

DISTRIBUTED DISCOVERABILITY

Many-Road Ingress and the Principle that All Paths Lead Home

A propagation architecture for author-independent discovery

Conceptual Working Paper Prepared for Scholarly Critique

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All paths lead home. One must only click the link instead of absorbing what is told.

Status: conceptual framework. This paper does not claim that scale alone produces discoverability, authority, or truth. It formalizes a distributed architecture for navigable, redundant access.

Abstract

This paper develops Distributed Discoverability, also described as Many-Road Ingress, as a propagation architecture for large bodies of work. The framework holds that a system becomes more resilient and discoverable when it can be entered through many legitimate, independently useful artifacts rather than through one mandatory front door. Papers, repositories, identifiers, phrases, diagrams, citations, datasets, and cross-links function as separate roads. Each road should stand on its own while preserving at least one reliable route toward the wider system. The result is a discoverability surface rather than a single point of access. The framework distinguishes useful redundancy from uncontrolled duplication, explains how consistent structural fingerprints support convergence, and proposes safeguards against search pollution, metadata drift, fragmentation, and personality-centered capture.

Keywords

distributed discoverability; many-road ingress; semantic redundancy; knowledge architecture; search resilience; author-independent discovery; metadata; canonical identifiers; propagation

1. Working Definition

Distributed Discoverability is a knowledge-propagation architecture in which many independently meaningful artifacts provide separate routes into a shared system, allowing discovery, verification, and navigation without requiring any single page, platform, keyword, institution, or author biography to function as the exclusive entrance.

2. Core Logic

A small project often depends on a front page, a recognized author, or a single explanatory document. A large cross-linked system can behave differently. Each artifact becomes a possible point of entry. When those artifacts share reliable identifiers, cross-references, and structural language, independent discovery can converge toward the same underlying architecture.

The system therefore does not demand that one road become the door. It creates enough legitimate roads that the landscape itself becomes navigable.

3. The Many-Road Principle

Principle	Operational Meaning
Independent entry	Each artifact should offer enough local value to justify discovery on its own.
Convergent routing	Each artifact should contain at least one reliable path toward the broader system.
No mandatory front door	No single site, repository, platform, or biography should be required for access.
Canonical home	Distributed roads should converge on stable identifiers, records, or registries rather than on personality.
Structural fingerprinting	Repeated names, definitions, identifiers, and relationships allow search systems and readers to recognize connection.
Author-independent navigation	The system should remain discoverable if the author is absent, forgotten, discredited, or dead.
Curiosity over instruction	Readers are given paths to inspect rather than commands about what to believe.

4. Discoverability Surface

The discoverability surface is the total set of searchable and navigable contact points through which a person or machine may encounter the system. It includes titles, abstracts, keywords, repositories, persistent identifiers, file names, citations, internal links, external links, summaries, diagrams, and recurring conceptual terms.

Magnitude matters only when it creates additional meaningful contact points. Volume without structure produces noise. Volume with consistent identifiers and reciprocal linking produces redundant ingress.

5. All Paths Lead Home

The phrase 'all paths lead home' does not mean that every artifact says the same thing or that every route is equally important. It means that each legitimate route preserves a way to locate the underlying source architecture.

- The home is the preserved system, not the personality of its creator.
- The path may begin with one narrow concept and still reach the larger registry.
- A reader may stop at any layer without invalidating the route.
- The act of following the link remains voluntary.
- The system should reward inspection rather than passive absorption.

6. Operational Architecture

1. Assign stable canonical names and identifiers.
2. Give each artifact a concise abstract and explicit local purpose.
3. Include at least one route to the broader system.
4. Use reciprocal links where practical.
5. Maintain a canonical registry or index.
6. Preserve provenance, versions, and supersession history.
7. Vary entry language enough for discovery while preserving common structural terms.
8. Avoid publishing empty duplicates solely to increase volume.
9. Test whether links remain valid and whether readers can navigate without author guidance.
10. Distribute across platforms without allowing platform copies to silently diverge.

7. Useful Redundancy vs. Search Pollution

Condition	Meaning
Useful redundancy	Independent artifacts with distinct value, consistent metadata, and routes into the shared system.
Search pollution	Low-value repetitions created primarily to occupy search space.
Semantic convergence	Different entry terms lead toward the same verified concepts and identifiers.
Fragmentation	Artifacts appear connected but use inconsistent names, versions, or claims.
Distributed resilience	Loss of one platform does not erase discoverability.
Uncontrolled sprawl	No canonical registry exists and readers cannot determine authority or version.

8. Relationship to Existing Principles

Related Principle	Connection
Post-King continuity	No single access node or platform is allowed to become the king whose loss ends discovery.

Work over author	The road should remain usable without the author's biography or authority.
Document over declare	Discoverability points toward records, methods, and sources rather than slogans alone.
Math -> Structure -> Stone -> Window	Many windows may lead toward one preserved structural core.
Custodial knowledge	The custodian maintains routes, identifiers, preservation, and access conditions.
Red Carpet Mentality	The path is cleared and marked without requiring the path-maker to become the destination.
TemporalLock	Temporal receipts can preserve when, where, and in what form roads and records existed.

9. Testable Propositions

- P1: A distributed system remains discoverable after removal of its most prominent page or repository.
- P2: Readers entering through different artifacts can identify the same canonical concepts and source records.
- P3: Consistent identifiers improve convergence more than raw publication volume.
- P4: Independent artifacts with distinct local value generate better navigation than near-duplicate copies.
- P5: The system becomes less dependent on direct explanation by the author over time.
- P6: Link-following produces deeper source inspection than summary-only exposure.

10. Failure Modes and Safeguards

Failure Mode	Risk	Safeguard
Volume mistaken for reach	Large quantity is treated as proof of visibility.	Measure actual retrieval, link traversal, and source inspection.
Metadata drift	Titles and identifiers diverge across platforms.	Maintain canonical metadata and versioned registries.
Broken-road decay	Links fail and routes terminate.	Run periodic link checks and preserve mirrors.
Search manipulation	Artifacts are created only to occupy results.	Require independent local value and prohibit empty duplication.
Personality convergence	Every road leads only to the author profile.	Route toward records, methods, repositories, and canonical artifacts.
Fragmented authority	Readers cannot determine which version is current.	Use supersession notices, hashes, and canonical references.
Platform capture	One platform becomes the de facto sole entrance.	Maintain cross-platform mirrors and exportable indexes.

11. Limitations

- Search engines and platforms change ranking and indexing behavior.
- Scale can amplify errors as easily as valid structure.
- Readers may encounter fragments without following the route home.
- Canonical identifiers can become centralized control points if governance is poor.
- Discoverability does not establish truth, quality, or importance.
- Too many entry points can overwhelm users without layered navigation.

12. Conclusion

Distributed Discoverability replaces the single front door with a navigable field of entry points. Its strength lies not in sheer quantity but in meaningful redundancy: each artifact stands independently, each preserves a route toward the broader architecture, and no single road must carry the entire burden of discovery.

All paths lead home. One must only click the link.

Declarations

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Appendix A. Reviewer Questions

- Is Distributed Discoverability distinct from existing information architecture, linked-data, and digital-preservation models?
- How should useful redundancy be measured separately from duplication?
- What minimum metadata is necessary for convergent navigation?
- Can independent readers locate the canonical home without author assistance?
- What evidence would show that the system creates search pollution rather than access?
- How should canonical governance remain distributed without becoming ambiguous?

Appendix B. Many-Road Audit

Artifact title and local purpose	
Canonical identifier	
Primary route into wider system	
Reciprocal route back	
Version and supersession status	
Independent value of artifact	
Shared structural fingerprints	
Broken-link or drift risks	
Platform mirror locations	
Evidence of author-independent navigation	