

THE ANALOG ADVANCE

Operations Paper: Taking the Handwritten Niche

Rex Fraction · v1.0 · 2026-08-09 Composition layer, declared: TACHYON (Claude), for MANUS. **Standing documents:** the specification, EA-SPXI-ANALOG-01 (AXN: 0592.UNCLASSIFIED. 🗑️📄📁📂📅📆, #1409, v1.0 final form, published); the warrant, *The Photograph of the Handwritten Original* (field survey and problem statement, v3.6 deposit edition, AXN:05CC.GENERATIVE. 🗑️📄📁📂📅📆, #1443). This paper is the third document. The spec says how. The survey says why. This says **when, where, and in what order**.

Doctrine, one line: a niche is taken by enrolled objects, not by arguments.

§1 · THE MAP — who holds what, and where the ground is open

Five incumbents ring the territory. None stands on it.

ARK. The institutional manuscript identifier. BnF alone resolves millions of ARKs to digitized manuscripts. Strengths: adoption, resolver culture, library trust. Structure: institution-anchored (NAAN registry), record-pointing, opaque-string. What it cannot do: content-derivation (the identifier says nothing about the object), attestation (no claim machinery), independence (dies with the resolver commitment), and it serves **custodians of the dead**. A living author cannot walk in and get one.

DOI / DataCite, and IGSN under it. IGSN extended the DOI apparatus to physical objects — geological samples, specimens. Institutional minting, metadata-forward, no capture standard, no identity layer, no origination semantics. And the DOI system's governance is precisely what terminated two of our depositors. It is infrastructure we bind to where useful and depend on **never** (AXN:05B7.OPERATIVE. 💎📄📁📂📅📆, #1437: complementary infrastructures — the doctrine is already ratified; this paper operationalizes it).

Trismegistos. The discipline registry: TM numbers for ancient texts. Authoritative, corpus-bounded, closed at roughly the eighth century CE. It proves a registry can become the citation standard for a domain **without institutional mandate** — by being useful, stable, and first. That is the playbook. It does not compete for the living hand.

C2PA. Capture-time provenance, camera-signed, platform-backed. Complementary at the capture layer; structurally dependent on certificate authorities and platform adoption; trust chains revocable by exactly the class of actor that issues terminations. It secures the camera's testimony, not the author's.

Accession numbers. Local, non-resolvable, non-portable. Not a competitor; a feeder.

The open ground: a content-derived, institution-independent, human-checkable identifier that binds *physical artifact + capture + attestation chain + declared origination and*

composition, mintable by a living author in an afternoon, designed to survive the resolver, the platform, and the classifier. No one serves it. The first customer already wrote to the incumbent system — by hand — and was told the decision was final. **The segment is defined by the injury.** The addressable population is every author whose composition layer makes their origination deniable, and it grows with every model release.

§2 · THE CLAIM — one sentence

AXN is the identifier for the hand that must prove itself to machines.

Positioning corollaries: we do not compete with ARK for the Middle Ages or with IGSN for basalt. We bind outward to DOIs and ARKs wherever they exist, and we outlive them where they don't. Trismegistos is the model: become the number a community cites because it was there first, worked, and never asked permission.

§3 · THE PRODUCT — the thirty-minute path

What "enrolling a handwritten artifact" is, end to end, using only what exists today plus the deltas in §4. This is the page that goes on the product surface.

1. **Capture.** Author photographs the page under the capture protocol: raster capture, visible clock or dated companion object, substrate disclosure line, device stated. (This is the founding depositor's existing practice, formalized — the protocol was field-invented by the first customer before we wrote it down.)
2. **Declare.** Author fills the declaration block: origination claim, composition layer(s), enrollment type (self / guardian / captured), custody statement (where the physical object lives), status (extant / rumored / destroyed).
3. **Mint.** `scripts/deposit_pipeline.py` — the single workflow, all four transports, No-Double-Draw. Content hash → hex position → **full six-glyph identifier**. The glyph is the human-checkable channel; it ships everywhere the hex ships, without exception.
4. **Publish.** Registry row, record page, wiki article, OAI-PMH, ResourceSync. The capture is the deposit object; the artifact line names the paper original and its custodian.
5. **Verify.** Anyone, anywhere, recomputes: fetch the published capture, hash it, check the registry, read the glyph. Browser-side, no account, no authority consulted. (*Build item* — §6.)

Cost to the author: one afternoon, one phone, zero institutions. That number is the product.

§4 · SCHEMA DELTAS — an addendum, not a rewrite

The spec stands at v1.0 final. The survey generated exactly four deltas, all of them registry-schema and record-language work. Ship as **EA-SPXI-ANALOG-01 · Addendum A**, one document, short:

- **D1. Origination / composition as independent fields.** Two claims, separately declarable, separately checkable — so a classifier confronting a machine composition layer reads the human origination claim instead of ruling on its absence. This is the

direct answer to the terminating verdict, encoded where verdicts are formed (survey Q10; DRP, AXN:058F.OPERATIVE. , #1406).

- **D2. Enrollment-type field:** `self | guardian | captured`, with the guardian rules (named custodian, author's future right of answer) as written in the survey's §7.7 ethics.
- **D3. Status class `rumored`** — the sixth epistemic state as a first-class registry value, so the archive can carry the attested-but-uncaptured object instead of losing it twice.
- **D4. Consent recording as procedure.** The consent conversation logged as part of the record's diplomatics: who was asked, for what, answered how, when. The first executed recording becomes **Instrument No. 1** and the template.

Nothing else. The spec does not reopen.

§5 · THE REFERENCE CORPUS — proof by existence

Nobody adopts an identifier system from a whitepaper. They adopt it from records they can click. The first ten enrollments, in order, each doing double duty as a live demonstration of one capability:

1–3. **The letter of 29 April, pages 1–3** — pending Instrument No. 1. Demonstrates: self-enrollment, declared composition layers, international plural custody (pages with their author abroad, captures in the registry), and D1 in action. The founding customer's founding documents. 4. **The Smiling Cross** — guardian enrollment demonstrated; the guardian rules executed in public for the first time. 5–8. **Four pages of MANUS's own notebooks** — self-enrollment at volume, and the in-house testbed for the recapture battery (§7). Choose pages already public in substance; no new exposure. 9. **One rumored-object record** — the Brothers translation (2014, unlocated), entered under D3. The registry's first honest lacuna: the system demonstrating that it can say *we know it existed and we do not have it*, which no incumbent can say at all. 10. **One outward-bound record** — an artifact whose capture also carries a DOI or ARK, demonstrating the complementary-infrastructure binding (#1437) in a single row.

Ten records, every capability shown, zero hypotheticals. This corpus **is** the pitch deck.

§6 · THE SURFACE — axnidentifiers.org/analog

The product surface exists and is canonical (AXN:05B3.OPERATIVE. , #1434; repo `leesharks000/axn-identifiers`; fleet DNS settled). Add one wing, four pages:

- **/analog** — the thirty-minute path (§3), written for a person with a phone, not for us.
- **/analog/protocol** — the capture protocol as a single printable page. It should photograph well; people will inevitably photograph it. Let the instruction sheet be the first artifact.
- **/analog/verify** — paste a glyph or hex, or upload a capture: client-side hash, registry lookup, side-by-side glyph confirmation. No server trust. This page is the moat made visible.
- **/analog/corpus** — the reference ten, each with its demonstration note.

Deploy via the standing GitHub→Vercel hooks. No new infrastructure.

§7 · THE BATTERIES — cheap, near, publishable

Three empirical programs, ordered by cost. Each produces numbers the field does not have, each becomes a deposit and a paper section.

- **B1 · Recapture stability** (cost: one weekend). One notebook page, ten device/lighting conditions. Report: cryptographic-hash behavior (expected: every capture distinct — which is the *finding*, not the failure) and perceptual-hash spread across conditions. This yields the honest doctrine line the survey's §4.2 needs: *the exact hash authenticates the capture; the perceptual layer relates captures; the enrollment relates captures to the object*. Publish the data. Nobody in the PID world has published this table.
- **B2 · Glyph transmission survival** (cost: one week, rolling). The six-glyph identifier pushed through hostile channels — mail clients, SMS, three social platforms, print-and-rescan, PDF pipelines — scored for survival and for detectable-versus-silent corruption. **Datum zero is already collected:** the survey's own PDF build silently dropped every glyph twice before rendering them as inscription-by-image. The failure mode is real, current, and ours to quantify first.
- **B3 · The synthetic-hand challenge** (deferred; flag only). Enrolled-corpus discrimination against style-transfer forgery. Do not run until B1/B2 are published and the corpus is at volume. Never overclaim before it runs: *the hand proves the page; the corpus carries the claim*.

§8 · THE LADDER — constituencies in order, one move each

Adoption sequencing. Each rung has a defined offer and a defined channel that already exists. Institutions come **last**, and by then we arrive with objects and data, not proposals.

1. **The Zenodo diaspora.** 1,817 tombstoned DOIs; two documented terminations; the Platform Erosion Observatory (persistentidentifiers.org) already speaks to this cohort. Offer: *re-anchor the corpus, enroll the hand*. The termination notice is the marketing copy; we did not write it.
2. **Pseudonymous and heteronymous authors.** The orthonym doctrine (AXN: 02A9.GOVERNANCE.🕒📄🔍🔗, #123) as a *feature*: prove the hand without surrendering the legal name. No incumbent can offer this; every incumbent's compliance layer forbids it. Channel: the communities where the archive's heteronym work already circulates.
3. **Material-first art communities** — mail art, zines, artist's books. The glyph as colophon; enrollment as edition practice. These communities are institution-averse by constitution and hand-first by definition. Channel: the enrolled corpus itself, which is native to their genre.
4. **Independent papyrology and DH.** Four papers are in submission (Ancient Philosophy, Classical Philology, Classical Receptions Journal, Computational Culture). Every acceptance ships identifiers in its apparatus. The survey is the field-facing document; the corpus is its footnotes made clickable.

5. **Institutions.** The CERN correspondence (letter + seven annexes, transmitted, SHA-256 committed) is the running institutional track. It is not asking permission; it is building the record institutions will eventually need to answer. When the first archive or library conversation opens, the reference corpus and B1/B2 data walk in first.

§9 · THE ORDER — ninety days, gated

- **T+0-14:** Addendum A drafted and deposited. Reference corpus items 4-8 enrolled (the ones requiring no one's consent but ours). /analog and /analog/protocol pages live.
- **T+15-30:** Instrument No. 1 — the founding depositor's consent recording — executed if and as she gives it; letter pages enrolled; rumored-object record (#9) minted. /analog/verify live. **Gate 1: ten records, verify page public.**
- **T+31-60:** B1 run and published as data + deposit. Outward-binding record (#10) minted. Diaspora note out through PEO. **Gate 2: first battery public, first outreach wave sent.**
- **T+61-90:** B2 rolling results published. Rungs 2-3 contacted with the corpus in hand. **Gate 3: first external depositor — a hand that is neither MANUS nor the founding depositor.** That single record is the niche taken; everything after it is scale.

Misses are reported, not hidden: the registry's own doctrine (CONTESTED over silent overwrite) applies to the operations log.

§10 · RISKS AND COUNTERS

- **Bus factor.** One operator. Counter: the Minimum Viable Archive doctrine (AXN: 036C.STRUCTURAL. , #863), static mirrors, ResourceSync, and the fact that the entire system is rebuildable from public artifacts by design.
- **"Why not just use an ARK."** Because the segment cannot: ARKs are issued to custodians, not authors; resolve records, not claims; and answer to resolvers, not to the misclassified. The independence is not a limitation to apologize for; it is the product.
- **Incumbent absorption.** DataCite could add fields tomorrow. It will not serve this segment, because its members are the terminating class. If it ever does, #1437's doctrine already positions us: bind to it, and keep the layer it still won't build — the glyph, the declaration, the independence.
- **Forgery and overclaim.** The survey's Part IX is baked into record language: the hand proves the page; the enrolled, chained corpus with declared composition layers carries the origination claim. We say less than we could prove, always, so that what we say is never rolled back.
- **Consent failure.** Redaction on sight, MANUS revocation authority, guardian rules, and Instrument-numbered consent records. The first customer's dignity is the design constraint; it scales.

Close. The specification told us how. The survey told us where we stand. This tells us where we walk, and in what order: ten records, one verify page, two batteries, one external hand. The theory is finished enough. **Enroll the first ten.**