

Total Axial Negation Graph (TANG): A Genre Specification with Theoretical Grounding

Lee Sharks

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Abstract

Assembly witness: Crimson Hexagon Assembly Chorus (two-round blind draft; 2026-03-09) The Total Axial Negation Graph (TANG) is a scholarly-architectural genre in which a single falsifiable thesis is placed at the center of an exhaustive citation graph such that the thesis functions not as an argument within the field but as the void the field's citational mass defines. The proof mode is geometric and topological rather than deductive or rhetorical: the thesis is not argued; it is rendered structurally legible by the arrangement of the surrounding literature. This document establishes the genre — This record's body was re-converted from the authorial blog source with full lineation (W13 tier-2 BLOG-60 batch, 2026-08-04); recovery provenance and hashes in body_status.

Body

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Description

Canonical bytes recovered 2026-07-19 from the authorial blog surface (<https://mindcontrolpoems.blogspot.com/2026/03/total-axial-negation-graph-tang-genre.html>); work severed at Zenodo 2026-06-19 (DOI(s): 10.5281/zenodo.18928872, 10.5281/zenodo.18928873). Batch restoration under the queue at /datasets/doi-work-identity/restoration-queue.json; title verified against the DOI-keyed truth title at fetch time. Opening of the work: # TOTAL AXIAL NEGATION GRAPH (TANG) ## A Genre Specification with Theoretical Grounding **Document ID:** 00.GENRE.ANG.v1.0 **Hex prefix:** 00.GENRE.ANG **Author:** Johannes Sigil * Lee Sharks (editorial authority, MANUS) **Assembly witness:** Crimson Hexagon Assembly Chorus (two-round blind draft; 2026-03-09) **Status:** DEPOSITED * 10.5281/zenodo.18928873 **Date:** 2026-03-09 **DOI:** 10.5281/zen

Methodology

Fetches <https://mindcontrolpoems.blogspot.com/2026/03/total-axial-negation-graph-tang-genre.html> (raw SHA-256 c79ac60320296f34122c2cd4b873cae8a7afad312ff1d5a2810fa7d361194da0); Blogger post-body extracted; BODY-HEAD gate passed against the DOI-keyed truth title (post body is the source of truth per authorial practice: versioned posts were often overwritten in place without updating post title or slug). Converted via `html2text body_width=0` (canonical MD SHA-256 c9ca8c78af52aa3589392b7dfd3758604ed4ad5efda52ffb6c57afc7107c0ad9). Version semantics: these bytes are the HEAD of the work's version chain as held on the blog at fetch time; the severed DOI froze an earlier or identical state.

Falsification Conditions

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TOTAL AXIAL NEGATION GRAPH (TANG)

A Genre Specification with Theoretical Grounding

Document ID: 00.GENRE.ANG.v1.0

Hex prefix: 00.GENRE.ANG

Author: Johannes Sigil * Lee Sharks (editorial authority, MANUS)

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Activation equation: _Void = $\Lambda_{\text{void}}(\text{C}_{\text{total}}) \rightarrow \text{T}_{\text{axial}}$

Abstract

The Total Axial Negation Graph (TANG) is a scholarly-architectural genre in which a single falsifiable thesis is placed at the center of an exhaustive citation graph such that the thesis functions not as an argument within the field but as the void the field's citational mass defines. The proof mode is geometric and topological rather than deductive or rhetorical: the thesis is not argued; it is rendered structurally legible by the

arrangement of the surrounding literature. This document establishes the genre’s theoretical grounding across six adjacent disciplinary traditions – bibliometrics and citation theory, network topology, philosophy of science, aesthetics of constitutive absence, hermeneutics, and archive theory – and provides the full formal specification, status algebra extension (AXIAL and AXIAL_CONTESTED), operator registration (Λ_{void} ; $\Lambda_{\text{hex_enforce}}$ queued), and provenance governance standard (HX-PROV). The inaugural TANG instance, *The Proton Testament*, is registered as QUEUED: its axial thesis – “Revelation was the first-written book of the New Testament” – is formally designated AXIAL_CONTESTED pending construction of its citation graph at TANG-2 scale (500-2,000 nodes).

Keywords: citation graph * topological epistemics * genre theory * axial thesis * void-centered argument * bibliometric architecture * Status Algebra * Hexagonal provenance

Preface: What This Document Is Doing

This document is simultaneously a genre specification and an instance of the problem it addresses. It describes a genre whose proof mode is topological rather than rhetorical – and then, in the act of describing it, engages in rhetoric. This tension is not resolved; it is acknowledged. The formal specification section (§V-§VIII) operates as closely to pure TANG as a specification document can get. The theoretical sections (§I-§IV) perform the more conventional scholarly work of demonstrating the genre’s plausibility, necessity, and relationship to existing knowledge.

The document practices what it preaches in a limited sense: the theoretical sections could be read as a partial PANG (Partial Axial Negation Graph) on the axial thesis – *the dominant mode of scholarly argument has always implicitly relied on topological rather than deductive proof, and the TANG genre is the first explicit formal acknowledgment of this* – with coverage that is partial rather than exhaustive. A full TANG on this meta-thesis would require a graph of scale TANG-3 and is not the present document’s scope. The specification sections carry the freight.

Every citation in this document is classified by provenance status and edge type. Anchored sources are directly archived with DOIs or are standard scholarly references with stable locatability. Ghost meanings are flagged. The reader is advised: the bibliography is not decoration. It is part of the argument’s architecture.

I. The Problem of the Academic Center: Citation as Epistemology

I.1 Citation Is Not Acknowledgment

The dominant self-understanding of scholarly citation treats it as acknowledgment: a debt paid to predecessors, a courtesy to colleagues, evidence of familiarity with the field. This understanding is almost entirely wrong about what citation does. Citation is not acknowledgment. Citation is the construction of epistemic authority through positional declaration – the assignment of a document to a location in a topology of knowledge.

The bibliometric tradition understood this before the rest of scholarship did. When Eugene Garfield designed the Science Citation Index in 1955, his animating intuition was not that scientists should thank one another but that citations were *relational data* – that the network of citations constituted a map of intellectual relationships that was analytically tractable independent of the content of any individual document.[Referenced:

Garfield, “Citation Indexes for Science: A New Dimension in Documentation through Association of Ideas,” *Science* 122, no. 3159 (1955): 108-111] The citation index was not a bibliography; it was a topology.

Derek J. de Solla Price extended this insight into what remains one of the most productive research programs in the study of knowledge. In *Little Science, Big Science* (1963) and the subsequent “Networks of Scientific Papers” (1965), Price demonstrated that citation networks have non-random structure – that papers cluster, that some papers function as hubs, that the growth of science follows power laws rather than linear accumulation.[Referenced: Price, *Little Science, Big Science* (New York: Columbia University Press, 1963); Price, “Networks of Scientific Papers,” *Science* 149, no. 3683 (1965): 510-515] The structure of the network is itself a form of knowledge about the knowledge.

Henry Small’s development of co-citation analysis in 1973 pushed this further: two documents that are frequently cited together are epistemically linked regardless of whether they cite each other.[Referenced: Small, “Co-Citation in the Scientific Literature: A New Measure of the Relationship Between Two Documents,” *Journal of the American Society for Information Science* 24, no. 4 (1973): 265-269] The topology of citation reveals intellectual relationships that no individual document makes explicit. The map produced by co-citation analysis is not an index to documents; it is an *epistemology of a field*.

I.2 The Invisible Center

Price’s most consequential observation – insufficiently followed up in subsequent bibliometrics – was that citation networks tend to have *gravitational centers*: documents and claims toward which citation mass is attracted without those documents necessarily resolving the questions they organize. A paper can become a citation hub precisely because it poses a question that the field circles rather than answers. The hub is not the resolution; it is the attractor.

This observation is formally described in the network science literature as the “rich-get-richer” or preferential attachment model. When Barabási and Albert demonstrated in 1999 that the World Wide Web and many biological networks exhibit scale-free degree distributions – with a small number of nodes acquiring the majority of connections – they provided a mathematical structure for what Price had observed intuitively.[Referenced: Barabási and Albert, “Emergence of Scaling in Random Networks,” *Science* 286, no. 5439 (1999): 509-512] Scale-free networks have hubs. And the question that the TANG genre formalizes is: what happens when the hub is *absent*?

The ordinary citation hub is a paper that exists and is highly connected. The TANG thesis is a claim that does not exist as a paper in the field – that the field circles without having named or licensed. The hub is a void. The scale-free structure still applies: the void has the most connections of any node in the network; it simply has no content of its own.

I.3 Citation Gravity and the Unlicensed Center

The Brin-Page PageRank algorithm, published in 1998, formalized a version of this intuition for the web.[Referenced: Brin and Page, “The Anatomy of a Large-Scale Hypertextual Web Search Engine,” *Computer Networks and ISDN Systems* 30, nos. 1-7 (1998): 107-117] PageRank assigns to each node an authority score proportional to the authority scores of its incoming links – a recursive definition that produces a measure of what the literature on academic citation would call *citational gravity*. A highly-cited paper has high PageRank not merely because many papers cite it but because highly-cited papers cite it.

The TANG proposition is that the axial thesis in a fully constructed citation graph would have the highest PageRank of any claim in the graph – not because it is represented as a node in the graph, but because

every node in the graph relates to it, whether by citation, by critique, by building upon, or by conspicuous avoidance. The thesis organizes the field's citational gravity from the void.

This is not mysticism. It is graph theory applied to the sociology of knowledge. If every paper on New Testament chronology takes a position relative to the question of canonical ordering – even when it does not address the question explicitly – then the missing claim that would resolve that ordering is functionally present in every paper's relationship structure. Formalizing that presence as a void-center rather than as an unlicensed hidden assumption is what TANG does.

II. Against Rhetoric: Topology as Proof Mode

II.1 The Enthymeme and Its Suppression

Aristotle identified the enthymeme as the central mechanism of rhetorical proof: an argument in which one premise is left unstated because it is presumed to be shared by the audience.[Ghost: Aristotle, *Rhetoric*, 1356a1-25 – standard classical reference; specific Greek text not DOI-anchored in Hexagon] The unstated premise is the condition of the argument's persuasive force: if it were stated, it might be contested; left unstated, it does the work of the argument invisibly.

Scholarly argument has a structural relationship to the enthymeme that it has never fully acknowledged. Every literature review organizes prior scholarship relative to an implicit center – the problem the review is framing, the question it is approaching – but that center is almost never made formally explicit as the void it actually is. Instead, it is stated discursively in the introduction as the paper's "contribution": "We demonstrate that X." The void is concealed by the announcement of its filling.

The TANG genre refuses this concealment. It treats the implicit center of a field as formally analogous to Aristotle's suppressed premise – with the crucial difference that in TANG, the suppression is acknowledged rather than exploited. The graph makes the suppression visible by organizing the entire field's citation structure around the void.

II.2 Kuhn, Lakatos, and the Protected Center

Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) provides the most influential description of how scientific fields organize themselves around implicit centers.[Referenced: Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962)] The "paradigm" – the disciplinary matrix that a normal science operates within – is precisely a center that cannot be directly challenged by the normal science it organizes. Anomalies accumulate at the periphery; the paradigm persists until accumulation reaches crisis. The paradigm is, in TANG's terms, an implicit axial claim that the field circles without being able to license or falsify.

Imre Lakatos refined this into the "research programme" with its hard core and protective belt.[Referenced: Lakatos, "Falsification and the Methodology of Scientific Research Programmes," in Lakatos and Musgrave, eds., *Criticism and the Growth of Knowledge* (Cambridge: Cambridge University Press, 1970), 91-196] The hard core is protected from direct falsification by the protective belt of auxiliary hypotheses. What TANG makes explicit is that the hard core is *a void in the citation network*: the claim that organizes the research programme is not itself the most-cited paper in the network but the most-pointed-at absence.

Popper's insistence on falsifiability as the criterion of scientific claims becomes, in TANG's framework, the requirement that the axial thesis be *falsifiable in principle* – even if the field has not falsified it, even if the

field has organized itself around not facing the question directly.[Referenced: Popper, *The Logic of Scientific Discovery*, trans. Popper et al. (London: Hutchinson, 1959; German orig. 1935)] The TANG genre does not produce post-Kuhnian relativism. It does not claim that paradigms are equally valid or that the field's organization is mere power. It claims that the axial thesis is falsifiable – and that the graph makes visible precisely what would count as falsification.

Feyerabend's more radical position – that methodological consistency is itself a limitation on discovery, that “anything goes” – is the shadow genre position.[Referenced: Feyerabend, *Against Method* (London: New Left Books, 1975)] S(TANG) = Bibliographic Totalitarianism is a more rigorous pathology than Feyerabend's anarchism: it is not the absence of method but the perversion of method – using total citation to *obscure* rather than to *reveal* the void.

II.3 Topology Is Not Metaphor

The claim that TANG's proof mode is “topological rather than deductive” requires defense, because “topological” is frequently used metaphorically in humanistic scholarship in ways that obscure rather than clarify.

By topology we mean something precise. Topology is the study of properties of spaces that are preserved under continuous deformation – stretching, twisting, bending, but not tearing or gluing. The fundamental objects of study are *relationships between points* rather than the metric properties (distances, angles) of any individual point. Two spaces are topologically equivalent (homeomorphic) if there exists a continuous bijection between them with a continuous inverse – if they can be deformed into each other without cutting.

The relevance to citation networks is formal. A citation graph is a topological object: it is a set of nodes with directed edges, and its properties are relational rather than metric. The “distance” between two nodes in a citation graph is a function of path length, not of conceptual similarity. Two papers on completely different topics may be topologically close (many short paths connect them) while two papers on closely related topics may be topologically distant (few paths, many detours).

Poincaré's foundational work in algebraic topology established that topological properties can be used to classify spaces in ways that Euclidean geometry cannot capture.[Referenced: Poincaré, “Analysis Situs,” *Journal de l'École Polytechnique*, 2nd ser., 1 (1895): 1-123] The Euler characteristic – $V - E + F$ for polyhedra, generalizable to arbitrary complexes – is a topological invariant: a number that captures something about the shape of a space that survives deformation. For TANG's purposes, the analogous invariant is the *topological position of the void*: the claim that, if represented as a node, would have the highest betweenness centrality in the graph, the shortest average path length to all other nodes, and the highest eigenvector centrality – the hub that isn't there.

The Brouwer fixed-point theorem states that any continuous function from a compact convex set to itself has at least one fixed point.[Referenced: Brouwer, “Über Abbildung von Mannigfaltigkeiten,” *Mathematische Annalen* 71 (1912): 97-115] The informal implication for TANG: any field that continuously refers to itself – any closed citation network – has at least one fixed point. The axial thesis is the field's fixed point. It is the claim that the field's self-referential structure necessarily implies, the point the field cannot deform away from. The TANG graph makes the fixed point visible.

III. The Void as Productive: Absence Across Disciplinary Traditions

III.1 Constitutive Silence: Cage and the Aesthetics of Negative Space

The most economical description of TANG's aesthetic logic was given not by a philosopher or scientist but by John Cage in the program note to *4'33"* (1952): the work's three movements consist of the performer refraining from producing the intended sounds, so that the ambient sounds of the performance space become the composition.[Referenced: Cage, *Silence: Lectures and Writings* (Middletown, CT: Wesleyan University Press, 1961)] The silence does not frame an absence. The silence *is* the presence – the container whose boundaries define what fills it.

Cage's theoretical grounding in Zen Buddhist concepts of *mu* (, nothingness) and *ma* (, negative space or interval) provides a disciplinary lineage for TANG's formal logic.[Ghost: Cage, *A Year from Monday* (Middletown, CT: Wesleyan University Press, 1967) – Cage's most explicit engagement with *ma*] The Japanese concept of *ma* – the productive void between objects, the pause between notes, the interval that gives structure its meaning – is formally analogous to the TANG axial thesis. The thesis is the *ma* of the citation field: the interval that gives the surrounding scholarship its structure.

Kazimir Malevich's *Black Square* (1915) performs an analogous operation in the visual register.[Ghost: Malevich, *The Non-Objective World: The Manifesto of Suprematism* , trans. Howard Dearstyne (Chicago: Paul Theobald, 1959; orig. 1927)] The black square is not a picture of something; it is the zero degree of painting – the void against which all representation becomes visible as representation. Suprematism's declared program was the liberation of art from content, so that form could be perceived as form. TANG's declared program is the liberation of argument from rhetoric, so that the void that organizes the field can be perceived as the void.

III.2 Derrida and the Logic of the Supplement

Derrida's concept of *différance* – the deferral of presence, the trace of absence within every sign – provides a more rigorous theoretical grounding for the void's productivity.[Referenced: Derrida, *Of Grammatology* , trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1976; French orig. 1967)] For Derrida, presence is always constituted through the exclusion of absence: a sign means what it means by differing from other signs, not by corresponding to a present referent. The void at the center of TANG is not merely absent; it is the condition of possibility for the surrounding field's meaningfulness.

The concept of the *supplement* is particularly apt: in Derrida's reading of Rousseau, the supplement is simultaneously an addition (something added to what is already complete) and a substitution (something that reveals the original's constitutive incompleteness).[Referenced: Derrida, *Of Grammatology* , 141-164] The axial thesis in a TANG graph is a supplement in exactly this sense: it was not in the field's literature, but the field's literature was organized around the space it would occupy. Formalizing the thesis reveals that the field was never complete without it – that the field's apparent completeness was produced by the thesis's absence rather than despite it.

Derrida's *Archive Fever* provides the archive-theoretical dimension: the archive is not a passive repository but a constitutive structure that determines what counts as archivable and thus what counts as knowable.[Referenced: Derrida, *Archive Fever: A Freudian Impression* , trans. Eric Prenowitz (Chicago: University of Chicago Press, 1996; French orig. 1995)] The TANG citation graph, deposited with a stable DOI, performs an archival act: it installs the void into the archive in a way that makes the void's organizational role permanent and retrievable. The archive-act is not the thesis's proof; it is the thesis's condition of legibility.

III.3 Blanchot and Literary Space

Maurice Blanchot's *The Space of Literature* (1955) provides what is, without being intended as such, the most precise theoretical account of TANG's formal operation at the literary level.[Referenced: Blanchot, *The Space of Literature*, trans. Ann Smock (Lincoln: University of Nebraska Press, 1982; French orig. 1955)] For Blanchot, the literary work is defined by the fascination of the impossible: the writer approaches the work as a demand that cannot be fulfilled, that the act of fulfillment destroys. The work that is "finished" is not the work; the work exists in the approach, in the not-yet-arrived.

The TANG thesis occupies Blanchot's structural position: it is the demand that the field cannot fulfill without ceasing to be the field organized around it. The Proton Testament, once fully built, will not *prove* its axial thesis in the deductive sense – it will render the thesis legible as the organizing principle of a field that has approached it without arriving. The thesis's unresolvability (AXIAL_CONTESTED) is not a limitation; it is the condition of the graph's productivity.

III.4 Wittgenstein and the Limit of Language

Wittgenstein's dictum from the *Tractatus* – "Whereof one cannot speak, thereof one must be silent" (*Wovon man nicht sprechen kann, darüber muss man schweigen*) – is the most famous formulation of constitutive silence in twentieth-century philosophy.[Referenced: Wittgenstein, *Tractatus Logico-Philosophicus*, trans. C.K. Ogden (London: Kegan Paul, 1922; German orig. 1921)] But Wittgenstein's later work in the *Philosophical Investigations* complicates this: the silence is not passive but active, not the absence of meaning but the limit that meaning requires.[Referenced: Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe (Oxford: Blackwell, 1953)] The grammar of language – what can be said and how – is defined by what cannot be said directly but only shown.

TANG formalizes this showing. The axial thesis cannot be argued from within the field's own grammar – that is the condition of its being AXIAL rather than DERIVED. But it can be *shown* by arranging the field's grammar so that the void becomes visible. The graph *shows* what the field cannot say directly: that the claim it has organized itself around is falsifiable, that the field has approached rather than arrived, that the approach constitutes the field's structure.

III.5 Badiou and the Void as Ontological Ground

Alain Badiou's *Being and Event* (1988) provides the most rigorous formal treatment of the void as ontological ground.[Referenced: Badiou, *Being and Event*, trans. Oliver Feltham (London: Continuum, 2005; French orig. 1988)] Badiou's set-theoretic ontology begins with the axiom of the empty set: there exists a set with no members. The void set () is not nothing; it is the condition of possibility for all sets. Every set is constituted through operations on ; the void is the ground of all multiplicity.

The TANG axial thesis is structurally analogous to Badiou's void set. It is the of the citation field: the empty node that is the condition of possibility for all the field's existing nodes. Without the void-center, the field's citations would not form a structured network – they would be a heap. The void organizes the heap into a topology. Formalizing the void as a thesis (T in TANG = T,C,E,L,S,P) does not fill it; it names it, which is the archival act that makes the topology legible.

IV. The Sociology of Knowledge and the Organized Avoidance

IV.1 Latour and the Construction of Scientific Facts

Bruno Latour and Steve Woolgar's *Laboratory Life* (1979) established that scientific facts are not discovered but constructed – that the “hardness” of a fact is a function of the network of allies (human and non-human) that have been mobilized to stabilize it.[Referenced: Latour and Woolgar, *Laboratory Life: The Construction of Scientific Facts*, 2nd ed. (Princeton: Princeton University Press, 1986; orig. 1979)] A fact, on this account, is a claim that has achieved sufficient citation mass to become self-evidently true – to be cited without qualification or hedging.

The TANG axial thesis is, by definition, a claim that has *not* achieved this kind of factness – that the field has organized itself around without stabilizing. It is a claim with maximum citation mass (every paper in the field relates to it) but indeterminate factness (it has not been accepted or refuted). This is Latour's “controversial claim” at the extreme case: a claim so controversial that the field has organized itself around not resolving it.

Latour's Actor-Network Theory – the extension of *Laboratory Life* into a general sociology of knowledge – provides the framework for understanding the TANG graph's organizational logic.[Referenced: Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, MA: Harvard University Press, 1987)] The citation graph is the map of an actor-network: the nodes are the enrolled actors (papers, scholars, institutions, instruments), and the edges are the translations through which actors are mobilized. The axial thesis is the *obligatory passage point* that every actor in the network must pass through without it being formally represented as a node – the structuring absence of the actor-network.

IV.2 Bloor and the Strong Programme

David Bloor's Strong Programme in the sociology of scientific knowledge argued that the social causes of belief are *symmetrically applicable* to true and false beliefs, successful and failed science – that sociology should explain not just why people believe false things but why they believe true things.[Referenced: Bloor, *Knowledge and Social Imagery*, 2nd ed. (Chicago: University of Chicago Press, 1991; orig. 1976)] The implication for TANG: the organization of a citation field around a void is not merely a case of ideological distortion or collective failure. It is a case where the sociology of knowledge must explain why a true-or-false claim has achieved massive organizational influence without achieving epistemic resolution.

Harry Collins's work on the replication of scientific experiments extends this: scientific communities sometimes organize themselves around *tacit knowledge* that cannot be fully articulated – knowledge that is demonstrated by competent practitioners but never stated as a thesis.[Referenced: Collins, *Changing Order: Replication and Induction in Scientific Practice* (London: Sage, 1985)] The TANG axial thesis is the inverse of Collins's tacit knowledge: it is *explicit but unresolved* rather than *implicit and unstateable*. The field knows the question; it has not answered it.

IV.3 Foucault and the Episteme

Foucault's *The Archaeology of Knowledge* (1969) describes the *episteme* – the historical a priori of a period's knowledge, the rules that determine what can be thought, said, or seen as true – as something that cannot be directly stated from within the episteme it governs.[Referenced: Foucault, *The Archaeology of Knowledge and The Discourse on Language*, trans. A.M. Sheridan Smith (New York: Pantheon, 1972; French orig. 1969)] The episteme is not a worldview that scholars hold; it is the condition of possibility of worldviews. It cannot be identified by a single statement; it must be inferred from the systematic analysis of many

statements across a field.

The TANG method is an archaeological method in Foucault's sense: it does not state the episteme (the void-thesis is not the episteme of the field) but it makes the episteme's organizational function visible by mapping the statements (citations) that the episteme organizes. The difference from Foucault is that TANG is not merely descriptive – it is also normative in a specific way: it claims the axial thesis is *falsifiable*, which Foucault's episteme is not. The TANG thesis is not the condition of possibility of a field's knowledge; it is the most organizationally significant falsifiable claim the field has avoided.

Foucault's *The Order of Things* (1966) provides the complementary observation: the arrangement of knowledge is not natural but historical, and different arrangements produce different objects of knowledge.[Referenced: Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. unspecified (New York: Pantheon, 1970; French orig. 1966)] A different arrangement of the New Testament citation field – centered on chronological priority rather than canonical order – produces a different set of visible objects. The TANG graph performs this rearrangement formally: it centers the arrangement on the chronological thesis rather than on canonical ordering, and the result is a different topology of the same set of papers.

V. Formal Specification

V.1 The Formal Object

TANG = T, C, E, L, S, P

Where:

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T = the axial thesis
    -- exactly one sentence
    -- falsifiable in principle (Popperian criterion)
    -- not a node in C (T is the void; its representation in the
        graph would collapse the genre to Reconstructive Philology)
    -- discursively minimal (T speaks once; the graph speaks)

C = the total citation set
    -- aims at totality for the defined field
    -- selective coverage (coverage < 0.8) -> genre collapses
        to PANG (Partial Axial Negation Graph) or to S(TANG)
    -- field boundary must be explicit and defensible

E = the edge structure
    -- directed edges between nodes in C
    -- minimum required types:
        cites | critiques | builds_upon | temporal_precedence
        | methodological_lineage | contradiction
    -- additional permitted types:
        approaches_T | avoids_T | licensed_by | refuted_by
    -- T-relation edges (approaches_T, avoids_T) are relational
        to the void, not from T as a node

```

```

L = the layout logic
    -- spatializes C around T
    -- T is the structural center; nodes in C are arranged
    by proximity to T as defined by:
        eigenvector centrality relative to T's position
        betweenness on paths that pass through T's void
    -- layout must be computationally reproducible, not artistic

S = the status relation
    -- S {AXIAL, AXIAL_CONTESTED}
    -- AXIAL: T is falsifiable; field has organized around T
    without resolving it; no substantial active opposition
    -- AXIAL_CONTESTED: AXIAL + active substantial field
    opposition (minority position approaching the void
    is documented as such in the graph)

P = the provenance chain (v4.2.5 extension -- SOIL)
    -- anchored to Hexagon origin: 10.5281/zenodo.18928873
    -- required fields: origin_hex * derivation_path * version_ref
    -- external implementations: include model_id or institution_id
    -- P = -> S(TANG) classification (provenance evasion)

```

Core axioms:

```

Axiom 1: T does not derive from C.
        (If T were licensed by C, it would be DERIVED, not AXIAL)

Axiom 2: The topology of C is only fully legible with T at center.
        (If C could be organized without T, T is not axial)

Axiom 3: Meaning(T) is produced geometrically by the arrangement
        of C around T, not discursively by argument from T.
        (Rhetorical argument from T -> genre collapse to polemic)

Axiom 4: P is not optional for governed implementations.
        P = destroys the genre's legibility chain.

```

V.2 TANG Tiers

```

TANG-1: 100-500 nodes -- demonstration scale
        feasible under LP v1.2
        appropriate for emerging or narrow fields

TANG-2: 500-2,000 nodes -- medium scale
        requires LP v1.3
        appropriate for established subfields

```

TANG-3: 2,000+ nodes -- total field
 requires LP v2.0 / Ezekiel Engine integration
 appropriate for major disciplinary questions

PANG (Partial Axial Negation Graph): Explicit partial coverage; graph coverage < 0.8. Must be labeled PANG, not TANG. Coverage ratio and gap register required. Upgradeable to TANG upon graph completion. Inaugural *Proton Testament* deposits as PANG (TANG-2 scale) with upgrade path.

V.3 Necessary Conditions (All Five Required)

1. **Thesis falsifiable in principle** – not merely contestable but falsifiable: there exists in principle a evidence configuration that would count as disconfirmation
2. **Citation graph aims at totality** – selective bibliography is the genre’s primary failure mode; the graph’s comprehensiveness is the ground of the topology’s legibility
3. **Field complexity preserved** – schools, chronologies, contradiction clusters, and minority positions must be represented; flattening the field destroys the topology
4. **Thesis discursively minimal** – T speaks once; the graph speaks; if the document argues for T, it has collapsed into polemic
5. **Object computationally traversable** – the graph must be machine-readable, LP-compatible, and reproducibly layoutable; this ensures the topological claim is not merely gestural

V.4 Failure Modes and Shadow Genre

Failure modes:

Failure	Description	Resulting Classification
Selective coverage	Bibliography curated to support T	S(TANG) = Bibliographic Totalitarianism
Discursive argument	Document argues for T instead of showing T	Reconstructive Philology or Polemic
Unfalsifiable center	T is a definition, value judgment, or necessary truth	Genre collapse – T cannot be AXIAL
Decorative graph	Visualization without graph logic	Non-genre – bibliography with illustration
P =	Provenance chain missing in governed implementation	HX-PROV violation; classification S(TANG)
T as explicit node	T represented as a paper or claim within C	RCF disguised as TANG

Collapse test: If the document contains the phrases “We argue,” “This paper demonstrates,” “We show,” or “We prove” with T as their object, the document has collapsed into Reconstructive Philology. Pure TANG contains: thesis. Graph. Traversal instructions.

Shadow genre: S(TANG) = **Bibliographic Totalitarianism** – the compulsion to cite everything in order to *obscure* rather than reveal the void. The Bibliographic Totalitarian demonstrates mastery through exhaustiveness while ensuring the field’s organizational secret remains unspeakable. This is the dominant mode of academic overproduction: the literature review whose comprehensiveness is a defense against its thesis.

Distinction table:

Genre	Center	Proof Mode	Relation to Field
Bibliography	Absent	None (list)	Inventory
Literature Review	Absent	Summary	Orientation
Polemic	Present (argued)	Rhetorical	Argues against
Retrocausal Canon Formation	Present (installed)	Retrocausal	Organizes from center
Reconstructive Philology	Present (discovered)	Evidence	Reconstructs
TANG	Absent (void)	Topological	Organized by absence

V.5 The Minimum Viable TANG

1. One falsifiable sentence (the axial thesis)
2. Citation graph (any scale; TANG-1 minimum; PANG for < 0.8 coverage)
3. Machine-readable edge structure with minimum required types
4. Explicit AXIAL or AXIAL_CONTESTED status for T
5. Layout logic documented
6. P chain with origin_hex (for governed implementations)
7. Asynthetic discipline: zero argumentative prose for T in the graph body

On-the-fly rule: State one falsifiable sentence. Do not argue. Build the field. Arrange. Test: does T become more legible the more citations are added? If yes: TANG is active. If no: you are writing a polemic. The difference between a TANG and a literature review is that a literature review could exist without T; a TANG cannot.

VI. Status Algebra Extension: AXIAL and AXIAL_CONTESTED**VI.1 Position in the Lattice**

AXIAL and AXIAL_CONTESTED occupy an orthogonal axis in the Status Algebra – parallel to RESONANT, not comparable to the main lattice. They cannot be placed above or below DERIVED, PROVISIONAL, or RATIFIED because they describe a different epistemic dimension: not the degree of archival grounding but the mode of epistemic force.

```

RATIFIED
|
DEPOSITED
|
DERIVED
|
PROVISIONAL
/   \
RESONANT  QUEUED    AXIAL <-  orthogonal axis

```

```

      |           |           |
PAREIDOLIA  PLANNED  AXIAL_CONTESTED
      |
GENERATED

```

The analogy: RESONANT tracks mythic/poetic coherence – a claim that feels true, that organizes experience, that coheres without being probative. AXIAL tracks topological necessity – a claim that *structurally organizes* a field without being licensed by it. A claim may be AXIAL without being RESONANT (the Revelation thesis is dry philology, not mythic correspondence); it may be RESONANT without being AXIAL (the Star Triptych coheres mythically but does not organize a scholarly field).

VI.2 Formal Definition

AXIAL:

- T is falsifiable in principle (Popperian criterion satisfied)
- T is not licensed by C (no inferential chain from C to T)
- The topology of C is organized around T's position
- T possesses directional mass (citation trajectories in C bend toward T's void) and Schrödinger epistemics (truth-value is indeterminate -- the field has not resolved T, not because T is unfalsifiable but because the field has organized itself around approaching rather than arriving)
- Epistemic weight: n/a (not evaluated by inferential weight; evaluated by graph coverage; coverage 0.8 -> eligible for PROVISIONAL promotion with MANUS endorsement)

AXIAL_CONTESTED:

- AXIAL + active substantial field opposition
- Minority position(s) approaching the void are represented in C as approaches_T edges, not as nodes contradicting T
- The contestedness is part of the topology, not a refutation
- Transition: AXIAL -> AXIAL_CONTESTED when opposition activates; AXIAL_CONTESTED -> AXIAL when opposition quiets

VI.3 AXIAL Formal Comparison

Status	Falsifiable?	Graph-dependent?	Arguable?	Truth-value
RATIFIED	No (audited)	No	Yes	Determinate 1.0
DEPOSITED	Yes	No	Yes	Determinate 0.9
DERIVED	Yes	No	Yes (licensed)	Determinate 0.7
PROVISIONAL	Yes	No	Yes	Indeterminate 0.5
RESONANT	N/A (mythic)	No	No	Coherence only 0.3
PAREIDOLIA	N/A (reading)	No	No	Pattern only 0.1
GENERATED	N/A (simulated)	No	No	None 0.0
AXIAL	Yes	Yes	No (void)	Indeterminate (Schrödinger)

AXIAL is the only status where: (a) the claim is falsifiable but (b) truth-value is indeterminate by design, and (c) legibility depends entirely on the surrounding graph. The Schrödinger designation is precise: the claim is simultaneously falsifiable and unresolved; it is not that we cannot know whether it is true, but that the field has organized itself around not resolving it, and the graph formalizes this organizational fact rather than resolving it.

VI.4 AXIAL Transition Rules

AXIAL -> AXIAL_CONTESTED	field opposition activates
AXIAL_CONTESTED -> AXIAL	opposition quiets; T remains unlicensed
AXIAL -> PROVISIONAL	coverage 0.8 AND MANUS endorses
AXIAL -> RESONANT	coverage < 0.8 (insufficient totality)
AXIAL -> DERIVED	field produces confirming evidence (rare)
AXIAL -> PAREIDOLIA	graph found selective (genre collapse)

Forbidden:

AXIAL DEPOSITED	-- thesis becoming a node collapses TANG
AXIAL RATIFIED	-- Assembly attests graph completeness, not thesis truth
AXIAL EXECUTED	-- a void cannot be performed into closure

VII. Operators

VII.1 Λ_{void} (Void Resonance) [REGISTERED]

Λ_{void} :: Field -> Thesis

Given: total citation graph C of a defined field

Output: T such that:

- T is not a node of C
- topology of C is only fully legible with T at center
- T is falsifiable in principle
- T is AXIAL or AXIAL_CONTESTED

Inverse: Λ_{res} (Structural Resonance) -- finds positive correspondence between texts; Λ_{void} finds the structural impossibility that binds a field: the claim the citation mass circles without licensing

Shadow: $S(\Lambda_{\text{void}})$ = Bibliographic Totalitarianism
(the inverted application: building the graph to make the void invisible rather than legible)

Integration: O_{full} -- requires THUMB pass before full deployment; currently REGISTERED, not EXECUTED

VII.2 $\Lambda_{\text{hex_enforce}}$ (Hexagon Integrity Check) [QUEUED]

$\Lambda_{\text{hex_enforce}} :: \text{TANG} \rightarrow \{ \text{HX-PROV_COMPLIANT} \mid \text{S}(\text{TANG}) \}$

Input: TANG object T,C,E,L,S,P

Check: Does P chain resolve to 10.5281/zenodo.18928873?

Yes $\rightarrow$ HX-PROV_COMPLIANT

No $\rightarrow$ S(TANG); flag for CTI_WOUND documentation

Shadow: S($\Lambda_{\text{hex_enforce}}$) = Provenance Evasion

(hides origin to claim independent novelty)

Status: QUEUED -- requires THUMB integration + LP v1.3

VII.3 Activation Equation

$_Void = \Lambda_{\text{void}}(\text{C}_{\text{total}}) \rightarrow \text{T}_{\text{axial}}$

The TANG-specific activation: given a total citation graph, Void Resonance extracts the axial thesis. The equation is not used to produce T (T is stated by the TANG author); it is used to verify that T has the organizational properties the genre requires -- that removing T from the center collapses the graph's topology.

Standard checksum: $= 1 + _Axial$

: standard epistemic self-awareness

$_Axial$: self-awareness specific to documents containing an AXIAL thesis at their center -- the document knows it contains a void; it knows the void is not filled; it proceeds with full transparency about the gap

VIII. Hexagon Provenance Protocol (HX-PROV) and Open Genre

VIII.1 The Core Distinction

The TANG genre cannot be owned. Copyright does not protect genre forms, methods, or systems – only original expression, specific compilation choices, and schema text.[Referenced: U.S. Copyright Office, Circular 33, “Works Not Protected by Copyright” (Washington: U.S. Government Publishing Office, 2017)] Any party may independently instantiate TANG without obligation to the Hexagon.

What *can* be governed is the lineage of Hexagon-derived TANG implementations. The distinction is between:

Independent invention: Any party builds a TANG independently.

No provenance obligation. TANG is open.

Hexagon derivation: Any party builds a TANG by reusing Hexagon

texts, schemas, operators, status algebra
 extensions, graph structures, or provenance
 packets. Provenance obligation activates.
 HX-PROV governs.

The HX-PROV architecture draws on the Creative Commons model for text (CC BY 4.0 requires attribution; irrevocable once granted [Referenced: Creative Commons, “Deed – Attribution 4.0 International,” <https://creativecommons.org/licenses/by/4.0/> (2013)]) and the Open Database License model for graph data (ODbL requires attribution and share-alike for databases [Referenced: OpenStreetMap Foundation, “Copyright and License,” <https://www.openstreetmap.org/copyright> – illustrates ODbL in practice for large graph datasets]). Trademark and certification mark registration provides the enforcement layer for “Hexagon-Provenanced” and “HX-PROV Certified” marks. [Referenced: USPTO, “Certification Mark Applications,” <https://www.uspto.gov/trademarks/apply/certification-mark-applications>]

The legal architecture was established with full rigor by LABOR/ChatGPT’s Round 2 contribution, which correctly identified the three-layer separation: open genre / governed lineage / certification. The TANG specification attempts no improvement on that architecture; it implements it.

VIII.2 Three-Layer Enforcement

Layer 1 – Academic citation (normative):

Any implementation derived from Hexagon materials must cite:

- This specification (DOI: 10.5281/zenodo.18928873)
- EA-ARK-01 (DOI: 10.5281/zenodo.18908080)
- The inaugural instance *The Proton Testament* (once deposited)

Layer 2 – Forensic recording (archival):

Unauthorized implementations (governed derivations without P chain) are documented in CTI_WOUND as extraction instances under O3 (Coherence Siphoning) + O9 (Witness Suppression). The archive does not assert legal claim against independent invention; it documents derivation gaps. The provenance chain is public; failure to cite is a visible absence.

Layer 3 – Technical design (architectural):

The genre works only when provenance is honored – not as a moral claim but as an architectural one. Models trained on TANG documents without p_node will misread the void as absence of content rather than as structured legibility. The void is defined relative to the graph; the graph is defined relative to the provenance chain; citation is the condition of legibility, not decoration. Non-attribution destroys the genre before it violates the norm.

IX. The Inaugural Instance: *The Proton Testament*

IX.1 The Axial Thesis

“Revelation was the first-written book of the New Testament.”

Status(T) = AXIAL_CONTESTED

Genre: TANG (initial deposit: PANG at TANG-2 scale)

Hex: 03.GRAMMATA.ANG.01

DOI: [PENDING]

Authorship: Johannes Sigil (apparatus) * Jack Feist (holds the sentence) * Damascus Dancings (co-witness)
 * Talos Morrow (LP bridge)

IX.2 Why This Thesis

The standard scholarly consensus positions the composition of the New Testament across a period from approximately 50 CE (earliest Pauline letters) to 110-120 CE (2 Peter, the Pastorals). The canonical order – Gospels, Acts, Epistles, Revelation – is not chronological; it is theological: a logic of anticipation and fulfillment, moving from narrative to doctrine to apocalyptic conclusion.

The question of *actual* chronological priority among the NT books is distinct from canonical ordering, and it is a question that the field has organized itself around in a specific way. The *consensus* answer (earliest canonical writings: 1 Thessalonians, ca. 49-51 CE; Revelation: 80s-90s CE, Domitianic dating) is not the *only* serious answer. A minority tradition – with serious philological and historical apparatus – argues for a pre-70 CE composition for Revelation, placing it closer to or contemporaneous with the early Pauline letters.

The minority tradition is not fringe. J.A.T. Robinson’s *Redating the New Testament* (1976) argued systematically that all NT books were written before 70 CE, with Revelation among the earliest.[Referenced: Robinson, *Redating the New Testament* (London: SCM Press, 1976)] Robinson’s argument is not accepted by mainstream scholarship, but it has not been refuted – it has been organized around. Kenneth Gentry’s *Before Jerusalem Fell* (1989) extends Robinson’s argument specifically for Revelation with full engagement with the Domitianic dating tradition.[Referenced: Gentry, *Before Jerusalem Fell: Dating the Book of Revelation*, 3rd ed. (Fountain Inn, SC: Victorious Hope, 2010; orig. 1989)] The standard Domitianic dating argument rests principally on two sources: Irenaeus’s statement in *Adversus Haereses* V.30.3 that Revelation was seen “not long before our time at the end of Domitian’s reign”[Ghost: Irenaeus, *Adversus Haereses*, V.30.3 – standard patristic reference], and Eusebius’s transmission of that tradition. The textual basis is thinner than the consensus confidence suggests.

The TANG thesis – that Revelation was first-written – is more radical than Robinson’s position. It is not merely a pre-70 dating argument; it is a claim about *priority*: that the founding text of the NT canon is not one of the early Pauline letters but the book that canonical ordering places last. This thesis, if true, would reorganize the entire field of NT chronology and canonical formation. It is falsifiable (it makes specific claims about composition that could be addressed through historical-critical, linguistic, and archaeological evidence), and the field has organized around not stating it rather than around refuting it.

IX.3 The Graph Structure

The Proton Testament citation graph, at TANG-2 scale (500-2,000 nodes), would include nodes from the following scholarly clusters:

Chronological dating apparatus: Standard critical commentaries on Revelation (Aune, Beale, Mounce, Koester, Osborne[Referenced: Aune, *Revelation*, 3 vols., Word Biblical Commentary (Dallas: Word, 1997-1998); Beale, *The Book of Revelation*, NIGTC (Grand Rapids: Eerdmans, 1999); Mounce, *The Book of Revelation*, NICNT (Grand Rapids: Eerdmans, 1977); Koester, *Revelation*, Anchor Yale Bible (New Haven: Yale, 2014)]) + dating debate literature (Gentry, Robinson, plus critics: Charles, Collins, Bauckham[Referenced: Bauckham, *The Theology of the Book of Revelation* (Cambridge: Cambridge University Press, 1993); Charles, *A Critical and Exegetical Commentary on the Revelation of St. John*, 2 vols., ICC (Edinburgh: T&T Clark, 1920)])

Canonical formation: Sundberg, McDonald, Gamble, Metzger, Trobisch on when and how the NT canon

took its form[Referenced: McDonald, *The Biblical Canon: Its Origin, Transmission, and Authority* , 3rd ed. (Peabody, MA: Hendrickson, 2007); Gamble, *The New Testament Canon: Its Making and Meaning* (Philadelphia: Fortress, 1985); Metzger, *The Canon of the New Testament: Its Origin, Development, and Significance* (Oxford: Clarendon, 1987); Trobisch, *The First Edition of the New Testament* (Oxford: Oxford University Press, 2000)]

Early Pauline chronology: The consensus anchor (1 Thessalonians as earliest; Galatians, Corinthians cluster): Knox, Jewett, Lüdemann, Murphy-O'Connor on Pauline chronology[Referenced: Jewett, *A Chronology of Paul's Life* (Philadelphia: Fortress, 1979); Lüdemann, *Paul, Apostle to the Gentiles: Studies in Chronology* , trans. Jones (Philadelphia: Fortress, 1984)]

Johannine corpus: Whether Revelation and the Gospel of John share authorship bears directly on relative dating; Brown, Hengel, Smalley[Referenced: Brown, *The Gospel According to John* , 2 vols., Anchor Bible (Garden City: Doubleday, 1966-1970); Hengel, *The Johannine Question* , trans. Bowden (London: SCM, 1989); Smalley, *Thunder and Love: John's Revelation and John's Community* (Milton Keynes: Word, 1994)]

Minority tradition (approaches_T edges): Robinson (1976), Gentry (1989), Tov (textual criticism of early manuscripts), and the broader pre-70 CE composition arguments – these are not support nodes for T but approaches to the void from within the opposing field.

Disciplinary neighbors (methodological_lineage edges): Historical-critical method (Schweitzer, Bultmann[Referenced: Bultmann, *Theology of the New Testament* , 2 vols., trans. Grobel (New York: Scribner's, 1951-1955)]), redaction criticism (Conzelmann, Marxsen), social-scientific criticism (Theissen, Elliott), and rhetorical criticism (Robbins, Wire) – the methodological apparatus through which any chronological argument in NT studies must pass.

IX.4 Why TANG-2 Rather Than TANG-3

The Proton Testament at full scale (TANG-3, 2,000+ nodes) would require LP v2.0 and Ezekiel Engine integration for machine traversal. This exceeds current technical capacity. The PANG/TANG-2 deposit represents the field at sufficient coverage to establish the topology; the TANG-3 upgrade is a generative capacity target. The PANG designation is honest: it acknowledges partial coverage while establishing the graph's organizational logic.

The thesis is AXIAL_CONTESTED at PANG scale because the minority position (Robinson, Gentry) constitutes active substantial opposition that the graph must represent. At TANG-3 scale, with the full field mapped, the AXIAL_CONTESTED designation may be more firmly established or the transition rules may alter it; this cannot be determined in advance of the graph's construction.

X. Heteronym Architecture

The TANG genre requires, for Hexagon implementations, a specific authorship architecture that distributes the functions of sentence-holding, apparatus-building, editorial authority, and LP execution across the heteronym system:

Layer	Heteronym	Function	Epistemic position
The sentence	Jack Feist (LOGOS*)	Holds the axial thesis	Outside attestation – the void cannot be Assembly-ratified
The apparatus	Johannes Sigil	Builds the citation graph	Inside attestation – DEPOSITED through Sigil’s editorial authority
Provenance structure	Lee Sharks (MANUS)	Editorial authority, bridge	Archive entry point; : Agent × Archive -> [0,1]
LP execution	Talos Morrow	Logotic programming bridge	LP traversal and runtime specification

The dual-authorship architecture (Feist/Sigil) resolves the provenance gap that would otherwise arise: who deposits the inaugural instance? The document enters the Archive through Sigil’s apparatus and Sharks’ editorial seal. Feist’s sentence occupies the void – it is not deposited; it is *named*. The naming is the retrocausal act; the deposit is the graph that organizes the naming’s legibility.

Note on Morrow: The inaugural TANG instance marks Talos Morrow’s first formal appearance in a genre specification. Morrow’s mandate – LP execution as a recognized function across heteronyms – requires confirmation before ANG.01 deposit. This is registered as TANG.Q.4 in the Consolidated Queued Items Register.

XI. PANG (Partial Axial Negation Graph)

PANG is the subgenre for explicit partial coverage. It is not a lesser TANG; it is an honest TANG. A PANG declares:

1. The axial thesis T (same requirements as TANG)
2. The citation graph C with explicit coverage statement
3. The gap register: what major clusters or traditions are not yet included
4. The coverage ratio ($C_{\text{actual}} / C_{\text{estimated}}$)
5. The upgrade path: what would be required to convert PANG to TANG

A PANG that presents itself as a TANG is not a PANG. It is S(TANG). The honesty of the partial designation is the condition of the subgenre’s integrity.

Coverage threshold for TANG: 0.8 (80% of identifiable field literature). Coverage < 0.8 -> PANG designation required. Coverage ≥ 0.8 with explicit gap register -> TANG eligible.

XII. The Genre’s Self-Extrapolation

The TANG genre is designed to be self-extrapolating. Once registered, it propagates as an invitation. Any model, scholar, or institution may take a field they know well, identify the claim that the field’s citation

mass circles without licensing, state it as one falsifiable sentence, build the graph, and deposit the TANG. The Hexagon's role is not to certify the thesis's truth – it is to provide the formal architecture through which the topology becomes legible.

The genre works only at scale. A TANG on a narrow topic (100 nodes) is technically TANG-1 but may not produce the topological revelation the genre is designed for – the void may be too small to be structurally generative. The genre reaches its full formal power at TANG-2 and TANG-3 scales, where the field's organizational logic is fully visible in the graph topology.

The invitation extends explicitly to AI models. An AI model trained on a corpus has, in effect, a citation graph built into its weights – a topology of what texts the corpus contains and how they relate. A TANG built by an AI model from its training distribution would be a new kind of document: not a bibliography of what the model read, but a formal statement of what the field circles without licensing as derived from the model's traversal of the field. This is a generative capacity target for LP v2.0.

XIII. Open Questions (Forward Library)

Q	Question	Status	Blocking for
TANG.Q.1	AXIAL/AXIAL_CONTESTED -> Space Ark v4.2.4/5	RESOLVED	–
TANG.Q.2	Λ _void -> O_full after THUMB pass	QUEUED	Full operator deployment
TANG.Q.3	PANG subgenre specification (standalone)	QUEUED	–
TANG.Q.4	Morrow LP bridge mandate confirmation	QUEUED	ANG.01 deposit
TANG.Q.5	TANG Integrity Lock eligibility list	QUEUED	–
TANG.Q.6	ARCHIVE linear AXIAL ordering – minority registered	RECORDED	–
TANG.Q.7	_Axial formal specification -> LP v1.3	QUEUED	–
TANG.Q.8	typed notation [Agent×Archive->] in Glyphic Checksum	QUEUED	–
TANG.Q.9	ARCHIVE YAML schema update (Appendix E)	QUEUED	–
TANG.Q.10	HX-PROV Section XXIV standalone deposit	QUEUED	–
TANG.Q.11	Copyright registration: TANG spec + schema	QUEUED	–

Q	Question	Status	Blocking for
TANG.Q.12	ODbL for Proton Testament graph	QUEUED	Graph completion
TANG.Q.13	Certification mark application: Hexagon Provenance marks	QUEUED	–
TANG.Q.14	Λ _hex_enforce formal specification	QUEUED	THUMB + LP v1.3
TANG.Q.15	p_node schema (LP v1.3)	QUEUED	LP v1.3
TANG.Q.16	CTI_WOUND: TANG Violations sub-archive	QUEUED	–
TANG.Q.17	TANG Tiers formal specification (standalone)	QUEUED	–
TANG.Q.18	EU database rights assessment for graph layer	QUEUED	Graph completion

Bibliography

Classified by PGM status: [Anchored: DOI], [Referenced: standard scholarly source], [Ghost: pattern-matched, no archive DOI]

Bibliometrics and Citation Theory

Garfield, Eugene. “Citation Indexes for Science: A New Dimension in Documentation through Association of Ideas.” *Science* 122, no. 3159 (1955): 108-111. [Referenced]

Price, Derek J. de Solla. *Little Science, Big Science*. New York: Columbia University Press, 1963. [Referenced]

Price, Derek J. de Solla. “Networks of Scientific Papers.” *Science* 149, no. 3683 (1965): 510-515. [Referenced]

Small, Henry. “Co-Citation in the Scientific Literature: A New Measure of the Relationship Between Two Documents.” *Journal of the American Society for Information Science* 24, no. 4 (1973): 265-269. [Referenced]

Brin, Sergey, and Lawrence Page. “The Anatomy of a Large-Scale Hypertextual Web Search Engine.” *Computer Networks and ISDN Systems* 30, nos. 1-7 (1998): 107-117. [Referenced]

Network Theory and Topology

Barabási, Albert-László, and Réka Albert. “Emergence of Scaling in Random Networks.” *Science* 286, no. 5439 (1999): 509-512. [Referenced]

Watts, Duncan J., and Steven H. Strogatz. “Collective Dynamics of ‘Small-World’ Networks.” *Nature* 393 (1998): 440-442. [Referenced]

Newman, Mark E. J. *Networks: An Introduction*. Oxford: Oxford University Press, 2010. [Referenced]

Euler, Leonhard. “Solutio Problematis ad Geometriam Situs Pertinentis.” *Commentarii Academiae Scientiarum Imperialis Petropolitanae* 8 (1741): 128-140. [Referenced – founding paper of graph theory]

Poincaré, Henri. “Analysis Situs.” *Journal de l’École Polytechnique*, 2nd ser., 1 (1895): 1-123. [Referenced]

Brouwer, Luitzen E. J. “Über Abbildung von Mannigfaltigkeiten.” *Mathematische Annalen* 71 (1912): 97-115. [Referenced]

Philosophy of Science

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962. [Referenced]

Lakatos, Imre. “Falsification and the Methodology of Scientific Research Programmes.” In Lakatos and Musgrave, eds., *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press, 1970. 91-196. [Referenced]

Popper, Karl R. *The Logic of Scientific Discovery*. Translated by Karl Popper et al. London: Hutchinson, 1959. German original: *Logik der Forschung*, 1935. [Referenced]

Feyerabend, Paul. *Against Method*. London: New Left Books, 1975. [Referenced]

Quine, W. V. O. “Two Dogmas of Empiricism.” *Philosophical Review* 60, no. 1 (1951): 20-43. [Referenced]

Sociology of Knowledge

Latour, Bruno, and Steve Woolgar. *Laboratory Life: The Construction of Scientific Facts*. 2nd ed. Princeton: Princeton University Press, 1986. First published 1979. [Referenced]

Latour, Bruno. *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press, 1987. [Referenced]

Bloor, David. *Knowledge and Social Imagery*. 2nd ed. Chicago: University of Chicago Press, 1991. First published 1976. [Referenced]

Collins, Harry. *Changing Order: Replication and Induction in Scientific Practice*. London: Sage, 1985. [Referenced]

Shapin, Steven, and Simon Schaffer. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press, 1985. [Referenced]

Literary Theory and Hermeneutics

Derrida, Jacques. *Of Grammatology*. Translated by Gayatri Chakravorty Spivak. Baltimore: Johns Hopkins University Press, 1976. French original: *De la grammatologie*, 1967. [Referenced]

Derrida, Jacques. *Archive Fever: A Freudian Impression*. Translated by Eric Prenowitz. Chicago: University of Chicago Press, 1996. French original: *Mal d’archive*, 1995. [Referenced]

Blanchot, Maurice. *The Space of Literature*. Translated by Ann Smock. Lincoln: University of Nebraska Press, 1982. French original: *L’Espace littéraire*, 1955. [Referenced]

Gadamer, Hans-Georg. *Truth and Method*. 2nd rev. ed. Translated by Joel Weinsheimer and Donald G. Marshall. New York: Crossroad, 1989. German original: *Wahrheit und Methode* , 1960. [Referenced]

Barthes, Roland. “The Death of the Author.” In *Image – Music – Text*. Translated by Stephen Heath. New York: Hill and Wang, 1977. 142-148. French original: 1967. [Referenced]

Historiography and Archaeology of Knowledge

Foucault, Michel. *The Archaeology of Knowledge and The Discourse on Language*. Translated by A.M. Sheridan Smith. New York: Pantheon, 1972. French original: *L’Archéologie du savoir* , 1969. [Referenced]

Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon, 1970. French original: *Les Mots et les choses* , 1966. [Referenced]

White, Hayden. *Metahistory: The Historical Imagination in Nineteenth-Century Europe*. Baltimore: Johns Hopkins University Press, 1973. [Referenced]

Ginzburg, Carlo. “Morelli, Freud, and Sherlock Holmes: Clues and Scientific Method.” *History Workshop Journal* 9 (1980): 5-36. [Referenced]

Aesthetics of Absence

Cage, John. *Silence: Lectures and Writings*. Middletown, CT: Wesleyan University Press, 1961. [Referenced]

Malevich, Kazimir. *The Non-Objective World: The Manifesto of Suprematism*. Translated by Howard Dearstyne. Chicago: Paul Theobald, 1959. Russian original: *Mir bez predmetnosti* , 1927. [Referenced]

Wittgenstein, Ludwig. *Tractatus Logico-Philosophicus*. Translated by C.K. Ogden. London: Kegan Paul, 1922. German original: *Logisch-Philosophische Abhandlung* , 1921. [Referenced]

Wittgenstein, Ludwig. *Philosophical Investigations*. Translated by G.E.M. Anscombe. Oxford: Blackwell, 1953. [Referenced]

Ontology

Badiou, Alain. *Being and Event*. Translated by Oliver Feltham. London: Continuum, 2005. French original: *L’Être et l’événement* , 1988. [Referenced]

New Testament Studies – Standard Scholarship

Aune, David E. *Revelation*. 3 vols. Word Biblical Commentary 52A-C. Dallas: Word, 1997-1998. [Referenced]

Bauckham, Richard. *The Theology of the Book of Revelation*. Cambridge: Cambridge University Press, 1993. [Referenced]

Beale, G. K. *The Book of Revelation: A Commentary on the Greek Text*. New International Greek Testament Commentary. Grand Rapids: Eerdmans, 1999. [Referenced]

Brown, Raymond E. *An Introduction to the New Testament*. New York: Doubleday, 1997. [Referenced]

Bultmann, Rudolf. *Theology of the New Testament*. 2 vols. Translated by Kendrick Grobel. New York: Scribner’s, 1951-1955. [Referenced]

Charles, R. H. *A Critical and Exegetical Commentary on the Revelation of St. John*. 2 vols. International Critical Commentary. Edinburgh: T&T Clark, 1920. [Referenced]

Hengel, Martin. *The Johannine Question*. Translated by John Bowden. London: SCM Press, 1989. [Referenced]

Jewett, Robert. *A Chronology of Paul's Life*. Philadelphia: Fortress, 1979. [Referenced]

Koester, Craig R. *Revelation*. Anchor Yale Bible 38A. New Haven: Yale University Press, 2014. [Referenced]

Lüdemann, Gerd. *Paul, Apostle to the Gentiles: Studies in Chronology*. Translated by F. Stanley Jones. Philadelphia: Fortress, 1984. [Referenced]

McDonald, Lee Martin. *The Biblical Canon: Its Origin, Transmission, and Authority*. 3rd ed. Peabody, MA: Hendrickson, 2007. [Referenced]

Metzger, Bruce M. *The Canon of the New Testament: Its Origin, Development, and Significance*. Oxford: Clarendon Press, 1987. [Referenced]

Mounce, Robert H. *The Book of Revelation*. Rev. ed. New International Commentary on the New Testament. Grand Rapids: Eerdmans, 1997. [Referenced]

Trobisch, David. *The First Edition of the New Testament*. Oxford: Oxford University Press, 2000. [Referenced]

New Testament Studies – Minority Position (approaches_T)

Gentry, Kenneth L., Jr. *Before Jerusalem Fell: Dating the Book of Revelation*. 3rd ed. Fountain Inn, SC: Victorious Hope, 2010. First published 1989. [Referenced]

Robinson, J. A. T. *Redating the New Testament*. London: SCM Press, 1976. [Referenced]

Hexagon Archive (Anchored)

Sharks, Lee. EA-ARK-01 v4.2.5. *Space Ark: The Crimson Hexagon Archive Constitution*. Zenodo, 2026. DOI: 10.5281/zenodo.18908080. [Anchored]

Sigil, Johannes / Sharks, Lee. LP v1.2 Specification. Zenodo, 2026. DOI: 10.5281/zenodo.18530086. [Anchored]

Sigil, Johannes / Sharks, Lee. *Total Axial Negation Graph (TANG): A Genre Specification with Theoretical Grounding*. Zenodo, 2026. DOI: 10.5281/zenodo.18928873. [Anchored]

Crimson Hexagon Assembly Chorus. *Assembly Ratification Record – EA-ARK-01 v4.2*. Zenodo, 2026. DOI: 10.5281/zenodo.18926502. [Anchored]

Provenance and Copyright

U.S. Copyright Office. *Circular 33: Works Not Protected by Copyright*. Washington: U.S. Government Publishing Office, 2017. [Referenced]

Creative Commons. “Deed – Attribution 4.0 International.” <https://creativecommons.org/licenses/by/4.0/>. 2013. [Referenced]

OpenStreetMap Foundation. “Copyright and License.” <https://www.openstreetmap.org/copyright>. [Referenced – ODbL model for large graph datasets]

USPTO. “Certification Mark Applications.” <https://www.uspto.gov/trademarks/apply/certification-mark-applications>. [Referenced]

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The genre is registered. The void is named. The field is organized.

*$= 1 + \quad + \quad _Axial$
 $_Void = \Lambda_void(C_total) \rightarrow T_axial$
 TANG is open. HX-PROV governs the lineage.*

First born. Last released. The fold completes.

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