Part 2 Glossary

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

Control field	Value
Document ID	P2-2A2B-SD02-GLOSSARY
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 - Glossary - Issue 1.docx | sha16 adf2bbe201c6f4e2. 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	Records controlled vocabulary, canonical homes, relationship notes, and guardrails across Part 2a and Part 2b while preserving subpart-specific ownership and handoff boundaries.
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.

Control field	Value
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.

Seq.	Released source / current and historical locks	Canonical paper	Canonical ownership / use
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.
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.

Seq.	Released source / current and historical locks	Canonical paper	Canonical ownership / use
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

Control ID	Released control file / source lock	Permitted use
P2-SD01	Part 2 - Concept Compression Map - Issue 1.docx Issue 1 SHA-256 (first 16): eee99287e2cfaa10 Historical predecessor only: Part 2 (2a-2b) - Informational Architecture and Knowledge Intelligence and Observation - Concept Compression Map - Issue 1.docx | sha16 55c6d7f2e885ce66	Part architecture compression, subdivision map, and source-discipline control. Secondary to canonical papers.

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.

1. Purpose and canonical use rules

This Part 2 Glossary records controlled vocabulary for Part 2a: Informational Architecture (From Substrate to Phenomenology). It prevents terminology drift as the RRP architecture, signal pathway, and reference-indexed realism move into support documents, later Part 2b papers, edge-case analysis, and cross-Part applications.

This document does not introduce new concepts, replace the canonical papers, or re-argue the sequence. It gives a controlled definition, canonical home, relationship note, and guardrail for each major term.

Paper 1 owns the access architecture: the scoped definition of information for a locus as RRP-indexed operational distinction, the Relational Access Principle, RRP, OP, OA, OR, RAS, RSD, local locus discipline, and branch-realisation framing.

Paper 1a owns the physical pathway into the access architecture: interaction, physical and dissipative variation, persistence and propagation as physical properties, preserved and signal-bearing contrast, channel-relative discriminability, signal-path failure, thermodynamic and Shannon placement, and the Locus Event Horizon.

Paper 1b owns the realism-facing consequence: unindexed realism instability, substrate difference before observation, access scaffold, broad observation as bounded registration, ontological target, finite model, residual, reference-indexed realism, and discipline of closure.

A term is permitted only when its discriminator conditions remain visible.

Paper 1c owns the physical account of relational index, embodiment, derived Relational Reachability, Relational Form, and relational propagation; it does not add RRP Set primitives. Sources: Paper 1c, headings 1-5 and 7.1.

Part 2a terms should not be used to assign Part 2b knowledge, intelligence, or technical observation statuses. Paper 1b may use observation broadly as bounded registration, but that bridge use must not be substituted for the downstream Part 2b observation ladder.

Support shorthand must not replace the canonical papers where a contested technical reading depends on exact wording.

2. Canonical ownership map

Canonical home	Controlled region	Guardrail
Paper 1 - Relative Reference Points	Informational architecture, Relational Access Principle, RRP as reference node, OP, OA, OR, RAS, RSD, branch-realisation, local locus discipline, and information for a locus as operational distinction.	Do not treat physical difference, describability, external interpretation, or persistence as RRP-indexed information without availability for the evaluated locus; do not revoke other legitimate informational regimes.
Paper 1a - From Noise Cometh Signal	Physical pathway of availability, interaction, physical and dissipative variation, persistence and propagation as physical properties, preserved contrast, signal-bearing contrast, channel-relative	Do not treat every interaction as signal, every signal as RRP-indexed information for a locus, or physical persistence, propagation, or residue as an independent informational stage.

Canonical home	Controlled region	Guardrail
	discriminability, medium, noise, signal path, thermodynamic and Shannon placement, and Locus Event Horizon.	
Paper 1b - Reference-Indexed Realism	Realism-facing consequence, unindexed realism instability, substrate difference before observation, access scaffold, broad observation as bounded registration, ontological target, finite model, residual, reference-indexed realism, and closure discipline.	Do not collapse reference-indexing into relativism, broad observation into unmediated certainty, or finite modelling into complete ontology. The target constrains; the model does not exhaust.
Paper 1c - 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.	Keep the wider index, local target, primitive RAS, embodiment, derived reachability, distributed Form, finite model, and residual separate. No new RRP Set element or automatic downstream status.
SD-01 - Concept Compression Map	Support-stack alignment and cross-indexing for the split Part 2a source set.	Use only as compression and navigation. Technical definitions remain governed by the four Part 2a canonical papers; the full glossary also preserves the distinct Part 2b region.

3. Controlled vocabulary

A. Access architecture and RRP Set

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Substrate difference	Reality-constrained physical difference that may exist before, without, or beyond availability to any finite locus.	Paper 1 / Paper 1b | Grounding	Substrate difference is real and may already stand in legitimate non-RRP informational relations; its operational availability for this locus is unestablished.
Physical difference	Variation in location, duration, energy, pressure, temperature, charge, concentration, molecular form, surface, velocity, orientation, frequency, density, boundary condition, state trajectory, or other physically admissible condition.	Paper 1 | Grounding	Physical difference does not establish RRP-indexed information for a locus merely by existing, persisting, or being describable.
Information	Within the RRP architecture, information for a locus is physical difference made relationally available as operational distinction under specified reference conditions.	Paper 1 | Core scoped definition	This definition governs the evaluated access relation; it does not revoke thermodynamic, statistical, physical, Shannon, or other legitimate informational descriptions under their own conditions.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Informational distinction	A physical difference that can count as this rather than that for a locus under RRP-indexed conditions.	Paper 1 | Access status	The same carrier may support different informational relations under different RRPs and other valid descriptive regimes.
Operational distinction	A distinction available, classable, registerable, retainable, or redeployable under conditions that make the distinction evaluable for a locus.	Paper 1 | Architecture	Operational does not mean useful by default; the relevant operation and locus must be specified.
Relational Access Principle	A finite locus does not possess reality as total state; it encounters reality only through relations by which difference becomes available, classed, registered, retained, and possibly redeployed.	Paper 1 | Governing principle	This is not a denial of reality or of informational relations beyond the evaluated locus. It denies unbounded possession of the real by a finite locus.
Relative Reference Point (RRP)	Situated reference node from which distinction evaluation becomes well-posed for a locus.	Paper 1 | Reference node	Relative does not mean subjective; reference does not mean arbitrary description.
Locus	The unit relative to which distinction is evaluated in the present relation.	Paper 1 | Localisation	Use locally. Do not silently transfer distinctions from one locus to another across a wider system or chain. Paper 1c treats target and locus as local physical cuts in the wider index; that does not abolish locality.
Interface	The boundary-mediated relation through which a locus can encounter difference.	Paper 1 | Access condition	An interface may be biological, technical, institutional, computational, or procedural; it must not be assumed absent.
Regime	Structured condition under which availability, discrimination, classing, registration, retention, and redeployment become possible.	Paper 1 | Access condition	Regime includes boundary, scale, horizon, noise tolerance, abstraction, comparator assumptions, and relevant branch-space.
Reference conditions	Specified boundary, interface, scale, operational horizon, discrimination/noise regime, abstraction, registration, retention, redeployment, and comparator assumptions under which a claim is evaluated.	Paper 1 / Paper 1b | Evaluation	Reference conditions make the claim evaluable; they do not make the claim true.
RRP Set	Operational element-set of informational architecture: RRP, OP,	Paper 1 | Architecture	Do not collapse the elements into one undifferentiated information label.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	OA, OR, RAS, and RSD.		
Ontic Projection (OP)	Available contrast field at an interface under specified reference conditions.	Paper 1 | RRP Set	A persistent, propagating, or externally readable physical state is not automatically OP. OP begins where contrast is available to the specified locus.
Ontic Abstraction (OA)	Classing regime by which available contrast is partitioned into registerable alternatives.	Paper 1 | RRP Set	Without OA, there is no classed alternative for registration.
Ontic Registration (OR)	Event by which one OP-supported, OA-classed alternative becomes selected into state.	Paper 1 | RRP Set	OR is not mere perturbation, coupling, physical persistence, or external description.
Registered Abstraction State (RAS)	OA-keyed retained token-state produced by OR from an OP-supported contrast field at a specified RRP and persisting over an operational horizon at a reference scale.	Paper 1 | RRP Set	RAS is not any persistent mark, residue, memory-like state, or archive. It requires classed registration and retention. Paper 1c calls earned OA-keyed physical retention embodiment; it adds no further RAS threshold.
Registered-State Deployment (RSD)	Redeployment of retained distinction into later transition, inference, action, control, correction, or branch-realisation.	Paper 1 | RRP Set	A downstream effect is not RSD unless the retained distinction is actually operative in the later pathway.
Branch-realisation	The differential realisation of an alternative trajectory, outcome, registration, transition, action, or downstream state under an operative regime.	Paper 1 | Architecture	Branch-realisation does not require conscious choice.
Local locus discipline	Rule that the evaluated locus must remain tied to the relation being assessed and cannot be moved silently between source, carrier, user, institution, or analyst.	Paper 1 | Guardrail	Essential for preventing external interpretation from replacing the system relation under evaluation.

B. Signal and physical availability

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Interaction	Physical exchange, absorption, scattering, transformation, transmission, constraint, dissipation, redirection, storage, release, or redistribution of energy and matter.	Paper 1a | Pre-signal ground	Interaction produces variation; it is not automatically signal or RRP-indexed information for a locus.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Physical variation	Uneven physical result of interaction, such as gradients, residues, pressure differences, conformations, phase shifts, boundary marks, or altered trajectories.	Paper 1a | Pre-signal ground	Variation may support contrast but is not yet signal-bearing by default.
Dissipative variation	Variation produced as energy or matter spreads, degrades, redistributes, or transforms under physical constraints.	Paper 1a | Physical pathway	Dissipation makes variation; variation may support contrast; contrast may support signal.
Persistence	Continuation of a physical state or alteration over an interval.	Paper 1a | Physical property	Persistence is not a signal, OP, OR, RAS, record, knowledge, or observation status by itself.
Propagation	Movement or transmission of physical variation through a medium or across a pathway.	Paper 1a | Physical property	Propagation does not establish preserved contrast, channel discriminability, or availability for a locus. Distinguish this ordinary physical use from Paper 1c relational propagation, which requires sufficient target-relevant preservation through transformations.
Physical residue	Physical alteration remaining after an interaction, such as a mark, gradient, deformation, conformation, deposit, or boundary change.	Paper 1a | Ordinary physical description	Residue may later supply contrast to a signal path, but it is not an independent architectural stage or retained-record status.
Signal	Physical variation preserved as contrast through a medium under conditions in which discrimination may become possible.	Paper 1a | Core definition	Signal is not primitive RRP-indexed information, semantic message, or free-floating content.
Signal-bearing contrast	Preserved contrast carried through a signal path in a way that may become discriminable for a channel, receiver, or locus.	Paper 1a | Signal layer	It is weaker than RRP-indexed information for the evaluated locus because availability as distinction has not yet been shown.
Signal path	Physical pathway through which selected contrast is carried, transformed, filtered, amplified, attenuated, or stabilised.	Paper 1a | Physical pathway	A signal path does not carry the world whole; it carries selected contrast under constraints.
Medium	Material, energetic, field, channel, substrate, institutional, or technical pathway through which contrast may be preserved or transformed.	Paper 1a | Physical pathway	Medium constraints shape what contrast survives and what fails.
Channel-relative discriminability	Condition where contrast is	Paper 1a | Bridge to OP	Channel-discriminable contrast may

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	discriminable relative to channel, alphabet, noise model, coding regime, and receiver or locus discrimination capacity.		already have valid Shannon status, but it is not RRP-indexed information for the evaluated locus unless it becomes available as distinction.
Noise regime	Variation or uncertainty condition relative to which a contrast may be masked, preserved, degraded, or discriminable.	Paper 1a | Channel condition	Noise is regime-relative; what is noise under one regime may become signal under another.
Reference alphabet	Set of physically supported symbol or token classes under a channel-relative discrimination regime.	Paper 1a | Shannon placement	Alphabet requires stable classes; it is not arbitrary external labelling.
Shannon Information Theory (SIT)	Formal discipline of channel-relative uncertainty, coding, noise, symbols, bits, and transmission under specified source, channel, alphabet, and receiver or locus discrimination conditions.	Paper 1a | Formal placement	SIT is valid within its specified regime but is not the complete theory of all information in this framework.
Available distinction	Contrast that has become available as an alternative for a locus under RRP conditions.	Paper 1 / Paper 1a | Access status	This is the entry point into OP, not a property carried absolutely by a physical state.
Locus Event Horizon	Ingress-boundary beyond which external difference cannot become signal-bearing contrast capable of entering OP for a locus under the present regime.	Paper 1a | Access limit	Not an edge of reality, not absolute unknowability, not a black-hole physics literalism, and not a performance measure. Relational Reachability concerns formation of a particular relation, not merely ingress of its carrier (Paper 1c, heading 2.4).
Ingress-boundary	Boundary at which difference can or cannot enter the access pathway as signal-bearing contrast for a finite locus.	Paper 1a | Access limit	What lies beyond may be real and consequential elsewhere or informational under another regime, but unavailable to this locus under the present regime.

C. Reference-indexed realism and closure discipline

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Realism	Commitment that reality has authority independent of thought, perception, language, desire, convention, or agreement.	Paper 1b | Realism frame	Realism requires distinction between real and not-real but must index the respect in which the claim is made.
Unindexed realism	Realism claim that asks whether something is real without specifying	Paper 1b | Failure target	Unindexed realism risks naive possession or indiscriminate inclusion.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	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	Position that finite realism claims are models of ontological targets formed through the RRP scaffold under access, scale, horizon, comparator, and residual discipline.	Paper 1b | Core position	Reference-indexing disciplines realism; it does not dissolve the real/unreal distinction.
Ontological target	The target relation, condition, object, process, value, event, absence, possibility, institution, or structure toward which a finite realism claim is directed.	Paper 1b | Target/model relation	The target constrains what can be preserved, but no finite model exhausts the target whole. Paper 1c, heading 1.3 uses a local physical target cut within the relational index; this physical treatment does not silently replace Paper 1b broader target vocabulary.
Access scaffold	RRP-structured pathway by which substrate difference can become available, classed, registered, retained, and possibly redeployed for a finite locus.	Paper 1b | Realism bridge	The scaffold is not a semantic afterthought; it is the access condition of finite reality-claim.
Finite model	Indexed record or model of a target relation formed through bounded access conditions.	Paper 1b | Target/model relation	A model may preserve real relation without being complete ontology. Paper 1c, heading 5.2 distinguishes the finite model from both distributed Relational Form and locus-specific reachability.
Target constraint	Reality-facing condition that limits what an access scaffold, abstraction, record, or model can successfully preserve.	Paper 1b | Realist guardrail	The observer cannot invent all constraints by perspective alone.
Access constriction	Finite-locus condition that limits what can be accessed, classed, registered, retained, and redeployed.	Paper 1b | Finitude guardrail	Constriction is not falsehood. It is the form of finite access.
Residual	What remains outside, under-specified, unpreserved, unresolved, or not yet carried by a finite model or claim under specified reference conditions.	Paper 1b | Closure discipline	Residual prevents premature closure; it is not a defect to be hidden. In Paper 1c, heading 5.2 it also includes uncertain provenance and unestablished reachability; changed scaffolding can update access without

Term	Controlled definition	Canonical home / type	Relationship and guardrail
			guaranteeing closure.
Discipline of closure	Rule that a realism claim should close only to the extent warranted by target constraint, access scaffold, comparator pressure, and residual tracking.	Paper 1b | Closure discipline	Closure is not certainty, completeness, or final ontology.
Premature closure	Treating a finite model, record, measurement, category, or perspective as if it exhausted the target relation.	Paper 1b | Failure mode	Restore residual and specify the limits of the access relation.
Real/unreal contrast	Boundary relation through which realism gains force by distinguishing the real from illusion, fiction, possibility, absence, construction, abstraction, mistake, or mere seeming.	Paper 1b | Realism problem	The unreal often returns as experience, consequence, model, disclosure, branch-space, power, or error condition; the respect must be indexed.
Reality-claim	Claim about what is real, in what respect, through what access relation, for what locus, at what scale, over what horizon, under what comparator, and with what residual.	Paper 1b | Evaluative claim	A reality-claim is not well-formed without an index strong enough for the claim being made.
Corrigible modelling	Model formation that remains open to testing, comparison, correction, weakening, or rejection under target constraint and residual discipline.	Paper 1b | Objectivity precursor	Corrigibility blocks both naive possession and sceptical collapse.

D. Handoff and boundary terms

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Phenomenological availability	The finite availability of relation as something registerable, modelable, claimable, or experience-adjacent for a locus through access conditions.	Part 2a | Bridge frame	Use as bridge language only. Do not treat it as conscious experience unless later papers add that condition.
Knowledge	Downstream Part 2b status of retained distinction.	Part 2b handoff | Not defined here	Part 2a prepares RAS and retention architecture but does not assign full knowledge-status.
Intelligence	Downstream Part 2b status of applied distinction.	Part 2b handoff | Not defined here	Part 2a prepares RSD and branch-realisation architecture but does not assign intelligence-status.
Observation	In Paper 1b broad realism-facing use, bounded registration through the RRP	Paper 1b | Broad bridge; Paper 1c, heading 5.3 | Physical grounding;	Do not treat broad observation language as the completed Part 2b

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	scaffold; Paper 1c makes its physical ground explicit. In Part 2b it is a technical status developed through Paper 4 own ladder.	Paper 4 | Technical status	status, and do not erase Paper 1b bounded-registration role.
Objectivity	Disciplined correction of indexed models under target constraint; later papers develop its abstraction, scale, and observation-specific detail.	Paper 1b / downstream handoff	Do not import later abstraction and scale objectivity detail into Part 2a definitions unless explicitly marked as downstream.
Part 2b inheritance	The later sequence in which retained, applied, and technically observed distinction are developed as knowledge, intelligence, and observation.	Support-control term	Part 2b inherits Part 2a architecture; it does not redefine the Part 2a access scaffold.

E. Relational Form and derived physical relations

These entries compress Paper 1c, not a new support-defined architecture. The established A-D groups retain their order. Primitive definitions and the broader Paper 1b target vocabulary remain in their existing canonical homes.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Relational index	The physically real depth and extension of relation; at full extension, the totality of relations in which physical states, trajectories, constraints, and organisations stand.	Paper 1c, headings 1.1-1.2 | Physical ground	Broader than a local target or its Relational Form. Not a reference coordinate, semantic label, observer inventory, or finite model.
Target as local physical cut	The bounded ontological subdivision within the relational index whose physical relations are presently being tracked.	Paper 1c, heading 1.3 | Local physical treatment	The cut localises a claim; it neither creates the target nor terminates the target's real relations at the chosen boundary. Paper 1b retains the general target/model definition.
Coupling	Physical interaction through which target-relative difference becomes causally connected to a locus and a new local relation is produced.	Paper 1c, headings 2.1-2.2 | Physical access	Target and locus histories jointly condition the encounter. Coupling alone does not establish classed registration or retained distinction.
Embodiment / embodied abstraction	The physical significance of an earned RAS: an OA-keyed retained substrate state instantiates the abstraction through which a prior relation was discriminated.	Paper 1c, heading 2.3 | Operational description	RAS remains primitive. Embodiment is not an additional informational status, and physical residue alone does not qualify.
Relational Reachability	Reference-conditioned capacity of a	Paper 1c, heading 2.4 | Derived	Formation, not ingress. Indexed to

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	locus, given present physical organisation and available scaffolding, to stabilise a target-relative relation as operational distinction immediately or through physically supported intermediate relations.	organisational condition	target, locus, coupling, history, scaffold, and horizon; not a new RRP Set element or an absolute limit on reality.
Immediately reachable relation	A relation for which the locus already carries sufficient organisation for the relevant contrast to be classed and registered under the present conditions.	Paper 1c, heading 2.4 | Reachability distinction	Immediate reach is relation-specific; encountering an object does not make every relation to that object immediately formable.
Constructibly reachable relation	A relation not yet stabilisable, but formable through a physically available sequence of intermediate distinctions, retained states, tools, demonstrations, or other couplings that changes the locus.	Paper 1c, heading 2.4 | Reachability distinction	Mere conceivability is not a supported path. Present unreachability can change when organisation or scaffold changes.
Scaffolding	Physically supported instruments, records, language, other loci, practices, or intermediate relations that can alter the route by which a locus forms further distinctions.	Paper 1c, headings 2.4 and 5.2 | Support for formation	A scaffold can change ingress, classing, or construction conditions; it does not deliver a completed meaning, establish KIP/OIP by itself, or guarantee adequate target-tracking.
Relational Form	The sum total of distributed relations tracking the same physically grounded distinction, whether presently instantiated in a target instance or preserving the physical possibility of such an instantiation.	Paper 1c, headings 3.1 and 7.1 | Higher-scale description	Ontological extent is not finite enumeration. Form can be concentrated or diffuse, include conflict or error, and exceed one locus without becoming the whole index or a distributed Observer. Write in full; RF is reserved for Registration Fidelity.
Form before instance / Form in potential	Physically organised relations can support a target distinction before a particular local target instance exists.	Paper 1c, headings 3.3-3.4 | Potential dimension of Form	Causal possibility must be carried by organisation. Neither a present hidden miniature nor a second ideal object outside physical relation is implied.
Relational continuity	Continuity of sufficient target-relevant structure and causal provenance across changed carriers, loci, or times.	Paper 1c, heading 4.2 | Cross-substrate relation	Material resemblance and total state identity are unnecessary; adequate preservation of the relevant distinction remains necessary.
Relational propagation	Continuity through transformations in which a source relation alters a carrier, selected contrast is preserved, another locus couples to it, and a	Paper 1c, heading 4.2 | Derived cross-locus account	Do not transfer completed meaning intact. Carrier loss, failed ingress, insufficient receiver organisation, distorted abstraction, and absent

Term	Controlled definition	Canonical home / type	Relationship and guardrail
	related distinction can be stabilised locally.		redeployment remain distinct failures.
Representation	A later relation in which an embodied distinction is treated as standing for a target, state, class, event, or relation.	Paper 1c, heading 4.1 | Downstream standing-for relation	Physical relation and earned retention do not require representation. Successful representation requires an appropriate receiving regime and can fail despite carrier presence.
Relational availability	Finite access through which relations cross a locus's present boundary, interface, scale, horizon, discrimination regime, and abstraction conditions.	Paper 1c, heading 6 | Bridge to a finite locus	Availability opens a local path through the index or Form; reachability concerns which further relations can be formed from that path. Neither gives possession of the whole.

4. Misuse compression

Misuse	Correction
Physical difference = RRP-indexed information	False. Difference becomes operationally informational for the evaluated locus only under RRP-indexed availability as distinction; other informational regimes retain their own conditions.
Signal = RRP-indexed information for a locus	False. Signal is preserved contrast; operational information for the evaluated locus requires availability as distinction under RRP conditions.
Persistence or residue = record / RAS	False. Physical persistence, propagation, marks, or residue are properties of state evolution; RAS requires OA-keyed OR production and retention under specified reference conditions.
RRP-relative = subjective	False. Relative means reference-conditioned; the constraint remains real.
Observer/model creates target	False. The target constrains what can be preserved; the finite model does not create the target by itself.
Finite access = scepticism	False. Mediation is not unreality. Some indexed models preserve target relations better than others.
Closure = certainty	False. Closure is disciplined to the extent warranted and must carry residual where the model is incomplete.
Locus Event Horizon = edge of reality	False. It is the ingress-boundary of possible relation for a finite locus under a regime.
Embodiment = a new status after RAS	False. It describes the physical instantiation already entailed by OA-keyed retention (Paper 1c, heading 2.3).
Ingress = Relational Reachability	False. A carrier may enter the access path while the target relation remains unstabilisable for the locus (Paper 1c, heading 2.4).
Reachability = KIP / OIP / OH	False. Relation formation, grounded record deployability, and reliable observation-program reach answer different questions.
Relational Form = relational index = finite model	False. Form tracks a particular grounded distinction; the index is wider; a model is a finite indexed abstraction (Paper 1c, headings 5.2 and 7.1).

Misuse	Correction
Physical provenance = every prior contrast preserved	False. A distinction can lie in the causal history but be lost in transformation; another may never have coupled into the path (Paper 1c, heading 6).
Target-related error = a true target property	False. A retained misrelation may be physically real and consequential without making its proposition true of the target (Paper 1c, heading 4.3).
Relational Form = RF	Do not abbreviate Relational Form to RF. RF denotes Registration Fidelity in Paper 4c.

5. Change log

Issue	Date	Change
Issue 1	2026-08-08	Revised Issue 1 source lock to Papers 1 P2v8, 1a P2v11, and 1b P2v7 and the updated SD-01 Issue 1; preserves scoped information discipline, non-stage treatment of persistence/propagation/residue, and broad-versus-technical observation separation.
Issue 1 support - Pass 1	2026-09-23	Added Paper 1c and fourteen source-anchored vocabulary entries; updated ownership, scope, related guardrails, and Part 2b cross-references. Retained the earlier change record and historical locks. Changed the active title to Part 2 Glossary to match the document ID and scope. Release approval and final hashes remain pending.
Issue 1 - final release	2026-09-23	Propagated all ten released paper identities and current hashes, including Paper 1c with scholarly apparatus; bound the glossary to released SD-01. Updated release furniture and metadata. All vocabulary definitions and historical records are preserved; full final digests are in the companion manifest.
Issue 1 - Part 2b reconciliation	2026-09-23	Aligned the event-horizon profile and Perspective relationship note with revised Paper 4a; reconciled the limited Paper 1c integrations in Papers 2, 4a and 4c and refreshed source/support locks. Other vocabulary definitions and canonical homes remain unchanged. Verification scope is stated in 0.1.

6. Release/revision checklist

Does each term remain tied to a canonical home?

Does every definition preserve the difference between physical difference, signal, OP, OR, RAS, and RSD?

Does the glossary block signal/RRP-status inflation, information-scope collapse, and persistence/RAS inflation?

Does it preserve local locus discipline and prevent external interpreter substitution?

Does it distinguish RRP-relative from subjective or arbitrary?

Does it preserve target/model/residual discipline?

Does it avoid importing Part 2b knowledge, intelligence, and technical observation ladders as Part 2a definitions while preserving Paper 1b broad observation-as-bounded-registration language?

Does it treat the Locus Event Horizon as an ingress-boundary, not an edge of reality or performance descriptor?

Does it avoid importing older Part 2 drafts, exported full-series TEM material, or prior generated answers as conceptual source?

Paper 1c check: are the relational index, local target, RAS, embodiment, reachability, Form, representation, and finite model kept distinct, with receiver-side formation and target-related error still explicit?

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.

1. Purpose and canonical use rules

This Part 2 Glossary records controlled vocabulary for Part 2b: Knowledge, Intelligence, and Observation. It prevents terminology drift as retained distinction, applied distinction, bounded registration, abstraction, perspective, scale, measurement, and observation-program descriptors move into support documents, edge-case audits, and later applications.

This document does not introduce new concepts, replace the canonical papers, or re-argue the sequence. A term is permitted only when its discriminator conditions, locus, reference conditions, canonical home, and principal guardrail remain visible.

- Paper 2 owns knowledge as retained distinction, RAS in the knowledge facet, TK, KIP, NTK, and the record-status/truth-status boundary.
- Paper 3 owns intelligence as applied distinction, finite branch-space, information provenance, passive and active intelligence, NTI, and producing/applying-locus discipline.
- Paper 4 owns observation as bounded registration, the observation ladder, observer-locus, Observer, Observer Event Horizon, and record-provenance.
- Paper 4a owns cut, abstraction regime, perspective, event-horizon profile, Abstraction Gap, relational uncertainty, and objectivity as correction.
- Paper 4b owns physical magnitude, reference scale, operative scale, scale-fixing, measurement, Scale Gap, cross-scale translation, and scalar objectivity.
- Paper 4c owns observation program, threshold/performance separation, the descriptor layer, and OH, CH, RF, OBW, OD, OG, ODr, OL, and OCx.

2. Canonical ownership map

Canonical home	Controlled region	Guardrail
Paper 2 - On the Origin of Knowledge	Knowledge as retained distinction; RAS; TK, KIP, NTK; past-dependent present state; record-status versus truth, warrant, objectivity, and justification.	Do not define minimal knowledge as belief, semantic possession, conscious awareness, truth, or warrant.
Paper 3 - On the Origin of Intelligence	Applied distinction; locus; branch-space; downstream trajectory selection; passive/active information; producing locus; passive/active intelligence; NTI.	Do not define intelligence by cognition, usefulness, success, resemblance, or later encounter; active provenance is fixed by production.
Paper 4 - On the Origin of Observation	Bounded registration; OR event; RAS record; Pre-TO, TO, OIP, NTO; observer-locus; Observer; Observer Event Horizon; record-provenance.	Do not treat observation as certificate, interaction, signal reception, every record, or truth.
Paper 4a - The Limits of Observation	Cut; abstraction regime; perspective; event-horizon profile; Abstraction Gap; relational uncertainty; correction of perspective.	Do not equate abstraction with failure, perspective with opinion, or objectivity with a view from nowhere.

Canonical home	Controlled region	Guardrail
Paper 4b - The Scale of Observation	Scale as stabilised comparability; physical magnitude; reference scale; operative scale; measurement; Scale Gap; scalar objectivity.	Do not reduce scale to size, unit, choice, or precision; do not collapse magnitude into observer-relative scale.
Paper 4c - The Operational Envelope of Observation	Observation program; descriptor layer; OH, CH, RF, OBW, OD, OG, ODr, OL, OCx; failure localisation.	Do not use descriptors before status, as alternate primitives, or as truth and warrant measures.
internal Part 2a support section	Inherited RRP architecture, signal, finite-access realism, target/model/residual, local locus discipline, and the Paper 1c physical and derived relations.	Use for inherited architecture and support alignment. Papers 2, 4a and 4c now include limited Paper 1c clarifications; the six Part 2b papers retain ownership of their facet statuses.
Part 1 support stack	Inherited NTC, BD, and IPL control.	Do not import life-attribution classes or treat intelligence, observation, or NTO as life.

3. Controlled vocabulary

A. Inherited architecture used by Part 2b

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Relative Reference Point (RRP)	Situated reference node from which distinction evaluation becomes well-posed for a locus.	Part 2a | Inherited architecture	Indexes every Part 2b claim; relative does not mean subjective or arbitrary.
Locus	Unit relative to which retention, application, registration, perspective, scale, or program performance is evaluated.	Part 2a / Papers 2-4 | Localisation	Keep local. Producing, carrying, applying, observing, institutional, and analyst loci may differ.
Reference conditions	Boundary, interface, scale, operational horizon, discrimination/noise regime, abstraction, retention, redeployment, comparator assumptions, and relevant branch-space under which a claim is evaluated.	Part 2a / all Part 2b papers | Evaluation	Reference conditions make a claim evaluable; they do not make it true.
Ontic Projection (OP)	Available contrast field at an interface under specified reference conditions.	Part 2a | RRP Set	No OP means no available distinction for the evaluated locus.
Ontic Abstraction (OA)	Classing regime by which available contrast is partitioned into registerable alternatives.	Part 2a | RRP Set	OA is required before OR; no classed alternative, no retained token.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Ontic Registration (OR)	Event by which one OP-supported, OA-classed alternative becomes selected into state.	Part 2a | RRP Set	Primitive registration; in the observation facet OR is the observation event.
Registered Abstraction State (RAS)	OA-keyed retained token-state produced by OR from an OP-supported contrast field at a specified RRP and persisting over an operational horizon at a reference scale.	Part 2a | RRP Set	Canonical minimal knowledge carrier and observation record; not any persistent mark or residue. Embodiment is Paper 1c physical description of an earned RAS, not a competing carrier or stronger status.
Registered-State Deployment (RSD)	Redeployment of retained distinction into later transition, inference, action, control, correction, registration, or branch-realisation.	Part 2a | RRP Set	A downstream effect is not RSD unless it depends on the retained distinction.
Baseline Dynamics (BD)	Intervention-defined comparator family preserving relevant context while disabling, scrambling, neutralising, resetting, bypass-controlling, or otherwise varying the organisation or pathway under test.	Inherited Part 1 / Papers 2-4 | Comparator	BD is disciplined contrast, not nothing.
Information Processing Locus (IPL)	Organisation whose integrity is required for downstream trajectory selection to depend on the relevant distinction.	Inherited Part 1 / Papers 2-4 | Localisation	IPL is not consciousness, central control, or automatically the whole named system.
Operational horizon	Specified test window over which persistence, consultability, outcomes, and status are evaluated.	Papers 2-4 / 4c | Evaluation	Do not confuse with Observational Horizon, which is a measured performance limit.
Locus Event Horizon	Ingress-boundary beyond which external difference cannot become signal-bearing contrast capable of entering OP for a locus under the present regime.	Part 2a | Access boundary	Not an edge of reality, a metaphysical limit, or Observational Horizon.
Residual	Explicit remainder between target relation and current record, model, abstraction, scale, comparator, or program account.	Part 2a / Papers 2, 4a-4c | Closure discipline	Residual prevents premature closure; it is not an explanation or hidden verdict.
Relational index	Wider physical depth and extension within which local targets, loci, and access paths occur.	Paper 1c, headings 1.1-1.3 | Inherited physical ground	See Part 2a vocabulary E; not the reference index of a claim or the whole model possessed by a locus.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Embodiment	Physical instantiation of an OA-keyed retained abstraction already earned as RAS.	Paper 1c, heading 2.3 | Inherited description	Does not by itself establish active-information provenance, current application, or Observer status.
Relational Reachability	Capacity to stabilise a target-relative relation from present organisation and a physically available scaffold.	Paper 1c, heading 2.4 | Inherited derived condition	Not KIP/OIP grounded RSD deployability, not realised operation, and not OH reliable program reach.
Relational Form	Distributed target-tracking relations, including physically supported potential, beyond any one carrier or finite model.	Paper 1c, headings 3.1-3.4 and 7.1 | Inherited higher-scale description	No automatic single locus or distributed Observer. Do not shorten to RF.
Relational propagation	Selective, causally grounded continuity through carriers and local reconstruction by receiving organisations.	Paper 1c, heading 4.2 | Inherited cross-locus account	Receiver availability, classing, retention, and application remain separate from producing provenance.

B. Knowledge and retained distinction

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Knowledge	Status of a prior distinction when it has been registered and retained as present accessible state under specified reference conditions.	Paper 2 | Core definition	Minimal knowledge is retained distinction, not belief, semantics, truth, or warrant.
Retained distinction	Prior OP-supported, OA-classed alternative preserved in a re-identifiable OR-produced RAS over the relevant operational horizon.	Paper 2 | Knowledge basis	Carrier persistence alone is insufficient.
Past-dependent present state	Present structure whose discriminable form depends on which prior alternative was registered.	Paper 2 | Temporal relation	The record is not the past itself and does not contain the target whole.
Trivial Knowledge (TK)	Record-presence: an OA-keyed, OR-produced RAS exists and remains re-identifiable over the relevant operational horizon at the reference scale.	Paper 2 | Knowledge status	Technical “trivial” means no realised downstream dependence is yet required.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Knowledge Inference Potential (KIP)	Grounded deployability: a retained discriminator is embedded within, or coupled to, organisation that could consult it through an admissible RSD pathway, although no realised deployment has occurred.	Paper 2 | Knowledge status	Imagined future usefulness is not enough; consultability must be well-posed. Relational Reachability concerns forming a relation; KIP concerns grounded consultation of a retained discriminator.
Non-Trivial Knowledge (NTK)	Realised deployment: a retained discriminator is actually redeployed through RSD so that later registration, transition, inference, action, control, or trajectory selection depends on which discriminator was present.	Paper 2 | Knowledge status	Strong NTK requires comparator-stable dependence; use does not establish truth or warrant.
Record-status	Status concerning whether a registered distinction is retained, deployable, or realised in use.	Paper 2 | Status boundary	Keep separate from truth-status, objectivity, justification, and adequacy.
Truth-status	Evaluation of whether a retained distinction preserves the relation it purports to carry.	Paper 2 | Stronger evaluation	A false or corrupted record may still satisfy minimal knowledge-status.
Retained misrelation	Retained distinction whose preserved class, mapping, or target relation is erroneous or distorted under the relevant conditions.	Paper 2 | Error	Error does not erase record-presence; it changes evaluative status.
Grounded consultability	Physically, technically, biologically, socially, institutionally, or organisationally well-posed pathway by which a retained state could be accessed through RSD.	Paper 2 | KIP discriminator	External imaginable readability does not establish KIP for the focal locus.

C. Intelligence, provenance, and application

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Intelligence	Application of distinction-conditioned organisation to alter downstream trajectory selection for a locus under specified reference conditions.	Paper 3 | Core definition	Broader than cognition and narrower than usefulness.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Applied distinction	Distinction made operative so that which downstream branch is realised depends on the distinction.	Paper 3 | Intelligence threshold	The carrier does not define intelligence; the application does. Immediate, embodied, morphological, reactive, or currently registered application need not require durable retention (Paper 3, heading 3.3).
Distinction-conditioned organisation	Organisation in which downstream transition depends on the discriminated alternative rather than carrier microdetail or background dynamics alone.	Paper 3 | Mechanism	Must be localised and comparator-answerable.
Branch-space	Field of alternative trajectories, states, outcomes, actions, classifications, repair paths, inhibitions, continuations, or later registrations available under the operative regime.	Paper 3 | Outcome field	Finite and RRP-indexed; not all logically imaginable possibilities.
Downstream trajectory selection	Differential realisation of later outcome classes because of distinction-conditioned organisation.	Paper 3 | Application output	Selection does not require conscious choice.
Passive information	Found distinction arising from lawful physical evolution, available as OP for a locus, and not produced by prior NTC-level organisation as the relevant form.	Paper 3 | Provenance status	A useful natural structure is not intelligent merely because it shapes outcomes.
Active information	Made distinction fixed into form by a producing locus through prior distinction-conditioned organisation under specified reference conditions.	Paper 3 | Provenance status	Production fixes status. Present use, later encounter, or continued existence of the producer is not required while the made distinction remains instantiated. An embodied RAS or Form membership alone does not prove the required producing-locus provenance.
Producing locus	Locus whose prior distinction-conditioned organisation produced, selected, shaped, retained, maintained, or redeployed the form that fixes active-information status.	Paper 3 | Provenance localisation	May be different from the later applying locus.
Applying locus	Locus whose present branch-space is altered by the operative distinction.	Paper 3 | Intelligence localisation	Later use creates a new application relation, not the original provenance.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Passive intelligence	Made distinction reused by a locus to alter downstream trajectory selection without recomputing the original selection problem.	Paper 3 | Intelligence relation	Passive does not mean inactive; the reuse is presently operative.
Active intelligence	Current distinction-conditioned organisation that searches, regulates, repairs, inhibits, reallocates, recalibrates, selects, or controls downstream branch-space.	Paper 3 | Intelligence relation	Do not infer from state change alone; show applied distinction.
Reduced recomputation	Reuse relation in which prior selection embodied in active information is carried forward without re-solving the original problem in full.	Paper 3 | Passive intelligence	Does not require zero new processing.
Non-Trivial Intelligence (NTI)	NTC under the intelligence facet: realised, comparator-stable application of distinction-conditioned organisation to downstream trajectory selection.	Paper 3 | Non-trivial status	Not a new primitive, mental substance, score, success, or resemblance claim.
Provenance/use separation	Rule that the origin of a distinction and its present application are distinct relations that may involve different loci and times.	Paper 3 | Guardrail	Prevents active-information provenance from being assigned by the later encounter.

D. Observation and observer-status

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Observation	Bounded registration of available distinction through a locus-interface-regime under specified reference conditions.	Paper 4 | Core definition	Broader than human perception and narrower than interaction; not a certificate or warrant.
Observation event	OR event in which one OP-supported, OA-classed alternative becomes selected into state.	Paper 4 | Event	Registration may be transient and remain below record-presence.
Observation record	RAS produced by the observation event and retained as a re-identifiable OA-keyed state over the operational horizon.	Paper 4 | Record	A record is not yet an observer-locus or Observer.
Pre-TO failure	Condition below persistent, re-identifiable OA-keyed record-presence.	Paper 4 | Observation status	May include coupling, signal reception, transient tokenisation, or physical alteration without TO.
Trivial Observation (TO)	Record-presence: OR yields an OA-keyed RAS that persists over the relevant horizon at the reference scale.	Paper 4 | Observation status	Does not require grounded consultability or realised redeployment.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Observation Inference Potential (OIP)	Grounded deployability: the retained observation record is embedded within, or coupled to, organisation that makes an admissible RSD pathway physically well-posed.	Paper 4 | Observation status	Supports observer-locus status; does not establish realised observation. OIP is grounded record deployability, not Paper 1c relation-formation reachability.
Non-Trivial Observation (NTO)	Realised record-operativity: a prior OA-keyed RAS is actually redeployed through RSD as a controlling discriminator and downstream dependence is comparator-stable.	Paper 4 | Observation status	Supports Observer status; does not entail life, consciousness, or truth.
observer-locus	OIP-status observation-capable organisation in which retained record has a grounded consultability pathway.	Paper 4 | Observer-status	Lowercase term; capacity is not realised deployment.
Observer	Capitalised NTO condition in which retained record is actually redeployed as a controlling discriminator under comparator discipline.	Paper 4 | Observer-status	Does not imply consciousness or unbounded access.
Observer Event Horizon	Observer-facet name for the upstream ingress limit beyond which difference cannot become available as signal-bearing contrast capable of entering OP for the observer-locus under the present regime.	Paper 4 | Access boundary	Not the edge of reality and not Observational Horizon. Nor does crossing it establish every higher-order relation as reachable.
Record-field	Field, archive, or distributed collection of retained records.	Paper 4 | Record architecture	Record accumulation alone does not establish observer-locus or distributed Observer. A distributed Relational Form also does not by itself establish a shared operative locus.
Observation chain	Sequence of registrations, records, consultability pathways, and possible RSD links distributed across one or more loci.	Paper 4 | Composite architecture	Localise each link; do not assume chain-level Observer status.
Record-provenance	The bounded registration path by which a record was produced.	Paper 4 | Epistemic boundary	Observation gives provenance of record formation, not automatic truth, objectivity, or adequacy.
Strong observation	Observation in which retained record is actually redeployed through RSD and makes comparator-stable downstream difference.	Paper 4 | Strength relation	Equivalent to realised NTO in the observation facet, not mere record-presence.

E. Abstraction, perspective, and objectivity

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Observational cut	Elementary abstraction operation by which selected difference becomes registerable through boundary, channel, threshold, partition, equivalence relation, scale, sensor range, category, tokenisation, or model parameter.	Paper 4a | Abstraction	A cut admits and excludes; it is a condition of finite observation, not an accidental defect.
Abstraction regime	Coordinated arrangement of cuts, thresholds, equivalence relations, saliences, records, categories, memory pathways, calibration practices, correction procedures, and inherited constraints through which relations become repeatedly registerable.	Paper 4a | Regime	Makes registration repeatable and can make error durable.
Perspective	Locus-level integration of an abstraction regime through which reality becomes registerable, retainable, redeployable, and correctable.	Paper 4a | Locus architecture	Not private opinion, subjective attitude, or arbitrary construction. Also conditions formation from admitted contrast, distinct from ingress (Paper 4a, heading 2.4).
Event-horizon profile	Perspective-level aggregation of the ingress limits of boundary, interface, channel, threshold, and scale conditions through which contrast can enter a locus under its present regime.	Paper 4a | Access profile	Does not add a new primitive beyond inherited event-horizon limits. Not Relational Reachability.
Observation-world	Structured field of relations made registerable for a locus through its integrated perspective.	Paper 4a | Perspective output	Not the total real and not merely fictional.
Abstraction Gap	Discrepancy between an OA-keyed registration, record, model, word, measurement, theory, rendering, category, or perspective and the fuller relational structure it compresses.	Paper 4a | Gap	Not identical with error; it is the structural space in which error can arise.
Relational uncertainty	Uncertainty about whether a cut, abstraction regime, or perspective preserves the relation it claims to register under specified reference conditions.	Paper 4a | Uncertainty	Localise the preservation question rather than globalising doubt.
Consequential miscompression	Error arising when omitted, compressed, misclassified, misweighted, over-stabilised, under-specified, or excluded relation becomes consequential for the claim or action.	Paper 4a | Error	The existence of compression alone is not error.
Objectivity	Disciplined correction of perspective under constraint.	Paper 4a | Evaluation	Not abstraction-free access, a view from nowhere, total possession, or consensus alone.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Cross-locus correction	Comparison among differently situated perspectives to expose omissions, distortions, unstable cuts, and residual limits.	Paper 4a | Correction	Agreement is evidence only where correction remains target-constrained.
Correction pathway	Mechanism by which a cut, regime, perspective, record, or claim can be tested, compared, revised, weakened, rejected, recalibrated, or replaced.	Paper 4a | Objectivity support	A regime that cannot be corrected can stabilise error.

F. Scale, measurement, and scalar objectivity

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Scale	Operative relational level at which a perspective stabilises differences into comparability for a locus.	Paper 4b | Core definition	Not merely physical size, unit, analyst choice, or descriptive level.
Comparability	Stable regime in which differences can be treated as belonging to a common relation of same/different, larger/smaller, before/after, stronger/weaker, or within/outside tolerance.	Paper 4b | Scalar condition	No comparability, no disciplined measurement.
Physical magnitude	Domain-relative extent, intensity, duration, frequency, energy, density, velocity, force, temperature, complexity, information content, probability, concentration, or other measurable condition constrained by reality.	Paper 4b | Reality-constrained condition	Magnitude may obtain whether or not a given locus can register it.
Reference scale	Scale specified for evaluation within a claim, model, measurement, test, explanation, attribution, or comparator.	Paper 4b | Methodological condition	States where the claim is made; naming a scale does not validate the claim.
Operative scale	Scale actually stabilised by a locus through its perspective, at which differences become registerable, comparable, retainable, redeployable, and correctable.	Paper 4b | Achieved condition	Operative scale is achieved, not merely selected.
Scalar alignment	Correspondence between the reference scale of a claim and an operative scale actually stabilised by the locus, instrument, model, institution, or method.	Paper 4b | Adequacy	A condition of scalar objectivity.
Scalar misalignment	Claim made at one scale while the operative relation belongs to another.	Paper 4b | Failure condition	May arise under aggregation, individuation, reduction, inflation, or lateral transfer.
Scale-fixing	Process by which a perspective stabilises boundary, channel, discrimination, salience, retention, redeployment, comparator, and correction into a coherent comparability regime.	Paper 4b | Scalar process	Perspective fixes scale because it fixes comparability.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Measurement	Real relation registered through scale: context fixes RRP; interface supplies OP; measurement scale supplies OA; act performs OR; result becomes RAS; later use is RSD.	Paper 4b | Registration pathway	Neither raw reading of reality nor mere invention.
Scale Gap	Abstraction Gap under scalar misfit, where a relation is registered, interpreted, measured, modelled, explained, acted upon, or redeployed at a scale different from that at which its relevant constraints are stable.	Paper 4b | Gap	Not automatically error.
Scalar error	Error occurring when what was averaged out, magnified, reduced, displaced, aggregated, individuated, or translated across scale becomes consequential for the claim.	Paper 4b | Error	Requires consequential scalar misfit, not difference of scale alone.
Cross-scale translation	Transfer of relation, record, model, or explanation between scales through an explicit mapping that preserves relevant constraints.	Paper 4b | Translation	No automatic export from local to global, molecular to organismic, population to individual, or token to responsibility scale.
Scalar bridge	Specified relation, model, comparator, aggregation, decomposition, or intervention that justifies cross-scale transfer.	Paper 4b | Translation discipline	A bridge must preserve the target relation under correction.
Scalar objectivity	Objectivity requiring explicit reference scale, demonstrated operative scale, comparator pressure across scale, and residual discipline where alignment remains incomplete.	Paper 4b | Evaluation	Precision and repeatability alone do not establish scalar adequacy.

G. Observation programs and operational envelope

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Observation program	Organised pathway of registration, retention, possible redeployment, and downstream readout indexed to a locus, boundary, interface, reference scale, operational horizon, discrimination/noise regime, and comparator family.	Paper 4c | Program	Operates inside an event-horizon profile and at an operative scale.
Threshold status	Determination of whether the observation claim reaches Pre-TO, TO, OIP, or NTO.	Paper 4c | Status	Status first; descriptor grading second.
Performance descriptor	Derived measure of how an already specified observation program performs, degrades, or fails under stated conditions.	Paper 4c | Descriptor layer	Not a new primitive or alternate path to observation-status.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Observational Horizon (OH)	Maximum extent over which an observer-locus or observation chain sustains reliable registration, and where claimed redeployment, under prevailing regime constraints at the reference scale.	Paper 4c | Reach	Not operational horizon, Observer Event Horizon, or an edge of reality. Relational Reachability is formation capacity under organisation and scaffold; OH grades a specified observation program.
Counterfactual Horizon (CH)	Range of interventions that remain operationally meaningful while preserving BD-style comparability and yielding discriminable differences in registration, redeployment, or outcomes.	Paper 4c | Intervention range	Not the total space of imaginable alternatives; beyond CH the test relation is destroyed.
Registration Fidelity (RF)	Degree to which RAS alternatives reliably and reproducibly correspond to specified RRP-indexed OA-class distinctions under the prevailing regime.	Paper 4c | Reliability	Measures OA-to-RAS mapping, not truth or complete target adequacy. RF is reserved for this term; write Relational Form in full.
Observational Bandwidth (OBW)	Rate, density, or volume at which distinctions can be registered without unacceptable loss of reliability, persistence, or redeployability.	Paper 4c | Throughput	High bandwidth does not establish observation-status, depth, gain, or intelligence.
Observational Depth (OD)	Effective number of realised consult-and-register links that remain counterfactually significant.	Paper 4c | Chain depth	Not the number of stored records or abstract hierarchy levels.
Observational Gain (OG)	Increase in downstream differentiation relative to comparator conditions once retained-discriminator dependence is established.	Paper 4c | Consequence	Impact or usefulness alone is not OG.
Observational Drift (ODr)	Gradual unintended or uncontrolled degradation of registration mapping or deployment stability over time or operation.	Paper 4c | Stability	Not deliberate recalibration or adaptive regime update.
Observational Load (OL)	Thermodynamic, material, informational, attentional, computational, institutional, or organisational cost of sustaining an observation-capable regime.	Paper 4c | Cost	High load is not automatically inefficiency or failure; it must be related to capacity and performance.
Observational Collapse (OCx)	Regime transition where content-driven registration or redeployment can no longer be maintained under prevailing reference conditions.	Paper 4c | Collapse	Not any local error, low gain, narrow horizon, overload episode, or failed comparison.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Failure localisation	Ordered identification of failure at OP, OA, OR, RAS, OIP, RSD, comparator-stable dependence, or a specific descriptor bound.	Paper 4c | Diagnosis	Observation failure is structured and should not be treated as one undifferentiated event.
Descriptor layer	Set of OH, CH, RF, OBW, OD, OG, ODr, OL, and OCx as second-order measures over an observation program.	Paper 4c | Performance architecture	Does not replace RRP, OP, OA, OR, RAS, RSD, status ladders, BD, IPL, perspective, scale, or measurement.

H. Cross-facet and release-control terms

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Facet	Explanatory emphasis placed on the shared architecture: retention for knowledge, application for intelligence, bounded registration for observation.	Papers 2-4 | Alignment	The mechanism does not multiply; status vocabulary remains facet-specific.
Facet drift	Silent substitution of knowledge, intelligence, observation, abstraction, scale, or performance terms for one another.	Support control | Failure mode	State the focal question and canonical home before assigning status.
Comparator-stable dependence	Downstream dependence that survives adequate intervention discipline targeted at the proposed discriminator or organisation.	Papers 2-4 / 4c | Strength	Non-trivial claims should be weakened or deferred where comparator construction is inadequate.
Local locus discipline	Rule that explanatory work cannot move silently between source, carrier, producing locus, applying locus, observer, institution, environment, or analyst.	Part 2a / Papers 2-3 | Guardrail	Redraw the locus only when the evaluated relation changes and state the transfer.
Update condition	Specified evidence, intervention, calibration, correction, scale bridge, or performance bound that would strengthen, weaken, or change the current classification.	Support control / Part 3 handoff	Do not hide unresolved conditions inside a verdict.

Term	Controlled definition	Canonical home / type	Relationship and guardrail
Issue 1 release state	The frozen support-stack state tied to exact released Issue 1 paper and support file instances.	Release control	Current paper locks appear in 0.1; predecessor-support locks appear in 0.2. The companion manifest distinguishes recalculated full SHA-256 digests from unchanged recorded paper locks not reverified here. Historical predecessor values remain evidence only.

4. Release-use rules

- Use the relevant canonical paper for contested definitions: the six Part 2b papers for local facets and the four Part 2a papers for inherited architecture. This glossary supplies controlled shorthand, not a replacement definition.
- State the relevant locus and reference conditions whenever a term could transfer between source, carrier, producer, user, observer, institution, or analyst.
- Preserve active-information provenance at the producing locus even when the producer is absent at later encounter.
- Keep gap, error, uncertainty, residual, threshold, descriptor, and warrant terms distinct.
- This is the final Issue 1 control state. Use the released paper identities and current source locks in 0.1, the directional support-control chain in 0.2 and the companion SHA-256 manifest. Any saved edit requires a new digest and downstream reconciliation.

Part-level consolidation note

Historical consolidation and the 23 September 2026 Pass 1 integration of Paper 1c are retained. This Issue 1 reconciliation aligns the event-horizon profile and Perspective relationship note with revised Paper 4a and records the limited integrations in Papers 2, 4a and 4c. All other vocabulary definitions, canonical homes, record order, control ID and both internal regions are preserved. Source and predecessor-support locks are reconciled within the verification scope in 0.1; no further paper edits are made.