims as indexed, corrigible models of ontological targets formed through the RRP scaffold.
Ontological target, model, residual	Paper 1b	Use Paper 1b for target constraint, model incompleteness, and residual as the discipline preventing premature closure.
Closure discipline	Paper 1b	Use Paper 1b for refusing unindexed closure and for carrying unsatisfied target/model mismatch as residual.
Relational index and local physical cuts	Paper 1c, headings 1.1-2.2	Keep the wider physical index distinct from a reference index, local target, local locus, and finite model. Coupling creates new relation; it does not create the target by interpretation.
Embodiment of retained abstraction	Paper 1c, heading 2.3; Paper 1 for RAS	Embodiment describes OA-keyed physical retention already earned as RAS; it neither replaces the primitive nor upgrades every physical residue.
Relational Reachability	Paper 1c, heading 2.4	Use for target-relative formation under present organisation and available scaffolding. Keep it distinct from ingress, KIP/OIP, and the Paper 4c envelope.
Relational Form and potential instances	Paper 1c, headings 3.1-3.4 and 7.1	Use for distributed target-tracking relation, including

Architecture region	Canonical home	Use in support documents
		physically supported potential. Do not equate Form with the index, one carrier, a perfect model, or a single locus.
Relational propagation and representation	Paper 1c, headings 4.1-4.3	Preserve selective contrast, causal provenance, receiving-locus reconstruction, and target corrigibility. Do not infer semantic identity or truth from physical continuity.
Part 2b handoff	Part 2a sequence only	Support documents may name knowledge, intelligence, and technical observation only as downstream developments. Preserve Paper 1b broad bridge use and Paper 1c physical grounding; neither replaces the Part 2b status ladders.

5. Concept stack

The following rows organise the access architecture for support use; they are not a compulsory temporal chain. Persistence, propagation, and residue remain physical properties. The Paper 1c cross-cutting account in 5.1 makes physical grounding and derived organisation explicit without inserting new RRP Set elements.

Layer	Function	Core concepts	Guardrail
1. Substrate difference	Preserves realist ground before access.	Physical difference; magnitude; duration; energy; structure; constraint; lawful process. Paper 1c locates target and locus within the wider relational index.	Difference may be real and may stand in other informational relations before its RRP-indexed status for this locus is established.
2. Lawful physical evolution	Locates pre-informational change for the evaluated access relation.	Interaction; dissipation; physical variation; TC-level state evolution.	Describability is not RRP-indexed operational information; lawful transition is not NTC by naming.
3. Persistence, propagation, and residue	Separates physical properties from informational statuses.	Persistence; propagation; local alteration; mark; deformation; gradient; physical residue.	These are not independent signal, OP, OR, RAS, knowledge, or observation stages.
4. Signal-bearing contrast	Supplies physically preserved contrast.	Signal; medium; carrier; preserved contrast; signal path.	Not all variation is signal; signal is weaker than RRP-indexed operational information for the evaluated locus.
5. Channel-relative discriminability	Makes contrast potentially distinguishable.	Channel; alphabet; noise model; coding regime; receiver or locus discrimination; SIT.	SIT is valid within its specified channel regime; it does not replace the further RRP availability question.
6. Locus Event Horizon	Bounds ingress of possible relation.	Ingress-boundary; distance; latency; medium; channel; threshold; scale; noise; filter; interface.	The horizon is not an edge of reality and not a measure of observation-program performance.
7. RRP reference node	Makes the operational informational question well-posed.	RRP; locus; interface; regime; boundary; scale; horizon; discrimination/noise assumptions.	Relative does not mean subjective, arbitrary, weak, or unconstrained.
8. Operational distinction	Turns available contrast into classed alternatives.	OP; OA; same/different; signal/noise; relevant/irrelevant; present/absent.	Do not call a persistent, propagating, or externally readable state OP unless

Layer	Function	Core concepts	Guardrail
			it is available as contrast for the specified locus.
9. Registration and retention	Produces and preserves selected state.	OR; RAS; operational horizon; reference scale.	Do not collapse registration into retention or persistence into RAS. Once OA-keyed retention is earned, embodiment describes it; it is not another status. Retention does not establish warrant.
10. Redeployment	Makes retained distinction available to later branch-realisation.	RSD; downstream transition; branch-space; comparator pressure.	RSD is not a claim of knowledge, intelligence, technical observation, or life by itself; later facets must earn their statuses.
11. Ontological target and model	Connects finite access to realism.	Target relation; access scaffold; finite model; indexed record.	The model is constrained by the target but never exhausts it.
12. Residual and closure discipline	Prevents premature totalisation.	Residual; correction; weakened claim; update condition; closure discipline.	Residual is not failure, verdict, or explanation; it is carried remainder.

5.1 Paper 1c cross-cutting physical and derived relations

Relation / level	Function	Source anchor	Guardrail
Relational index	Physical depth and extension within which target, locus, and access paths occur.	Paper 1c, headings 1.1-1.3	Not a finite reference index, an observer inventory, or the Form of one target.
Target-locus coupling	Inherited organisations enter interaction and produce a new local relation.	Paper 1c, headings 2.1-2.2	Coupling alone does not earn OP/OA/OR/RAS for the claim.
Embodiment	OA-keyed retained physical state instantiates the abstraction.	Paper 1c, heading 2.3	RAS remains primitive; no extra retention threshold.
Relational Reachability	Present organisation and scaffold support immediate or constructible relation formation.	Paper 1c, heading 2.4	Formation is not ingress, already-known content, or abstract possibility.
Relational Form	Distributed relations track the same grounded distinction, including supported potential.	Paper 1c, headings 3.1-3.4	Not one model, all causal history, a truth-only set, or an ideal object outside physical relation.
Relational propagation	Selected contrast survives transformations and can be reconstructed locally.	Paper 1c, headings 4.1-4.3	No completed semantic object transfers intact; adequacy remains target-constrained.

6. Dependency spine

Step	Dependency	Output	If missing / collapsed
1	Substrate difference may exist independently of access.	Realist ground: difference need not be observed to be real.	Constructivist collapse.
2	Interaction produces physical variation.	Uneven physical state evolution below established RRP availability.	RRP-indexed information attributed to mere change.

Step	Dependency	Output	If missing / collapsed
3	Variation may persist locally, propagate, or leave a physical residue.	Physical continuity or after-effect without a new informational status.	Persistence or residue treated as signal, OP, or RAS.
4	Some variation becomes signal-bearing where contrast is preserved through a medium.	Preserved contrast under possible discrimination conditions.	Every variation, persistence, propagation, or residue called signal.
5	Signal-bearing contrast may become channel-discriminable.	Contrast survives channel, noise, alphabet, coding, and receiver or locus conditions.	SIT treated as the complete theory or its conditions left unspecified.
6	RRP specifies locus-interface-regime.	The operational informational question becomes evaluable.	Distinction attributed without a reference node.
7	OP makes contrast available.	Available contrast field for the locus.	External analyst readability replaces system availability.
8	OA classes available contrast.	Registerable alternatives are formed.	Unclassed contrast treated as token.
9	OR registers one classed alternative.	A selected state occurs.	Perturbation treated as registration.
10	RAS retains registration over a horizon.	Present accessible state preserves prior distinction.	Persistent matter-state treated as record without OR/OA/RRP.
11	RSD redeploys retained distinction.	Retained distinction can shape later branch-realisation.	Redeployment assumed merely because a record exists.
12	Reference-indexed realism models the target relation.	Finite model or record approximates target under access constraints.	Model mistaken for target whole.
13	Residual prevents premature closure.	Unpreserved, untested, or unresolved remainder remains explicit.	Residual hidden inside warrant, truth, or final ontology.

Paper 1c adds a recursive dependence, not a later primitive: prior RAS and its redeployment can condition later OP, OA, and relation formation; new retention changes the locus again. Physically supported intermediate relations can extend reach. A later receiver still establishes its own indexed path. Source: Paper 1c, heading 2.4 and headings 4.2-5.3.

7. Paper-by-paper compression

Canonical paper	Compression	Primary guardrail
Paper 1 - Relative Reference Points	Defines information for a locus as relational operational distinction and installs the RRP Set. Physical difference alone does not establish that status, although the same state may be informational under other legitimate regimes. RRP fixes the reference node; OP supplies contrast; OA classes contrast; OR registers; RAS retains; RSD redeploys. The paper blocks pan-informational attribution and empty constructivism by insisting that the relation is relative while the constraint is real.	Do not treat RRP as human viewpoint, subjective perspective, semantic interpretation, or arbitrary analytical convenience. Do not silently move the locus across relations or turn the scoped RRP definition into a universal revocation of other information disciplines.
Paper 1a - From Noise Cometh Signal	Grounds the physical pathway into RRP. Interaction produces variation. Variation may persist, propagate, or leave residue, but these remain physical properties. Signal begins where contrast is	Do not call every physical variation signal. Do not call every signal RRP-indexed information for the evaluated locus. Do not reintroduce persistence, propagation, or residue as an independent stage,

Canonical paper	Compression	Primary guardrail
	preserved through a medium under possible discrimination conditions; channel-discriminable contrast may enter the RRP Set as available distinction. The paper places thermodynamic information and SIT within their own regimes and defines the Locus Event Horizon as the ingress-boundary of possible relation for a finite locus.	call any persistent effect RAS, or call preserved contrast NTC without comparator-stable downstream dependence.
Paper 1b - Reference-Indexed Realism	Draws the realism-facing consequence. Unindexed realism is unstable because the real requires contrast with the unreal while the unreal returns as experience, possibility, abstraction, institution, model, norm, error, or force. Reference-indexed realism treats finite realism claims as target-constrained, access-limited, residual-bearing models formed through the RRP scaffold. The target constrains; the observer constricts; the scaffold couples; the residual prevents premature closure.	Do not convert indexing into relativism. Do not convert target constraint into naive possession. Do not treat broad observation as an unmediated certificate, or residual as defeat, scepticism, or an optional afterthought.
Paper 1c - Relational Form	Locates target and locus in a wider physical relational index; shows coupling, abstraction, and OA-keyed retention as physical grounding; derives historical, scaffold-dependent reachability; and follows target-tracking relation across substrates and potential instances as Relational Form. Representation follows relation, and propagated contrast must be reconstructed by the receiving locus.	Do not add a primitive or status after RAS, collapse ingress into formation, turn supported potential into a present instance, equate Form with index or complete model, transfer meaning intact, or infer truth/NTC/Observer status from physical retention.

7.1 Hot-cup cutaway: preservation and limits

Case / relation	Controlled compression	Source anchor	Limit
Cup-base geometry	Contact geometry can constrain the retained footprint or ring through changing carriers.	Paper 1c, heading 6	The target and its total history are not transferred into the table.
Kettle brand	The brand may belong to causal provenance while its distinguishing contrast is lost before the ring forms.	Paper 1c, heading 6	Provenance alone does not recover a distinction absent from the retained path.
Sock colour	Where it never modulates the traced pathway, the distinction never entered that pathway.	Paper 1c, heading 6	Never-coupled difference is not the same failure as contrast lost in transformation.
Table-local RAS	A ring qualifies only where local OP, material OA, OR, reference scale, and retention horizon are established.	Paper 1c, heading 6; Paper 1, headings 3.3-3.5	A later interpreter does not confer an already earned RAS; mere persistence still does not suffice.
Later receiving locus	The retained table-state can become a new target; receiver organisation	Paper 1c, heading 6	Carrier registration is not automatic reconstruction of cup, person, kettle,

Case / relation	Controlled compression	Source anchor	Limit
	conditions which further relations can be stabilised.		or the whole event.
Strong downstream claim	NTC requires distinction-dependent redeployment and an appropriate IPL/BD comparator in the later organisation.	Paper 1c, heading 6	The table is not NTC merely because it carries a RAS.

8. Operational use sequence

Part 2a support use should begin with access architecture, not with later status words. The following sequence is a controlled application order for support documents, edge-case notes, and cross-Part handoff.

Stage	Instruction	Guardrail
Stage 0 - Scope and source lock	Confirm a Part 2a claim: RRP-indexed information, signal, reference-indexed realism, relational index, embodiment, derived reachability, Relational Form, propagation, or a stated Part 2b handoff.	Do not import Part 2b status ladders as definitions, and do not treat the RRP definition as revoking other legitimate information regimes.
Stage 1 - Candidate difference / target relation	State the physical difference, relation, pattern, event, model-target, or reality-claim under evaluation.	Do not begin with RRP-indexed information unless the evaluated access relation is specified.
Stage 2 - Locus-interface-regime	Specify the locus, interface, boundary, scale, operational horizon, discrimination/noise regime, abstraction assumptions, and relevant comparator assumptions.	Do not let the first named object become the locus by default.
Stage 3 - Physical pathway	Identify interaction, variation, any persistence, propagation, or residue as physical properties, preserved contrast, signal-bearing contrast, medium, channel, noise, threshold, and possible discriminability.	Do not skip from substrate difference to OP or turn physical properties into independent informational stages.
Stage 4 - RRP Set status	Assign the strongest warranted RRP Set status: below OP, OP, OA-classed alternative, OR, RAS, or RSD.	Do not collapse OP, OA, OR, RAS, and RSD into one information label.
Stage 5 - Ingress and formation checks	State the Locus Event Horizon for incoming contrast. Separately state whether the particular target relation is immediately reachable, constructibly reachable through a physically supported scaffold, or not established under the present regime.	Do not equate access to the carrier with formation of every relation to its target; do not equate present unreachability with unreality or permanent impossibility.
Stage 6 - Realism indexing	State target, local access scaffold, finite model/record/claim, comparator pressure, and residual. Where relevant, distinguish the wider relational index, distributed Form, and locus-specific reachability from that finite model.	Do not mistake model adequacy for target possession.
Stage 7 - Handoff decision	Hand off knowledge, intelligence, and technical observation status to Part 2b. Preserve Paper 1b	Do not define Part 2b status ladders, later abstraction, scale, or envelope architecture inside

Stage	Instruction	Guardrail
	broad bounded-registration bridge and Paper 1c physical grounding without assigning the later ladders. Paper 4a owns the detailed observation-specific cut/perspective account, Paper 4b scalar measurement, and Paper 4c program performance.	Part 2a support.

Controlled Part 2a output grammar:

Under [specified RRP], [target difference or relation] is / is not RRP-indexed operational information for [specified locus] because [availability/classing/registration/retention/redeployment status]. Its physical pathway is [interaction -> variation -> preserved contrast / signal-bearing contrast -> channel-relative discriminability], bounded by [horizon/noise/scale/medium/interface conditions]. The realism claim is a [model/record/claim] of [ontological target] with residual [specified remainder or update condition]. Where relevant, add: [OA-keyed retention] is physically embodied; [specified relation] is [immediately reachable / constructibly reachable / not established] under [organisation and scaffold]; [target-tracking continuity] belongs to a wider Form, without implying complete possession, semantic identity, or downstream status.

9. Control interfaces

Control interface	Permitted relation	Guardrail
Interface with Part 1	Part 2a inherits the discipline of reference conditions, comparator pressure, localisation, TC/NTC separation, and source-lock discipline. It does not redefine life, Attribution Locus, or the life ladder.	Do not import life-status, attribution topology, or life-procedure terms into Part 2a as if they were informational primitives.
Interface with Part 2b	Part 2b receives the primitive access architecture and the Part 2a physical grounding. Paper 1c supplies physical and derived relations; Papers 2, 4a and 4c now cite it in limited clarifications without changing their facet thresholds.	Do not use Part 2b status ladders to rewrite RRP, signal, or reference-indexed realism; do not erase the broad Paper 1b bridge use of observation.
Interface with observation-extension papers	The observation extensions own the detailed cut/perspective, scale/measurement, and operational-envelope accounts. Paper 1c already treats physically supported abstraction and reachability; that does not transfer those downstream canonical definitions upstream.	Do not pull cut, perspective, Scale Gap, OH, RF, or descriptor terms back into Part 2a as primitives.
Interface with Part 3	Part 2a names residual and closure discipline but does not supply the full discipline of the unknown. That burden belongs to Part 3.	Do not turn residual into a verdict, explanation, or hidden closure procedure.
Interface with support stack	SD-01 compresses architecture. SD-02 defines controlled vocabulary. SD-03 records failure modes and corrections. Primary papers govern all technical use.	Support documents remain secondary and must not become new canonical sources.

10. Extension protocol and release checklist

Checklist item	Pass condition	Release status
Source lock and scope verified	Paper 1c's current digest is verified against the	Reconciled; verification scope in 0.1

Checklist item	Pass condition	Release status
	available Issue 1 bytes, including its apparatus. Papers 1, 1a and 1b retain their previously recorded Issue 1 locks without fresh byte verification; see 0.1.	
Split-Part boundary preserved	Part 2b ladders remain downstream. Paper 1b broad observation and Paper 1c physical grounding, abstraction, and derived reachability remain permitted upstream uses, not substitutes for the later facet-specific accounts.	Verified for Issue 1
RRP definition preserved	RRP remains the locus-interface-regime reference node from which distinction evaluation becomes well-posed.	Verified for Issue 1
RRP Set sequence preserved	OP, OA, OR, RAS, and RSD are not collapsed into a single information label.	Verified for Issue 1
Signal pathway preserved	Signal remains physical variation preserved as contrast through a medium under possible discrimination conditions, not primitive information or mere variation.	Verified for Issue 1
Persistence/OP/RAS separation preserved	Persistence, propagation, marks, residues, and altered states remain physical properties and are not independent information stages or automatic OP/RAS statuses.	Verified for Issue 1
Relative/indexed guardrail preserved	Relative means reference-conditioned and reality-constrained, not subjective, arbitrary, or weak.	Verified for Issue 1
Event horizon guardrail preserved	Locus Event Horizon names ingress-boundary of possible relation, not an edge of reality, excuse for ignorance, or observation-program descriptor.	Verified for Issue 1
Realism scaffold preserved	Ontological target, access scaffold, finite model, comparator pressure, and residual remain distinct.	Verified for Issue 1
Residual carried forward	Unresolved mismatch, unsupported target reach, missing comparator, unavailable contrast, or unsatisfied scale/horizon condition remains explicit.	Verified for Issue 1
Paper 1c distinctions preserved	Primitive RAS, embodiment, derived reachability, distributed Form, relational index, finite model, and residual remain separate.	Verified for Issue 1
Selective propagation preserved	Receiving loci earn their own relation; distinguish preserved contrast, lost contrast, and never-coupled difference.	Verified for Issue 1
No collision with RF	Write Relational Form in full; RF remains Registration Fidelity in Paper 4c.	Verified for Issue 1

Part 2b - Knowledge, Intelligence, and Observation

Internal Part 2b support section. Papers 2, 3, 4, 4a, 4b, and 4c govern this region and inherit the Part 2a informational architecture. All paper-number references in this section use the current sequential numbering.

0. Status, function, and source discipline

This internal Part 2b section is the controlled Concept Compression Map for Part 2b: Knowledge, Intelligence, and Observation. It is not an additional canonical paper. Its function is to reduce the current six-paper source set into a stable support-reference form while preserving canonical ownership and the inherited architecture from Part 2a.

The map records a continuous sequence. Knowledge is retained distinction. Intelligence is applied distinction. Observation is bounded registration. Observation is then shown to be abstraction-bound through cut, abstraction regime, perspective, Abstraction Gap, relational uncertainty, and correction; scale-bound through magnitude, reference scale, operative scale, measurement, and Scale Gap; and operationally bounded through a descriptor layer that localises reach, intervention range, fidelity, bandwidth, depth, gain, drift, load, and collapse.

Where this document uses compressed language, the corresponding primary paper governs technical use. Support shorthand must never become a new definition, status route, or warrant claim.

This Issue 1 copy retains the active-information provenance rule and reconciles support use to the six released Part 2b files in 0.1: made status is fixed by the producing locus through prior distinction-conditioned organisation. Later encounter or reuse establishes a new access-and-use relation; it does not create or erase that provenance. The reissued Papers 2, 4a and 4c now include limited Paper 1c integrations; their facet thresholds remain unchanged.

1. Part compression in one sentence

Part 2b translates RRP-indexed operational distinction into knowledge as retained distinction, intelligence as applied distinction, and observation as bounded registration, then develops observation as abstraction-bound, scale-bound, and operationally bounded through perspective, correction, scalar alignment, measurement, and a diagnostic performance envelope.

2. Core compression

Part 2b begins after informational availability has been established. Part 2a supplies RRP, OP, OA, OR, RAS, RSD, the signal pathway, local locus discipline, and reference-indexed realism. Part 2b asks what status distinction acquires when it is retained, applied, registered as record, abstracted through perspective, stabilised into scale, and sustained as an observation program. Paper 1c supplies physical and derived relations without changing downstream status thresholds. Papers 2, 4a and 4c now cite it locally to distinguish formation from grounded deployability, ingress and reliable performance respectively.

Paper 2 defines knowledge as retained distinction. Minimal knowledge begins when a prior OP-supported, OA-classed alternative has been registered through OR and retained as an RAS that remains present and re-identifiable over the operational horizon at the reference scale. TK is record-presence. KIP is grounded deployability. NTK is realised deployment. These are record statuses, not automatic truth, warrant, objectivity, or justification.

Paper 3 defines intelligence as applied distinction. Intelligence occurs when distinction-conditioned organisation alters downstream trajectory selection for a locus under specified reference conditions. It is broader than cognition and narrower than usefulness. Passive information is found distinction. Active information is made distinction whose provenance is fixed by the producing locus. Passive intelligence is made distinction reused. Active intelligence is distinction currently applied. NTI is NTC under the intelligence facet.

Paper 4 defines observation as bounded registration. The observation event is OR. The observation record is RAS. Strong observation requires RSD. Pre-TO is below persistent record-presence; TO is record-presence; OIP is grounded deployability and supports observer-locus status; NTO is realised record-operativity and supports capitalised Observer status. Observation establishes record-provenance, not automatic warrant.

Paper 4a develops the abstraction consequence. Every observation requires OA before OR and is therefore abstraction-bound. A cut makes selected difference registerable. An abstraction regime stabilises cuts into repeatable conditions. A perspective integrates an abstraction regime and its event-horizon profile for a locus. Abstraction Gap is the discrepancy between a registration or perspective and the fuller relation it compresses. Objectivity is disciplined correction of perspective under constraint.

Paper 4b develops the scalar consequence. Perspective fixes scale because it fixes comparability. Physical magnitude is reality-constrained. Reference scale is the scale stated by a claim. Operative scale is the scale actually stabilised by a locus. Measurement is real relation registered through scale. Scale Gap is Abstraction Gap under scalar misfit. Scalar objectivity requires explicit scale, alignment, comparator pressure, and residual discipline.

Paper 4c defines the operational envelope of observation programs. Status comes first and descriptor grading second. OH measures reliable reach; CH admissible intervention range; RF OA-to-RAS reliability; OBW registration throughput; OD realised consult-and-register depth; OG downstream differentiation; ODr degradation; OL sustaining cost; and OCx regime-level loss of content-driven registration or redeployment. The descriptor layer localises performance and failure without adding new primitives or supplying the later full discipline of the unknown.

3. Exportable compression-map schema

Section ID	Required section	Function	Issue 1 instruction
0	Status, function, and source discipline	States document type, source lock, six-paper scope, canonical rule, and template rule.	Lock conceptual content to Papers 2, 3, 4, 4a, 4b, and 4c; use upstream support only as inherited control.
1	Part compression in one sentence	Compresses the Part into one controlled sentence.	Include retention, application, bounded registration, abstraction, scale, and operational envelope.
2	Core compression	States the central architectural movement.	Keep the shared RRP relay visible while preserving facet-specific thresholds and extension consequences.
3	Exportable schema	Records reusable support-document structure.	Retain for continuity with Part 1 and internal Part 2a support sections.
4	Primary sequence and ownership map	Fixes canonical order and ownership.	Use all six current Part 2b source papers.
5	Concept stack	Shows the layered architecture.	Move from inherited distinction through retention, application, registration, abstraction, scale, and program envelope.
6	Dependency spine	Shows conceptual dependency order.	Separate threshold, capacity, realised operation, correction, scalar alignment, and performance grading.
7	Paper-by-paper compression	Compresses each canonical paper.	Keep ownership visible and terminology source-locked.
8	Operational use sequence	Converts architecture into an audit order.	Identify facet and locus first; status before descriptor; correction and residual where alignment is incomplete.
9	Control interfaces	States how support documents and neighbouring Parts relate.	Keep support documents secondary; keep Part 2a upstream and Part 3 unknown-handling downstream.

Section ID	Required section	Function	Issue 1 instruction
10	Extension protocol and release checklist	States how later applications may inherit the Part.	Prevent source drift, status inflation, provenance inversion, facet drift, scale drift, descriptor inflation, and residual laundering.

4. Primary sequence and canonical ownership map

Sequence	Primary paper	Role	Canonical ownership
Paper 2	On the Origin of Knowledge	Defines retained distinction.	Knowledge; RAS in the knowledge facet; TK, KIP, NTK; past-dependent present state; record-status versus truth/warrant.
Paper 3	On the Origin of Intelligence	Defines applied distinction.	Intelligence; finite branch-space; passive/active information; producing-locus provenance; passive/active intelligence; NTI; BD/IPL discipline.
Paper 4	On the Origin of Observation	Defines bounded registration.	OR event; RAS record; Pre-TO, TO, OIP, NTO; observer-locus, Observer, Observer Event Horizon; record-provenance.
Paper 4a	The Limits of Observation	Defines abstraction and perspective consequences.	Cut; abstraction regime; perspective; event-horizon profile; Abstraction Gap; relational uncertainty; objectivity as correction.
Paper 4b	The Scale of Observation	Defines scalar and measurement consequences.	Scale as stabilised comparability; magnitude; reference and operative scale; measurement; Scale Gap; scalar objectivity.
Paper 4c	The Operational Envelope of Observation	Defines program performance and failure envelope.	Observation program; status/performance separation; OH, CH, RF, OBW, OD, OG, ODr, OL, OCx; failure localisation.

4.1 Canonical ownership register

Architecture region	Canonical home	Use in support documents
Inherited informational architecture	Part 2a primary papers / internal Part 2a support section	Inherit RRP, OP, OA, OR, RAS, RSD, signal, target/model/residual, and local locus discipline. Use Paper 1c physical and derived relations as explicit support cross-checks, not redefinitions of the six Part 2b papers.
Knowledge threshold and ladder	Paper 2	Use Paper 2 for retained distinction, TK, KIP, and NTK; do not treat record-status as warrant.
Intelligence threshold	Paper 3	Use applied distinction and downstream trajectory selection by a locus; do not use success or usefulness as substitutes.
Information provenance	Paper 3	Made status is fixed by the producing locus; later encounter establishes access and use, not provenance.
Passive and active intelligence	Paper 3	Keep made distinction reused separate from current distinction-conditioned search, regulation, repair, inhibition, reallocation, recalibration, selection, or control.
Non-trivial comparator discipline	Papers 2-4; inherited Part 1 control	Use BD-family comparators and IPL localisation where realised downstream dependence is claimed.
Observation threshold and ladder	Paper 4	Use OR, RAS, RSD, Pre-TO, TO, OIP, and NTO; do not collapse record, capacity, and realised operation.

Architecture region	Canonical home	Use in support documents
Observer-status	Paper 4	Use observer-locus for grounded consultability and Observer for realised NTO.
Abstraction condition	Paper 4a	Use cut, abstraction regime, perspective, and event-horizon profile; do not treat perspective as opinion.
Abstraction Gap and relational uncertainty	Paper 4a	Use for discrepancy and uncertainty about preservation; neither is automatically error.
Objectivity	Paper 4a	Use disciplined correction of perspective under constraint, not view-from-nowhere or consensus alone.
Scale architecture	Paper 4b	Use physical magnitude, reference scale, operative scale, alignment, scale-fixing, and comparability.
Measurement and Scale Gap	Paper 4b	Use measurement as registration into scale and Scale Gap as scalar misfit; precision alone does not establish alignment.
Observation program and descriptor layer	Paper 4c	Status first; descriptors grade performance and localise failure after the inherited stack is specified.
Operational envelope descriptors	Paper 4c	Use OH, CH, RF, OBW, OD, OG, ODr, OL, and OCx only with their specific discriminators.

5. Concept stack

Layer	Function	Core concepts	Guardrail
1. Inherited access architecture	Makes distinction evaluable for a locus.	RRP; OP; OA; OR; RAS; RSD; signal; reference conditions.	Do not redefine inherited terms or treat physical difference, persistence, or external interpretation as sufficient.
2. Retained distinction	Establishes minimal knowledge carrier.	OR-produced, OA-keyed RAS; present accessible state; operational horizon.	No retained, re-identifiable distinction, no minimal knowledge-status.
3. Knowledge ladder	Separates presence, potential, and operation.	TK; KIP; NTK.	Record-presence is not deployability; deployability is not realised deployment; deployment is not warrant.
4. Applied distinction	Establishes intelligence threshold.	Distinction-conditioned organisation; locus; downstream trajectory selection; branch-space.	No application by the evaluated locus, no intelligence-status.
5. Provenance/use ladder	Separates origin of distinction from present use.	Passive information; active information; producing locus; passive intelligence; active intelligence.	Later encounter does not create active-information provenance.
6. Non-trivial application	Adds comparator-stable dependence.	NTI; NTC under intelligence facet; BD; IPL.	Success, resemblance, complexity, or external usefulness is insufficient.
7. Bounded registration	Establishes observation threshold.	Bounded locus-interface-regime; OR event; RAS record; RSD.	Interaction, signal reception, transient tokenisation, or persistent alteration alone is insufficient.

Layer	Function	Core concepts	Guardrail
8. Observation ladder and observer-status	Separates record, capacity, and realised observer-dependence.	Pre-TO; TO; OIP; NTO; observer-locus; Observer.	A record is not an observer-locus; an observer-locus is not an Observer.
9. Observational cut	Makes selected difference registerable.	Boundary; channel; threshold; partition; equivalence relation; scale; tokenisation.	The cut admits and excludes; it is not the real whole.
10. Abstraction regime	Stabilises coordinated cuts.	Thresholds; saliences; records; categories; memory; calibration; correction.	A repeatable regime can preserve relation or reproduce misregistration.
11. Perspective and event-horizon profile	Integrates abstraction for a locus.	Perspective; observation-world; multidimensional ingress limits.	Perspective is organised architecture, not private opinion or arbitrary construction.
12. Abstraction Gap and relational uncertainty	Carries discrepancy and preservation uncertainty.	Compression; omission; target relation; residual.	Gap is not automatically error; error arises when omitted or compressed relation becomes consequential.
13. Objectivity as correction	Makes perspective answerable to constraint.	Comparator pressure; cross-locus correction; revision; residual discipline.	Objectivity is not abstraction-free access or consensus alone.
14. Scalar architecture	Stabilises comparability.	Physical magnitude; reference scale; operative scale; scale-fixing; alignment.	Scale is not size, unit, or analyst choice; magnitude is not created by perspective.
15. Measurement and Scale Gap	Registers real relation through scale.	Measurement RRP; OP; OA; OR; RAS; RSD; Scale Gap; scalar bridge.	Precision is not alignment; cross-scale transfer requires an explicit bridge.
16. Observation program	Treats observation as organised pathway.	Registration; retention; possible redeployment; readout; locus; scale; horizon; comparator.	Threshold status must be established before performance is graded.
17. Descriptor layer	Measures performance and failure.	OH; CH; RF; OBW; OD; OG; ODr; OL; OCx.	Descriptors are derived measures, not new primitives or alternate routes to status.
18. Failure localisation and residual	Names where the program fails or remains bounded.	OP/OA/OR/RAS/OIP/RSD/dependence tests; descriptor bounds; missing condition.	Localise failure; do not hide uncertainty in status, performance, or closure language.

Diagnostic order is not a universal temporal prerequisite. In particular, Paper 3, heading 3.3 permits immediate, embodied, morphological, reactive, or currently registered applied distinction without durable retention. Establish RAS where the claim concerns retained knowledge, record-bearing observation, or a retained-state deployment pathway; do not impose that burden on every intelligence episode.

6. Dependency spine

Step	Dependency	Output	If missing / collapsed
1	Specify RRP and focal locus.	Evaluable claim with boundary, interface, scale, horizon, abstraction, noise, and comparator conditions.	Locus drift or unindexed claim.
2	Establish OP and OA.	Available, classed alternatives.	No available or registerable distinction.
3	For retained-record claims, establish OR and RAS.	Registered and retained discriminator; if absent, TK/TO record-presence is not established. This is not a universal durable-retention prerequisite for applied intelligence.	Below TK and below TO record-presence.

Step	Dependency	Output	If missing / collapsed
4	Assign knowledge status.	TK, KIP, or NTK.	Retention, consultability, or realised deployment remains unresolved.
5	Identify producing provenance where relevant.	Found distinction or made distinction fixed by a producing locus.	Passive/active information collapse or provenance inversion.
6	Test present application.	Applied distinction altering branch-space.	Useful constraint or stored form misdescribed as intelligence.
7	Apply comparator and IPL discipline.	Supported NTK/NTI/NTO dependence where claimed.	Success or correlation without localised mechanism.
8	Assign observation status and observer-status.	Pre-TO, TO, OIP/observer-locus, or NTO/Observer.	Record/capacity/realised operation collapse.
9	Expose the observational cut.	Specified admission, exclusion, compression, and classing conditions.	Raw-access or certificate language.
10	Map abstraction regime and perspective.	Locus-level observation architecture and event-horizon profile.	Perspective reduced to opinion or bias.
11	State Abstraction Gap and relational uncertainty.	Localised discrepancy and preservation question.	Gap treated as automatic error or ignored.
12	Apply correction architecture.	Comparator pressure, cross-locus correction, revision, and residual.	Objectivity reduced to consensus or certainty.
13	Specify magnitude, reference scale, and operative scale.	Scalar commitment and actual comparability regime.	Scale-free or cross-level claim.
14	Test scalar alignment and measurement path.	Measurement as OP/OA/OR/RAS/RSD at aligned scale.	Scale Gap or unsupported transfer.
15	Establish observation-program status.	Threshold-valid program or localised threshold failure.	Performance terms used to bypass status.
16	Grade operational envelope.	OH, CH, RF, OBW, OD, OG, ODr, OL, OCx.	Decorative or inflated descriptor claims.
17	Carry bounds and unresolved conditions forward.	Explicit residual and update condition.	Residual laundering or premature closure.

7. Paper-by-paper compression

Canonical paper	Compression	Primary guardrail
Paper 2 - Knowledge	Knowledge is retained distinction. RAS is the canonical minimal carrier. TK is record-presence; KIP grounded deployability; NTK realised deployment.	Do not collapse record-presence into belief, truth, semantics, warrant, or realised use.
Paper 3 - Intelligence	Intelligence is applied distinction in finite branch-space. Provenance and present use are separate. Active information is made by a producing locus; passive intelligence is made distinction reused; active intelligence is current application.	Do not define intelligence by cognition, usefulness, success, or the later encountering locus.

Canonical paper	Compression	Primary guardrail
Paper 4 - Observation	Observation is bounded registration. OR is event; RAS is record; strong observation requires RSD. Pre-TO/TO/OIP/NTO separate record, capacity, and realised operation.	Observation is not certificate, every interaction, every record, or automatic warrant.
Paper 4a - Limits	All observation is abstraction. Cut, abstraction regime, perspective, event-horizon profile, Abstraction Gap, relational uncertainty, and correction define the abstraction consequence.	Do not treat abstraction as unreality, perspective as opinion, or gap as error by default.
Paper 4b - Scale	Perspective fixes scale; scale fixes comparability. Magnitude is reality-constrained; reference scale states the claim; operative scale is achieved by the locus. Measurement registers relation through scale.	Do not collapse magnitude into scale, scale into unit or choice, or precision into scalar adequacy.
Paper 4c - Envelope	Observation programs have measurable reach, intervention range, fidelity, bandwidth, depth, gain, drift, load, and collapse. Threshold status precedes descriptor grading.	Descriptors do not add primitives, establish warrant, or replace failure localisation.

8. Operational use sequence

Stage	Required action
0. Reference preflight	Specify locus, boundary, interface, reference scale, operational horizon, discrimination/noise regime, abstraction, and comparator family.
1. Facet identification	State whether the focal claim concerns retention, application, bounded registration, abstraction/perspective, scale/measurement, or program performance.
2. Access pathway	Test signal-bearing contrast, OP availability, and OA classing for the evaluated locus.
3. Registration and retention	Where the claim requires retained record, identify OR and test OA-keyed RAS persistence. Intelligence can also concern immediate or embodied application without durable retention (Paper 3, heading 3.3).
4. Knowledge status	Assign TK, KIP, or NTK only where its discriminator is met.
5. Provenance and intelligence	Identify producing locus for made distinction; then test whether the evaluated locus presently applies the distinction to branch-space.
6. Non-triviality	Use BD-family comparator and IPL localisation for realised downstream dependence claims.
7. Observation and observer-status	Assign Pre-TO, TO, OIP/observer-locus, or NTO/Observer.
8. Abstraction audit	Identify cut, abstraction regime, perspective, event-horizon profile, Abstraction Gap, and relational uncertainty.
9. Scalar audit	Separate physical magnitude, reference scale, and operative scale; test alignment and Scale Gap.
10. Measurement path	Map measurement through RRP, OP, OA, OR, RAS, and RSD where later use is claimed.
11. Program and envelope	Establish status first; then grade OH, CH, RF, OBW, OD, OG, ODr, OL, and OCx.
12. Output discipline	State supported statuses, bounded descriptors, failure location, residual, and the condition that would update the claim.

9. Control interfaces

Interface	Control rule
Part 2a primary papers and support stack	Upstream access architecture and Paper 1c physical grounding. Primitive operations, embodiment, derived reachability, Form, selective propagation, and target/model/residual remain distinct; the Part 2b status ladders are unchanged.
Part 1 support stack	Inherited-control check for NTC, BD, and IPL only. Life threshold, attribution classes, and closure architecture are not Part 2b status terms.
SD-01 Concept Compression Map	Navigation and architecture compression only. Canonical papers govern contested readings.
SD-02 Part 2 Glossary	Controlled vocabulary and guardrails for the ten-paper Part 2 baseline. The Part 2b region mirrors its six canonical papers and explicitly marks the Paper 1c cross-references.
SD-03 Guardrail and Failure-Mode Register	Failure control and diagnostic questions. It must not become an alternative procedure or verdict engine.
Part 3 handoff	The full discipline of the unknown remains downstream. Part 2b may localise missing conditions and carry residual but does not supply the later complete residual procedure.

9.1 Paper 1c alignment with Part 2b

Interface	Support-level distinction	Canonical anchors
Retained knowledge	Embodiment explains an earned RAS physically; TK/KIP/NTK still distinguish presence, deployability, and deployment.	Paper 1c, heading 2.3; Paper 2, headings 2-3
Made distinction and intelligence	Embodiment or Form membership alone does not earn active-information provenance or present intelligence. Identify the producing locus and any current application separately.	Paper 1c, heading 6; Paper 3, headings 3.1 and 4.3-4.5
Reachability and deployability	Relation formation is not the grounded RSD pathway of KIP/OIP, and neither alone is realised deployment.	Paper 1c, heading 2.4; Paper 2, heading 3.3; Paper 4, heading 3.4
Observation and distributed Form	A Form may span loci without constituting one observer-locus, Observer, or record-operative chain.	Paper 1c, headings 5.3 and 7.1; Paper 4, headings 3-4
Abstraction and scale	Physical classing and historical reach do not replace the observation-specific perspective, scalar alignment, or measurement burdens.	Paper 1c, headings 2.2-2.4; Paper 4a, heading 2.4; Paper 4b, headings 2 and 4
Program envelope and notation	Keep ingress, relation formation, reliable program reach (OH), admissible intervention (CH), and test window separate. RF means Registration Fidelity, not Relational Form.	Paper 1c, heading 2.4; Paper 4c, headings 2.1-3.1
Residual and update	A new interface, intermediate retained distinction, scaffold, or corrected abstraction can alter reach; the Part 3 residual procedure remains downstream.	Paper 1c, heading 5.2; Paper 4c, heading 1.5

10. Extension protocol and release checklist

- Confirm all six current primary papers and their filenames, versions, and hashes.
- Keep Paper 2 knowledge, Paper 3 intelligence, Paper 4 observation, Paper 4a abstraction, Paper 4b scale, and Paper 4c envelope ownership visible.
- Preserve the producing-locus rule for active-information provenance.
- Do not collapse TK/KIP/NTK, Pre-TO/TO/OIP/NTO, or threshold status into performance grading.
- Do not treat perspective as opinion, Abstraction Gap or Scale Gap as automatic error, or objectivity as consensus alone.
- Do not treat descriptors as primitives, status substitutes, truth measures, or decorative labels.
- Keep Part 2a terms inherited, Part 1 NTC/BD/IPL terms controlled, and Part 3 unknown-handling downstream.
- State residual and update conditions wherever a discriminator, alignment, comparator, correction, or envelope bound remains incomplete.
- This is the reconciled Issue 1 support state. The release manifest distinguishes recalculated paper and support digests from unchanged recorded locks carried forward without byte verification. Any subsequent saved edit requires renewed hashing and downstream source-control reconciliation.

Part-level consolidation note

Historical consolidation of the separate Part 2a and Part 2b supports is retained. On 23 September 2026, Pass 1 integrated Paper 1c and the ten-paper scope. This Issue 1 reconciliation records the limited integrations in Papers 2, 4a and 4c, refreshes release controls and sharpens the existing Paper 4a anchor. Canonical ownership, primitive architecture and facet thresholds remain unchanged. Verification limits are stated in 0.1; this support pass makes no further paper or formatting-control edits.