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Reviewed-By Trailer: Sovereign-Portable Peer-Review Attribution for  
Content-Hash-Bound Artefacts  
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## Abstract

This document defines a trailer grammar for sovereign-portable peer review as an extension of the identity-attributed commit grammar in [COMMITTS]. The grammar introduces one required trailer (Reviewed-By:) and three optional companion trailers (Review-Stance:, Review-Of:, Witnessed-By:) that bind a Sovereign-tier ~handle to a specific act of review over a specific content artefact, cryptographically signed using the Ed25519 mechanism of [COMMITTS]. The mechanism applies uniformly to git commits, document manifests, pre-prints, patent disclosures, and any other content-addressable artefact. Reviewer reputation accumulates on the sovereign handle rather than on a publisher's platform, making reviewer trust portable across journals, pre-print servers, and private review contexts. Pseudonymous review for anonymous peer-review processes is supported by permitting a Sovereign handle whose underlying party is concealed through out-of-band key custody, preserving full cryptographic verifiability of the review act without disclosing the reviewer's underlying identity. The grammar is positioned as complementary to CREDIT [CREDIT], ORCID [ORCID], and DOI [DOI] attribution infrastructure, not as a replacement for them.

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### 3. Introduction

#### 3.1. Problem Statement

Peer review of scholarly, scientific, and technical artefacts is today captured by a small number of publishing intermediaries whose editorial platforms hold the only durable record of a reviewer's contribution. When a reviewer accepts an invitation from a journal, the journal records the review against an internal reviewer profile; when the reviewer moves to another venue, that record does not travel with them. The mechanisms currently available for attaching reviewer identity to a review are fragmented and individually inadequate:

- \* *\*Journal reviewer databases.\** Each publisher (Elsevier, Springer Nature, Wiley, PLOS) maintains an internal reviewer profile. Reviewer reputation is platform-local. Migrating between publishers re-roots reputation.
- \* *\*ORCID reviewer credit [ORCID].\** ORCID supports a "Peer Review" activity type in which a publisher asserts that a given ORCID id performed a review. The assertion is publisher-attested; the reviewer cannot publish a review record without publisher cooperation, and cannot cryptographically demonstrate the review occurred without that cooperation.
- \* *\*CRediT contributor roles [CREDIT].\** CRediT is a controlled vocabulary for author-level contribution (conceptualisation, methodology, writing, etc.). It is orthogonal to review: CRediT describes what authors did, not what reviewers said.
- \* *\*Open-review initiatives (eLife [ELIFE-OPENREVIEW], F1000, arXiv trackbacks).\** These publish review content openly but continue to locate reviewer identity inside the publisher's platform; leaving the platform ends the review's discoverability.
- \* *\*COPE guidance [COPE].\** Establishes ethical norms for peer review but does not specify a format, attribution mechanism, or cryptographic binding.

None of the above provides a provider-neutral, DNS-resolvable, cryptographically-bound attribution mechanism for peer review that lets a reviewer accumulate portable reputation outside any publisher's platform.

#### 3.2. Design Goals

This document defines a review-trailer grammar with the following goals:

1. *\*Provider-neutral.\** No dependency on any specific publisher, pre-print server, or editorial platform.
2. *\*Sovereign-portable.\** Reviewer reputation accumulates on the reviewer's sovereign ~handle rather than on any publisher's platform. A reviewer who moves between journals, or between open review and private review, carries their signed review history with them.
3. *\*Content-bound.\** Every review trailer is bound to a specific content hash, so that a review of version 1 of a manuscript cannot be silently re-attributed to version 2.
4. *\*Cryptographically verifiable.\** Review attribution is bound by an Ed25519 signature whose public key is reachable from DNS without prior trust establishment, reusing the signature model of [COMMITTS].
5. *\*Pseudonymity-preserving.\** Anonymous peer review remains a load-bearing institution in some disciplines. The grammar supports pseudonymous review by permitting a Sovereign handle whose underlying party is concealed through out-of-band key custody, retaining cryptographic verifiability of the review act without disclosing the reviewer's underlying identity.
6. *\*Category-safe against misattribution.\** Conformant parsers reject cross-tier handle placement (e.g., an Instrument-tier handle in a Reviewed-By: slot) as a structural grammar violation, not a policy decision.

### 3.3. Scope

This document specifies:

- \* The Reviewed-By:, Review-Stance:, Review-Of:, and Witnessed-By: trailer grammar in ABNF [RFC5234].
- \* Reuse of the Identity-Signature:, Identity-Key-Id:, and Identity-Anchor: cryptographic trailers from [COMMITTS].
- \* Multiplicity, placement, and ordering rules.
- \* Verifier behaviour for accepting, rejecting, and surfacing review states.
- \* Security and privacy considerations specific to peer review.

This document does NOT specify:

- \* The ~handle identity primitive itself, which is defined by [MCPDNS] and incorporated by reference through [COMMITTS].
- \* The normative tier taxonomy, which is defined in [COMMITTS] Section 3 and restated briefly in Section 3 of this document.
- \* An editorial workflow or an editorial decision algorithm. This document defines an attribution grammar, not a review process.
- \* The economic rails for reviewer compensation. These are out of scope; the anti-extraction posture of Section 8 is summarised at the level required to motivate protocol-layer design choices.

## 4. Terminology

### 4.1. Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 RFC2119 [RFC8174] when, and only when, they appear in all capitals, as shown here.

### 4.2. Definitions

**Handle** A ~-prefixed identifier per [MCPDNS], as incorporated into [COMMITTS]. Handles are the unit of identity addressing in this document.

**Sovereign Tier Handle** Per [COMMITTS] Section 2.2. A handle representing a human individual or formal organisation with direct cryptographic agency; holds its own private key; can sign.

**Pseudonymous Sovereign Handle** A Sovereign-tier handle whose underlying real-world party is intentionally concealed. No syntactic marker distinguishes a pseudonymous Sovereign handle from a directly-identified one; the distinction is policy-level and is held by the reviewer (or by an editorial intermediary) through out-of-band key custody and assignment records. Pseudonymous Sovereign handles sign with the same cryptographic weight as any other Sovereign handle and are admissible wherever a Sovereign handle is admissible.

**Instrument Tier Handle** Per [COMMITTS] Section 2.2. A handle representing an AI model, API endpoint, or tool class; holds no key; cannot sign. Instrument handles are inadmissible in review slots.

**Review Act** A discrete act of evaluation performed by a Sovereign reviewer against a specific content artefact identified by content hash. A review act produces one trailer block.

**Content Hash** A cryptographic digest (SHA-256 or SHA-512, or the git object hash family of [COMMITs]) of the canonicalised artefact being reviewed. The hash binds the review to a specific manifest state and prevents silent re-attribution across revisions.

**Review Stance** A controlled-vocabulary enumeration of the reviewer's disposition toward the artefact. Permitted values are accept, reject, revise, endorse, and dispute.

**Witness** A second Sovereign-tier handle that attests to having observed the review act being performed, without taking review responsibility. Used for signing ceremonies and high-stakes review contexts (patent disclosures, adversarial reviews).

**Conformant Verifier** A consumer of review trailers that implements the parsing, rejection, and signature-verification rules defined in Section 7.

## 5. Identity Tier Taxonomy (Informative Reference)

The review-trailer grammar reuses the three-tier taxonomy defined in [COMMITs] Section 3 without extension. Pseudonymous review is expressed as a Sovereign handle whose underlying party is concealed through out-of-band key custody (Section 2.2); no separate tier or syntactic suffix is introduced.

Tier	Cryptographic Agency	Admissible in Reviewed-By: / Witnessed-By:	Examples
Sovereign	Holds own key, signs	Yes	~alice, ~example.com, ~reviewer-kappa
Bot	Scoped delegated key	No	~example-deps.bot, ~example-triage.bot
Instrument	No key, no signature	No	~example-model-1, ~example-model-2

Table 1

The Bot and Instrument tiers are inadmissible in review slots because peer review is an attestational act that requires cryptographic sovereign agency. Conformant verifiers MUST reject cross-tier placement per Section 7. Where AI-instrument involvement in review drafting must be disclosed, the separate Drafted-With: trailer of [COMMITTS] SHOULD be used alongside Reviewed-By:.

## 6. Trailer Grammar (Normative)

### 6.1. ABNF

The following ABNF [RFC5234] defines the syntax of each trailer. Implementations MUST accept exactly this grammar. Terminals not defined here are imported from [RFC5234] or from [COMMITTS] Section 4.1.

```
reviewed-by-trailer = "Reviewed-By:" SP review-handle CRLF
review-stance-trailer = "Review-Stance:" SP stance-value CRLF review-
of-trailer = "Review-Of:" SP content-hash-ref CRLF witnessed-by-
trailer = "Witnessed-By:" SP sovereign-handle CRLF
```

```
review-handle = sovereign-handle sovereign-handle = "~" handle-label
; per [COMMITTS] Section 4.1
```

```
stance-value = "accept" / "reject" / "revise" / "endorse" / "dispute"
```

```
content-hash-ref = hash-algorithm ":" hash-value hash-algorithm =
"sha256" / "sha512" / "git-sha1" / "git-sha256" hash-value = 1*HEXDIG
```

```
handle-label = 1*63( ALPHA / DIGIT / "-" / "_" / "." ) ; per
[COMMITTS]
```

Pseudonymous review is grammatically indistinguishable from direct-identity review: both forms appear as a sovereign-handle production. Whether the underlying party is concealed is a policy-level property held out-of-band by the reviewer (or by an editorial intermediary that manages pseudonym assignment) and is not exposed in the trailer grammar. Cryptographic verification proceeds identically in either case.

The cryptographic trailers Identity-Signature:, Identity-Key-Id:, and Identity-Anchor: are imported unchanged from [COMMITTS] Section 4.1 and MAY appear in a review trailer block under the multiplicity rules of Section 4.4 below.



## 6.2. Placement

Review trailers **MUST** appear in the trailer/footer block of the containing artefact. For git commits, this is the commit message footer as defined in [COMMITTS] Section 4.2. For document manifests (e.g., a REVIEW.md review record, a manifest appended to a pre-print, or a trailer block embedded in a patent disclosure submission form), the trailer block **MUST** appear as the final block of the document, separated from the preceding content by exactly one blank line.

A review trailer block is distinguished from a commit trailer block of [COMMITTS] by the presence of at least one Reviewed-By: trailer. The two trailer types **MAY** coexist on the same artefact: for example, a pre-print draft committed to a git repository **MAY** carry both an Acted-By: trailer (attributing the commit) and a Reviewed-By: trailer (attributing a subsequent review of the committed content). Verifiers **MUST** parse them independently.

## 6.3. Ordering

Review trailers **SHOULD** appear in the following canonical order:

1. Reviewed-By:
2. Review-Stance:
3. Review-Of:
4. Witnessed-By:
5. Identity-Signature:
6. Identity-Key-Id:
7. Identity-Anchor:

Verifiers **MUST** accept trailers in any order, but emitters **SHOULD** follow the canonical order to support diff-based review.

## 6.4. Multiplicity Rules

The following multiplicity constraints apply to a single review trailer block:

- \* **\*Reviewed-By:\*** - Exactly one trailer per review block. A single artefact **MAY** receive multiple review blocks over its lifetime (one per reviewer); each block is independently attributed and verified.

- \* **\*Review-Stance:\*** - At most one trailer per review block. A review takes exactly one stance at a time. If the reviewer's disposition is nuanced (e.g., "revise and resubmit with stance leaning toward accept"), the primary stance SHOULD be selected and the nuance recorded in the review body, not in additional stance trailers.
- \* **\*Review-Of:\*** - At most one trailer per review block. A review is bound to exactly one content-hash reference. A reviewer commenting on multiple artefacts MUST emit a separate review block per artefact.
- \* **\*Witnessed-By:\*** - Zero or more trailers per review block. Multi-witness ceremonies (e.g., patent disclosure reviews requiring two witness signatures) are permitted and expected. Multiple witnesses form an unordered set; order of appearance is not semantically significant.
- \* **\*Identity-Signature: and Identity-Key-Id:\*** - These two trailers MUST appear together or not at all, per [COMMITTS] Section 4.4. When present, they bind to the most recent preceding Reviewed-By: trailer in the block. Witness signatures, if required, are recorded as separate trailer blocks each rooted at a Reviewed-By: copy of the reviewer's handle or, alternatively, as witness-specific signature pairs whose binding is specified by the containing manifest.
- \* **\*Identity-Anchor:\*** - OPTIONAL in this version of the specification. Implementations targeting transparency-log-anchored review attribution MUST emit it.

## 7. Signature Algorithm (Normative)

### 7.1. Algorithm and Signed Payload

The signature algorithm is Ed25519 [RFC8032], reused unchanged from [COMMITTS] Section 5.

The signed payload is the raw byte representation of the canonicalised-content hash of the artefact under review, as named in the Review-Of: trailer. The algorithm named in the content-hash-ref determines which digest is produced; the signed bytes are the raw digest, not a hex-encoded string.

## 7.2. Rationale for Canonicalised-Content-Hash Signing

The signature binds the reviewer's sovereign key to the exact canonicalised content of the artefact being reviewed. This is distinct from (and orthogonal to) the tree-hash signing model of [COMMITTS]. A review is a statement about content, not about commit history; binding the review to the content hash preserves the review's attribution across re-export of the artefact into different containers (a pre-print re-uploaded to arXiv, the same manuscript ingested by a journal's submission system, a patent specification exported to PDF) as long as the canonicalisation yields the same digest.

Manifest hashes (envelope digests of the publisher's submission record) are deliberately NOT used as the signed payload. If a publisher re-packages the artefact, the manifest hash changes while the content is identical; binding reviews to manifest hashes would invalidate reviewer signatures under routine publisher operations. The authority over what constitutes "canonical content" rests with the artefact's originator (the author) rather than with the publisher; this preserves sovereign-portability of review.

## 7.3. Signature Format

Signature encoding follows [COMMITTS] Section 5.4 without modification. The trailer value is ed25519: followed by the base64url-encoded 64-byte signature per [RFC4648].

## 8. DNS Resolution (Normative Reference)

### 8.1. Reviewer Key Resolution

The reviewer's public key is resolved via the \_alter.<zone> DNS record mechanism of [MCPDNS], exactly as specified in [COMMITTS] Section 6.1. No mechanism is provided for verifiers to learn, from the trailer grammar or the DNS record alone, whether a given Sovereign handle is operated by a directly-identified party or by a concealed party under pseudonymous key custody. Where the distinction matters editorially, it is conveyed through separate out-of-band channels (editorial assignment records, conference of record); the protocol layer does not surface it.

## 8.2. Witness Resolution

Witness handles resolve identically to reviewer handles. Witnesses MUST be Sovereign-tier handles. Although the grammar does not distinguish pseudonymous from directly-identified Sovereign handles, the witness role is expressly an on-the-record presence attestation; witnesses SHOULD therefore use Sovereign handles whose underlying identity is publicly resolvable by the intended verifier audience, since concealed-party witnessing materially weakens the attestation.

## 9. Verifier Behaviour (Normative)

A conformant verifier MUST perform the following steps in order:

1. *\*Parse all review trailers from the trailer block.\** Trailers appearing outside the block MUST be ignored.
2. *\*Reject cross-slot category errors.\** For each trailer, resolve the handle's tier per [MCPDNS]. If any handle appears in a slot other than its tier's admissible slot - for example, an Instrument-tier handle in a Reviewed-By: slot, or a Bot-tier handle in a Reviewed-By: or Witnessed-By: slot - the trailer block is malformed and the verifier MUST reject it as a category error. The error message SHOULD identify the offending trailer by name.
3. *\*Validate the controlled-vocabulary stance.\** If a Review-Stance: trailer is present, its value MUST be one of the five stance values defined in Section 4.1. Unknown stance values MUST cause the review to be marked as malformed.
4. *\*Verify signatures, if present.\** If Identity-Signature: and Identity-Key-Id: are present, the verifier MUST:
  - a. Extract the key-id from the Identity-Key-Id: trailer.
  - b. Resolve the corresponding public key by querying the Reviewed-By: handle's \_alter record per Section 6.1.
  - c. Compute or retrieve the canonicalised-content hash of the artefact referenced by Review-Of:.
  - d. Verify the Ed25519 signature against that hash using the resolved public key.If signature verification fails, the verifier MUST mark the review as unverified and MUST NOT report it as having a valid sovereign attribution.
5. *\*Verify content-hash binding.\** If Review-Of: is present, the verifier SHOULD recompute the content hash from the artefact as delivered and compare it to the value in Review-Of:. Mismatch

indicates either artefact tampering or review attribution to a different version; the verifier MUST surface this condition and MUST NOT silently accept the review.

A conformant verifier SHOULD additionally:

1. \*Distinguish review states in user-facing output.\* Verifiers SHOULD present three distinct states:
  - \* verified - Reviewed-By: present with a valid Identity-Signature: resolving to the published key AND content-hash match.
  - \* claimed - Reviewed-By: present without a signature, or with a signature whose key cannot be resolved.
  - \* hash-mismatch - signature valid but content digest differs from Review-Of:.

Conflating these states is a security defect. Whether a verified review is directly-identified or pseudonymous is not derivable from the grammar; verifiers MUST NOT attempt to classify reviews along that axis from the trailer block alone.

## 10. Security Considerations

### 10.1. Reviewer Reputation Portability

Once a reviewer accumulates a signed review history on a sovereign ~handle, that history is architecturally outside any publisher's control. A publisher cannot unilaterally revoke, rewrite, or platform-lock the reviewer's past signed reviews; a reviewer migrating to a new publisher carries the chain of signed review acts with them, and any verifier (a future organisation, a tenure committee, a grant panel, an adversarial peer) can check the chain end-to-end without publisher cooperation.

This is an intentional redistribution of control away from platform-owned reviewer databases. Publishers remain the venue of record for the editorial decision process; they cease to be the venue of record for the reviewer's reputation.

## 10.2. Pseudonymity and Anonymous Peer Review

A Sovereign handle whose underlying party is concealed carries the same cryptographic weight as a directly-identified Sovereign handle and is grammatically indistinguishable from it. This preserves double-blind review where disciplinary norms require it, while still producing a verifiable signed review chain. Publishers operating anonymous-review workflows MAY mint or delegate a per-review Sovereign handle for the reviewer, discard the assignment-to-real-identity binding after the editorial process concludes, and rely on the reviewer's own key custody to retain the signed record for future portability.

The mapping between a concealed Sovereign handle and its underlying party is the responsibility of the reviewer and, optionally, of the editorial intermediary that facilitates the pseudonymous assignment. This document does not specify that mapping mechanism; implementations SHOULD document the assignment and custody model they use.

## 10.3. Review Spam

A malicious sovereign MAY publish arbitrary signed reviews attributing nonsense stances to arbitrary artefact hashes. The mitigation is not a protocol-layer filter but the reputational cost absorbed by the reviewer's own handle: spammy signatures accumulate against the same sovereign key that carries the reviewer's legitimate work. Verifiers SHOULD surface reviewer history to readers (e.g., "this handle has produced 12 reviews across 4 venues, of which 2 appear to be spam").

## 10.4. Review Bribery and Conflict of Interest

The grammar does not and cannot prevent a reviewer from being bribed to produce an unjustified positive review, nor from concealing a conflict of interest. Any economic counter-incentive is external to this specification: implementations operating on incentive-aligned rails can apply return-on-reputation invariants in which sustained honest reviewing compounds the reviewer's earnings stream while a single detected conflict-of-interest violation invalidates a disproportionate fraction of that stream. Conflict disclosure is a policy-layer concern; this protocol provides the truthful path for honest reviewers, not a verification path against dishonest ones.

### 10.5. Witness Collusion

Witness trailers attest to the presence of the reviewer at the review act; they do not attest to the review's substantive merit. Two witnesses colluding with a dishonest reviewer can still produce a validly-signed multi-witness block over a fraudulent review. Witness signatures therefore raise the cost of forgery but do not eliminate it. High-stakes review contexts (patent disclosure reviews, adversarial expert reviews) SHOULD require witnesses whose sovereign identities have independent reputational stakes that are lost by collusion.

### 10.6. Content-Hash Forgery

An attacker who can forge content with the same canonicalised hash as an honestly-reviewed artefact can silently re-attribute the reviewer's signature to forged content. The mitigation is the cryptographic strength of the chosen hash-algorithm. Implementations SHOULD default to sha256 or stronger and SHOULD NOT accept git-shal for high-assurance review contexts, in line with [COMMITTS] Section 8.4.

### 10.7. Key Custody at the Review-Signing Boundary

The same key-custody considerations as [COMMITTS] Section 8.6 apply unchanged: the signing operation MUST NOT occur in an unprivileged process that does not mediate access to the private key. Signing ceremonies for high-stakes reviews (patent disclosures, adversarial expert reviews) SHOULD additionally bind the signing key to a hardware authenticator and record the witness handles inside the trailer block before the signature is produced.

### 10.8. Negative Attribution: Missing Review Disclosure

A publisher MAY elect to omit the Reviewed-By: trailer when publishing a review in order to conceal the reviewer's identity even after review acceptance; this is detectable by the reviewer themselves (who retains their own signed copy) but not by third parties. The grammar defined here provides the positive attribution path; it does not force publishers to disclose reviewer identity where editorial policy forbids it.

## 11. Privacy Considerations

### 11.1. Pseudonymity as a First-Class Concern

Anonymous peer review exists because disciplinary communities have judged the costs of fully-attributed review (retaliation, seniority bias, disciplinary politics) to exceed the benefits. This document accepts that judgment by treating pseudonymous Sovereign handles as first-class cryptographic participants rather than as a degraded fallback. Because pseudonymous and directly-identified Sovereign handles are grammatically indistinguishable, implementations cannot reliably classify a review as pseudonymous from the trailer block alone; they MUST NOT emit operational warnings or user-facing nudges that characterise a review as lower-trust on the basis of suspected pseudonymity.

### 11.2. DNS-Linkability Risk

Every DNS resolution of a ~handle leaks the verifying party's interest in that handle to the DNS path (recursive resolvers, on-path observers, zone operators). Reviewers performing sensitive reviews under pseudonymous Sovereign handles SHOULD host the handle's zone with an infrastructure provider that is not the same entity as the publisher; otherwise the publisher's own DNS telemetry can de-pseudonymise review-assignment patterns.

### 11.3. Right to Withdraw a Review

A reviewer who wishes to withdraw a past review cannot unmake the cryptographic fact of the signed block; they MAY publish a superseding trailer block (a Reviewed-By: carrying a Review-Stance: dispute against their own prior review hash) that records the retraction without erasing the prior signature. The grammar is append-only by construction; retraction is done forward, not by deletion.

## 12. IANA Considerations

### 12.1. Trailer Name Registration

If a git/document trailer name registry is established by IANA (see [COMMITTS] Section 9.1), this document requests registration of the following additional trailer names with reference to this specification:

- \* Reviewed-By
- \* Review-Stance
- \* Review-Of



### \* Witnessed-By

The cryptographic trailers (Identity-Signature, Identity-Key-Id, Identity-Anchor) are registered by [COMMITTS] and are not separately registered here.

### 12.2. Stance Value Registry

This document requests IANA registration of a "Peer Review Stance Values" registry, initially populated with the five values of Section 4.1 (accept, reject, revise, endorse, dispute). The registration policy is "Specification Required" (RFC 8126). Extensions to the vocabulary MUST justify why the existing five values are insufficient for the proposed use case.

### 12.3. No Other IANA Actions

This document requests no other IANA actions. The did:alter: URI scheme, the identitylog:// URI scheme, and the Ed25519 signature encoding are all inherited from [COMMITTS].

## 13. Relationship to Existing Standards

The review-trailer grammar is intended to coexist with and complement existing peer-review attribution infrastructure, not to replace it.

Mechanism	Purpose	Coexistence with this spec
ORCID peer-review activity [ORCID]	Publisher-attested review record	Complementary. ORCID records THAT a review occurred; Reviewed-By: records WHAT the review was. Both can coexist on the same review act.
CRedit contributor roles [CREDIT]	Author-side contribution taxonomy	Orthogonal. CRedit describes what authors did; Review-Stance: describes what reviewers said. No overlap.
DOI attribution [DOI]	Persistent	Complementary. A

	identifier for the artefact	Review-Of: trailer MAY carry a DOI alongside or instead of a content hash where the DOI resolves to an immutable content manifest.
COPE ethics guidance [COPE]	Normative ethical framework for peer review	Orthogonal. COPE specifies duties; this document specifies attribution grammar. Implementations conforming to both are recommended.
eLife publish-review-curate	Open-review editorial model	Complementary. The eLife model benefits from portable reviewer identity; Reviewed-By: provides the portability without requiring platform lock-in.
arXiv trackbacks [ARXIV]	Informal linkage between reviews and pre-prints	Complementary. Trackbacks can carry Reviewed-By: blocks as machine-readable review records, upgrading informal trackback to cryptographic attribution.
Co-Authored-By: Claude	Informal AI co-authorship convention	Inadmissible in review slots. AI drafting assistance on a review SHOULD be disclosed via the Drafted-With: trailer of [COMMITTS], not via co-authorship.

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Table 2

Cryptographically-bound pseudonymous review - a Sovereign handle whose underlying party is concealed and whose review acts remain fully verifiable - is novel to this specification and has no analogue in prior peer-review attribution infrastructure. ORCID records publisher-attested facts about named identities; CRediT describes author contributions; DOI identifies artefacts. None of the three expresses the cryptographically-bound pseudonymous-reviewer role that peer review has relied on for a century but has had no portable attribution grammar for. That grammar is the load-bearing contribution of this document.

#### 14. Acknowledgments

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