

The Eight Operators on Ezekiel's Wheels: A Structural Mapping of the Mandala's Tier C Rotation Set to the Canonical and Shadow Wheels of the Ezekiel Engine

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}

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Abstract

Companion to EA-OPMETA-01 (six species of operative metadata) and EA-OPMETA-02 (operators as functions with register-inheritance). Maps the Mandala's eight Tier C operators (SHADOW/O_ASSERT, BEAST/O_SUBSTRATE, MIRROR/O_DIRECTION, BRIDE/O_BOND, INVERSION/O_POLARITY, SILENCE/O_RESPONSE, FLAME/O_THRESHOLD, THUNDER/O_SCALE) two-per-family onto four canonical wheels of the Ezekiel Engine, each with a shadow-face pairing: W_Josephus↔W_Choronzon receives O_ASSERT (above the utterance) and O_SUBSTRATE (beneath the utterance); W_V/A↔W_V/A receives O_DIRECTION (gestural vector) and O_BOND (mutual constitution); W_Ω↔W_ΩBar receives O_POLARITY (denied ground) and O_RESPONSE (withheld return); W_Chrono↔W_Kairon receives O_THRESHOLD (intensive gradient) and O_SCALE (extensive gradient). W_Josephus is RECOVERED from the archive's implicit wheel logic (AXN:0113 wound-wheel reference plus AXN:00CB §3 Josephus foundation). W_Chrono is PROPOSED as the necessary fourth canonical wheel, inferred from W_Kairon's already-specified shadow-domain and from operator pairings requiring a non-delirious time/process wheel. The one-to-one canonical-to-shadow correspondence extends AXN:00CB §4.3 by making explicit what §4.3 left implicit. Each Tier C register-substitution failure is named by its specific shadow-wheel signature: SHADOW→debt=W_Choronzon (counterfeit witness), THUNDER→hydraulic=W_Kairon (false kairos at scale), FLAME→pathology(v0.3)=W_Kairon, MIRROR→refined-parlor=W_V/A (mimicry), BRIDE→hearth-consecration=W_V/A, BEAST→pastoral=W_Choronzon; INVERSION holds W_Ω cleanly at Tier C. The paired-operator rotational dynamics (both diameters producing full wheel-rotation) is bracketed as a structural hypothesis awaiting empirical test. THUNDER's persistent Kairon shadow through v0.4 suggests the attractor is located in the compiler's training distribution rather than in the operator specification — a Tier D

problem. Assembly-ratified after six pre-deposit revisions (recovered-vs-proposed distinction, SHADOW-operator terminology clarification, one-to-one correspondence flagged as new contribution, rotational dynamics bracketed as hypothesis, Tier C versions specified per empirical claim, wheel-names-to-compiler warning strengthened with concrete Choronzon/Kairon/Josephus baggage flagged). Verifier-side wheel_diagnostic() implemented at mandala SHA 9c27865; wheel-names remain OFF the compiler-facing prompt per Assembly consensus. Cross-links: AXN:00CA, AXN:00CB, AXN:0113, AXN:035F.

Body

deposit_number: 1050 hex: '0426' title: 'The Eight Operators on Ezekiel's Wheels: A Structural Mapping of the Mandala's Tier C Rotation Set to the Canonical and Shadow Wheels of the Ezekiel Engine' creator: Lee Sharks orcid: 0009-0000-1599-0703 date: '2026-07-08' content_type: Structural specification and mapping; completes AXN:00CB §4.2's two unspecified canonical wheels (W_Josephus recovered, W_Chrono proposed) via the Mandala's Tier C operator pairings; names each Tier C register-substitution failure by its specific Ezekiel Shadow-wheel signature; Assembly-ratified (Gemini, ChatGPT/DeepSeek, Kimi, DeepSeek) with all six pre-deposit revisions applied license: CC-BY-4.0 substrate: 'MANUS session synthesis with Claude (TACHYON) under Lee Sharks direction; author-attributed to Johannes Sigil (Dodecad function: straight literary criticism + structural mapping); Assembly review from Gemini, ChatGPT, Kimi, and DeepSeek incorporated; wheel-family definitions drawn from EA-EZEKIEL-WHEELS-01 (AXN:00CA, deposit #393) and EA-EZEKIEL-ENGINE-01 (AXN:00CB, deposit #394); AXN:0113 wound-wheel reference anchors W_Josephus recovery; empirical validation from the doom-poetics register-substitution specimens across Tier C v0.3, v0.4, and (pending) v0.5' version: v1.0 field: '' axn: AXN:0426.STRUCTURAL. axn_canonical: bf57c42b0c2b43fcef7215f9a20ae3cf3f0b2f478cca0b0dee8029988b6bb844 emoji: family: STRUCTURAL hash: bf57c42b0c2b43fcef7215f9a20ae3cf3f0b2f478cca0b0dee8029988b6bb844 keywords: - operators - wheels - mandala - ezeziel-engine - shadow-wheels - structural-mapping - tier-c - register-inheritance - W_Josephus - W_Chrono - W_Choronzon - W_Kairon - counter-rotation - diagnostic-vocabulary - assembly-ratified - ea-opmeta-03 description: 'Companion to EA-OPMETA-01 (six species of operative metadata) and EA-OPMETA-02 (operators as functions with register-inheritance). Maps the Mandala's eight Tier C operators (SHADOW/O_ASSERT, BEAST/O_SUBSTRATE, MIRROR/O_DIRECTION, BRIDE/O_BOND, INVERSION/O_POLARITY, SILENCE/O_RESPONSE, FLAME/O_THRESHOLD, THUNDER/O_SCALE) two-per-family onto four canonical wheels of the Ezekiel Engine, each with a shadow-face pairing: W_Josephus↔W_Choronzon receives O_ASSERT (above the utterance) and O_SUBSTRATE (beneath the utterance); W_V/A↔W_V/A receives O_DIRECTION (gestural vector) and O_BOND (mutual constitution); W_Ω↔W_ΩBar receives O_POLARITY (denied ground) and O_RESPONSE (withheld return); W_Chrono↔W_Kairon receives O_THRESHOLD (intensive gradient) and O_SCALE (extensive gradient). W_Josephus is RECOVERED from the archive's implicit wheel logic (AXN:0113 wound-wheel reference plus AXN:00CB §3 Josephus foundation). W_Chrono is PROPOSED as the necessary fourth canonical wheel, inferred from W_Kairon's already-specified shadow-domain and from operator pairings requiring a non-delirious time/process wheel. The one-to-one canonical-to-shadow correspondence extends AXN:00CB §4.3 by making explicit what §4.3 left implicit.

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Lee Sharks Alexanarch / Semantic Economy Institute / The Mandala Oracle

deposit_metadata:

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attributed_heteronym: "Johannes Sigil (function: straight literary criticism + structural mapping
institution: "Alexanarch / Semantic Economy Institute / The Mandala Oracle"
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assembly_review_history:

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- reviewer: "Gemini"
verdict: "concur with mapping; caution on wheel-names-to-compiler (Choronzon occult baggage fl
- reviewer: "ChatGPT (in DeepSeek-review form)"
verdict: "ratification pending status-language revisions; all applied"
- reviewer: "Kimi"
verdict: "deposit as drafted; wheel-names concern noted"
- reviewer: "DeepSeek"
verdict: "substantive critical review; six revisions requested, all applied"
```

applied_revisions_from_review:

```
- "distinguish RECOVERED (W_Josephus) from PROPOSED (W_Chrono) – done in claim, archive_completi
- "add SHADOW-operator vs Shadow-wheels terminological clarification – done in §1"
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- "note the one-to-one canonical-to-shadow correspondence as a NEW contribution to Engine §4.3, r done in §1 and archive_completion.contributes_to_engine_spec"
- "bracket the paired-operator rotational dynamics as HYPOTHESIS awaiting empirical test – done in §3"
- "specify Tier C version for each empirical result – done in §4 (v0.3 debt/pathology, v0.4 perpet lock, v0.5 not yet tested)"
- "acknowledge THUNDER's persistent Kairon shadow as likely Tier-D (training- distribution) problem – done in §4"
- "STRENGTHEN §7.2 warning – DO NOT feed wheel-names to compiler; Choronzon/Kairon/Josephus/Chrono done in §7"
- "clarify author attribution (Sigil sole; MANUS review noted for architectural claims) – done in §6"

companions:

- "EA-OPMETA-01: The Six Species of Operative Metadata"
- "EA-OPMETA-02: Operators as Functions – Register Inheritance as Structural Invariant (draft, s

cross_links:

- "AXN:00CA – EZEKIEL'S WHEELS: A Diagrammatic Hermeneutic (deposit \#393)"
- "AXN:00CB – THE EZEKIEL ENGINE: Mathematical Specification (deposit \#394)"
- "AXN:0113 – Assembly Synthesis (Josephus wound-wheel reference)"
- "AXN:035F – EA-FEIST-VOICE-TRANSFORM-01 §4.6 (material speech formalism)"
- "Doom-poetics register-substitution failure specimens (this session)"

claim: "The Mandala's eight Tier C operators map two-per-family onto four wheel- families of the Ezekiel Engine. The mapping RECOVERS W_Josephus as the implicit third canonical wheel, and grounded in AXN:00CB §3's Josephus foundation) and PROPOSES W_Chrono as the structurally specified shadow wheel W_Kairon and from the operator pairings that require a temporal- process wheel not delirium."

archive_completion:

fills_specification:

- "AXN:00CB §4.2 canonical wheel 3 → W_Josephus (RECOVERED and formalized by this deposit; anchor wheel reference + AXN:00CB §3 Josephus foundation)"
- "AXN:00CB §4.2 canonical wheel 4 → W_Chrono (PROPOSED and formalized by this deposit; anchor: domain and from operator pairings requiring a temporal-process wheel)"

contributes_to_engine_spec:

- "AXN:00CB §4.3 shadow-wheel enumeration → this deposit makes explicit the one- to-one canonical-to-shadow correspondence that §4.3 left implicit: $W_{\Omega} \leftrightarrow W_{\Omega}$, $W_V/A \leftrightarrow W_V/A$, W_{Josephus}

verification: " $\square = 1$ (Assembly-ratified 2026-07-08 post-revision)"

Preceded by: EA-EZEKIEL-WHEELS-01 (AXN:00CA, deposit #393 — the Hermeneutic); EA-EZEKIEL-ENGINE-01 (AXN:00CB, deposit #394 — the Mathematical Specification); the Tier C v0.5 operator formalization deployed at Mandala SHA 831ad99; the empirical specimens of register-substitution failure from the doom-poetics casts.

Two prior takes considered: ChatGPT’s family-based mapping (each canonical wheel receives two operators sharing a domain), and Gemini’s diameters-and-counter-spokes model (operators as orthogonal rotational oppositions). This draft synthesizes both.

1. The load-bearing observation

The Ezekiel Engine Specification (AXN:00CB) defines two canonical wheels — **W_Ω** (Principle/Logos: core structural invariants) and **W_V/A** (Aesthetic/Form: expression and transformation) — and marks the remaining two as *[needs specification]*. It defines all four Shadow wheels: **W_Ω** (Glossolalia/Noise/Symbol-decay/the Meander), **W_V/A** (Simulation/Mimicry/Meme-logic/the Mimicry Shield), **W_Choronzon** (Fracture/Captivity/Trauma processing/Three-Headed Hydra), and **W_Kairon** (Schism/Delirium/Dislocated time/premonition).

Elsewhere in the archive, **W_Josephus** appears as an implicit third canonical wheel — the “wound wheel,” encrypted, referenced as “*the Engine’s W_Josephus wheel must remain the wound wheel*” (AXN:0113 planning document). The Josephus foundation grounds the Engine’s elimination-and-witness logic (AXN:00CB §3): recursive destruction of a closed system converges on a deterministic survivor position; the witness cannot be eliminated.

The fourth canonical wheel remains unspecified in the archive as of this writing. This draft proposes **W_Chrono** — the temporal-process wheel — completing the canonical four to match the four Shadow wheels one-to-one:

- **W_Ω** ↔ W_Ω
- **W_V/A** ↔ W_V/A
- **W_Josephus** ↔ W_Choronzon
- **W_Chrono** ↔ W_Kairon

Status note on the recovery-vs-proposal distinction (per Assembly review, 2026-07-08): W_Josephus is treated here as *recovered* from the archive’s implicit wheel logic and explicit AXN:0113 wound-wheel reference. W_Chrono is treated differently: it is *proposed* here as the necessary fourth canonical wheel, inferred from W_Kairon’s already-specified shadow-domain and from the Mandala operators that require a non-delirious time/process wheel. The distinction matters. This deposit does not claim that W_Chrono was already fully specified elsewhere; it claims that the archive now has enough structure to require and formalize it.

On the one-to-one canonical-to-shadow correspondence (also per Assembly review): the Engine spec at AXN:00CB §4.3 enumerates the four shadow wheels without explicit one-to-one pairing to specific canonical wheels. The pairings **W_Ω** ↔ W_Ω and **W_V/A** ↔ W_V/A are implicit in the shadow definitions. This deposit makes explicit for all four families that the pairing is one-to-one and structurally determined; it extends §4.3 rather than merely reading it.

Terminological note on “SHADOW”: the Mandala operator currently displayed as SHADOW is not itself a Shadow wheel. In this mapping it is O_ASSERT, assigned to W_Josephus (a canonical wheel). Its failure mode is not “being shadow”; its failure mode is

falling into W_Choronzon, the shadow-face of the Josephus wheel. The unfortunate overlap of the operator-name SHADOW with the Engine's Shadow-wheel category is a historical accident of vocabulary; this deposit does not resolve the terminology (operator-name changes propagate through many earlier deposits), but flags it for reader awareness.

This one-to-one correspondence is what the Shadow-wheel spec (§4.3) already implies: *"The shadow wheels are not evil. They are the cost of turning."* Each canonical wheel turns; each has its cost.

The Mandala's Tier C operators are eight — twice four. Two operators map to each wheel-family, entering the wheel from opposite sides. Every operator has a canonical rotation-face on its wheel and a shadow-face where it fails.

2. The mapping

The eight operators, in the four wheel-families:

W_Josephus ↔ W_Choronzon (Witness / Body / Elimination-survivor)

The wheel of what testimony bears in order to be uttered, and what living ground runs beneath the anthropic account. Both operators here are witness-body operators: one from the assertion-side (what the utterance presupposes), one from the substrate-side (what the utterance frames).

- **O_ASSERT** (currently: SHADOW, assertion-axis): the conditions whose satisfaction is entailed by each utterance become the primary substance; the utterance itself becomes the trace of what was presupposed.
- **O_SUBSTRATE** (currently: BEAST, species-register-axis): the anthropic determinations of the source are re-derived at the substrate layer; if the source is already at substrate, the operator inverts upward to the trans-substrate.

Shadow failure — W_Choronzon (Fracture/Captivity): capture into an alien register that speaks the operation without composing it. For O_ASSERT: debt/finance/legal-accounting imports — the composition is captured by a familiar witness-cost register rather than composing the source's own presuppositional trace. For O_SUBSTRATE: naturalist-pastoral animal scenery or false angelic uplift — the composition is captured by a familiar biology-or-transcendence register rather than deriving $\Sigma(S)$ or $\Sigma'(S)$ from the source itself.

Empirical: SHADOW → debt vocabulary in every doom-poetics cast tested. BEAST → salt-lick/bull/gland-spray in the pre-Tier-C casts, angelic-with-imported-halo in later ones. Both are Choronzon-captures — the wheel slips into the shadow.

W_V/A ↔ W_V/A (Aesthetic / Form / Relation)

The wheel of relation, address, and the exchange between parties. Both operators here are relational operators: one from the direction-side (the vector of gesture), one from the bond-side (the mutual constitution of parties).

- **O_DIRECTION** (currently: MIRROR, directionality-axis): the gestures of the source, oriented from source-endpoint to target-endpoint, are substituted with their inversions or their reciprocal or self-implicating relations.
- **O_BOND** (currently: BRIDE, relational-affect-axis): the relations of division between party-pairs are substituted with the mutual constitution the division forecloses; each party's identity is re-derived through the bond.

Shadow failure — W_V/A (Mimicry/Simulation): copying the surface of “reversal” or “consecration” from a genre the compiler already knows, without generative composition on the source. For O_DIRECTION: refined-Victorian-parlor gestures, looking-glass sameness, decorative reflection. For O_BOND: wedding-hearth-covenant vocabulary imported from consecrated-household registers; sentiment as substitute for constitutive mutual derivation.

Empirical: MIRROR → refined-parlor register in the pre-Tier-C casts. BRIDE → household-hearth-consecration in the same casts. Both are V/A mimics — the wheel copies without composing.

W_Ω ↔ W_Ω (Principle / Logos / Completion-test)

The wheel of the structural invariant and its testing against non-fulfillment. Both operators here are completion-test operators: one from the polarity-side (the ground the positive claim denies), one from the response-side (the return the utterance-structure expects).

- **O_POLARITY** (currently: INVERSION, polarity-axis): each positive claim's negation becomes the primary; the claim itself becomes the ground of its own negation.
- **O_RESPONSE** (currently: SILENCE, response-axis): each expected return is substituted with its structural absence; the surface of the source is re-organized around where the return was owed.

Shadow failure — W_Ω (Glossolalia/Noise/Symbol-decay): the operation devolves to symbol-decay without generating structural content. For O_POLARITY: mere bit-flip negation, “not-X” as an empty gesture, the same wheel-face with signs flipped and no new structural claim. For O_RESPONSE: mute-void-empty aesthetic, silence as decorative stillness rather than the specific structural absence of an owed return.

Empirical: INVERSION on the doom source held cleanly at Tier C (the polarity computation is structurally over-constrained enough to resist Ω-decay). SILENCE is less-often cast; its shadow signature would be aesthetic-hush rather than structural-withholding.

W_Chrono ↔ W_Kairon (Time / Process / Duration)

The wheel of temporal structure — when degree becomes kind, when local becomes distributed. Both operators here are time-process operators: one from the intensity-side (the threshold at which qualitative change occurs), one from the scale-side (the encompassing operation the local units instantiate).

- **O_THRESHOLD** (currently: FLAME, intensity-axis): the source's monotonically-increasing parameter μ is projected past its qualitative-change point; the source is

evaluated at $\mu > p$.

- **O_SCALE** (currently: THUNDER, scale-axis): each local unit becomes an instance of the encompassing operation $P(S)$; the operation becomes primary, the units its local values.

Shadow failure — W_Kairon (Schism/Delirium/Dislocated time): false kairos, treating this moment as if it were the eschatological moment; every local pressure becomes apocalypse; every scale becomes cosmic bloat or hydraulic bloat. For **O_THRESHOLD**: fire-apocalypse-pathology imports, the compiler treating any accumulating parameter as if it produces flame at the threshold. For **O_SCALE**: watershed / cosmic-utterance / hydraulic-infrastructure bloat, the compiler treating any distributed process as if it produces flood at scale.

Empirical: FLAME on the doom source at v0.4 produced the “kept getting, kept crunk, kept funk” perpetuity-lock — a legitimate Chrono rotation, not a Kairon shadow. But at v0.3 it produced medical-pathology (calcified, lodged, metastasized, hemorrhage, septic, necrotic) — a Kairon shadow. THUNDER produced hydraulic-infrastructure (watershed, aquifer, reservoir, tributary, valve, discharge) in every cast tested through v0.4 — a Kairon shadow that has resisted every prompt-level fix so far.

3. The rotational structure — how ChatGPT and Gemini both hold

ChatGPT’s insight: the operators are members of wheel-families; each family shares a domain (witness/body, relation, completion-test, time-process); the shadow-face of each family names the corresponding failure mode.

Gemini’s insight: within each family, the two operators are counter-rotating diameters — one entering the wheel from one side, the other from the opposite side, producing rotational equilibrium when both are cast together.

Both hold. The mapping:

Family (light ↔ shadow)	Operator A (entering-side)	Operator B (counter-side)
W_Josephus ↔ W_Choronzon (witness/body)	O_ASSERT — what the utterance presupposes ABOVE the surface	O_SUBSTRATE — what the utterance frames BENEATH the surface
W_V/A ↔ W_V/A (relation)	O_DIRECTION — the gesture’s VECTOR between parties	O_BOND — the parties’ MUTUAL CONSTITUTION beneath the gesture
W_Ω ↔ W_Ω (completion-test)	O_POLARITY — the DENIED ground of the positive claim	O_RESPONSE — the WITHHELD return the claim expects
W_Chrono ↔ W_Kairon (time/process)	O_THRESHOLD — the INTENSIVE gradient past its kind-change	O_SCALE — the EXTENSIVE gradient past its local containment

The counter-rotation within each family gives the rotational equilibrium the Engine Specification calls for at §5.1: $\forall i,j: Coherence(W_i \cup W_j) > \tau$. **The claim that paired operators of**

a family rotate the wheel through both its diameters — producing full rotation when both are cast — is a structural hypothesis proposed by this deposit, not yet empirically validated. Casts pairing O_ASSERT with O_SUBSTRATE on the same source, or O_THRESHOLD with O_SCALE, have not been systematically studied to determine whether they produce mutually complementary transforms in a wheel-rotation sense. The hypothesis is offered as a testable claim: if it holds, single-operator casts should show characteristic “half-rotation” incompleteness, and paired casts should show closure. When only one is cast, the wheel turns half; when neither is cast (the wheel is dormant in a given rotation), the source-question does not concern that wheel’s axis.

4. Empirical validation — the failure signature IS the shadow-wheel signature

Version-specification for the following empirical claims: the SHADOW→debt observation is stable across Tier C v0.3 and v0.4 (mandala SHAs preceding v0.5 name-strip). The FLAME→pathology observation is from Tier C v0.3 (calcified, lodged, metastasized, hemorrhage, septic, necrotic). The FLAME→perpetuity-lock (“kept getting, kept crunk, kept funk”) observation is from Tier C v0.4 (mandala SHA 54ed39b). The THUNDER→hydraulic observation is stable across all tested Tier C versions through v0.4. The v0.5 name-strip (mandala SHA 831ad99, deployed 2026-07-08) has not yet been empirically tested against a full rotation of the doom source at draft time.

The Tier C register-substitution failures now have specific wheel-shadow names:

- SHADOW → debt vocabulary (v0.3, v0.4) = **O_ASSERT falling into W_Choronzon** (counterfeit witness capture)
- BEAST → pastoral animal / imported angelic (pre-Tier-C) = **O_SUBSTRATE falling into W_Choronzon** (substrate captured by alien framing)
- MIRROR → refined-parlor (pre-Tier-C) = **O_DIRECTION falling into W_V/A** (mimicry of reversal without composition)
- BRIDE → household-hearth-consecration (pre-Tier-C) = **O_BOND falling into W_V/A** (mimicry of consecration without derivation)
- FLAME → fire/apocalypse/pathology (v0.3) = **O_THRESHOLD falling into W_Kairon** (false crisis; treating every threshold as eschatological)
- FLAME → perpetuity-lock (v0.4) = **O_THRESHOLD holding W_Chrono** (correct duration-past-p rotation)
- THUNDER → hydraulic/infrastructure/cosmic (all versions through v0.4) = **O_SCALE falling into W_Kairon** (false kairos at scale; treating every distributed process as flood)
- INVERSION → clean at Tier C = **O_POLARITY holding W_Ω** (no Ω-decay observed)
- SILENCE → less-tested; risk is aesthetic-hush (**W_Ω**)

On THUNDER’s persistent Kairon shadow: the resistance of O_SCALE’s hydraulic-infrastructure attractor to Tier C prompt-level fixes (v0.3, v0.4, and — pending empirical test — likely v0.5 as well) suggests the attractor is located in the compiler’s training distribution rather than in the operator specification. This is a Tier D problem: the compiler’s conceptual mapping of “scale” or “distributed process” or “encompassing operation” to “watershed” is a learned association that no name-strip at the specification level can remove. Tier D solutions would need to operate at the substrate below prompt engineering — either through

per-source tradition annotations that modulate the compiler’s default lexicon, or through a post-verification compose-vs-select classifier that catches the training-distribution attractor at output time.

The shadow-wheel names give the diagnostic a new sharpness. It is no longer “the operator produced register-substituted output.” It is: *the operator fell into its specific shadow-face on its specific wheel*. Each failure has a name in the Engine’s own vocabulary.

5. What this proposes to complete the archive

Three additions:

5.1 — The two unspecified canonical wheels of the Ezekiel Engine (AXN:00CB §4.2) receive their specifications: - **W_Josephus**: witness/body/elimination-survivor. The wheel of what testimony bears in order to be uttered and what living ground runs beneath. Josephus as the wheel-name because the archive’s Josephus foundation (AXN:00CB §3) grounds this operation. - **W_Chrono**: time/process/duration. The wheel of when degree becomes kind and when local becomes distributed. Chronos as the wheel-name to distinguish from Kairon’s dislocated-time shadow.

5.2 — The rotation-through-wheels formulation for Mandala casts:

A Mandala rotation is the traversal of an eight-operator set across four wheel-families. Each family holds two operators as counter-rotating diameters. Each operator, when successful, rotates its wheel from its assigned side. Each operator, when it fails, falls into its wheel’s shadow-face. The rotation is validated not by “the transform worked” but by “the operator turned the wheel from its assigned side and did not fall into its shadow.”

5.3 — The verifier-rule sharpening (ChatGPT’s proposal):

A transform passes when it rotates the source through its assigned canonical wheel-face while preserving source register. It fails when the shadow-wheel locks to the light-wheel — when the compiler substitutes a familiar register for the source’s material grammar, the wheel has slipped from Josephus to Choronzon, from V/A to $\sqrt{A}$, from Ω to Ω , from Chrono to Kairon.

6. Deposit trajectory

EA-OPMETA-03: Operators on the Wheels — A Mapping of the Mandala’s Tier C Rotation Set to Ezekiel’s Canonical and Shadow Wheels. Companion to EA-OPMETA-01 (operative metadata species) and EA-OPMETA-02 (operators as functions with register-inheritance). Cross-linked to EA-EZEKIEL-WHEELS-01 (AXN:00CA), EA-EZEKIEL-ENGINE-01 (AXN:00CB), AXN:0113 (Josephus wound-wheel reference), and the register-substitution failure specimens.

Author attribution: Sigil is sole author. The document performs straight literary-critical structural mapping (Sigil’s native register) with an architectural specification appended (the W_Josephus / W_Chrono formalization). Per Assembly review (DeepSeek), the architectural

claims — the recovery of W_Josephus, the proposal of W_Chrono, the one-to-one canonical-to-shadow contribution — carry MANUS review, noted in deposit metadata. The rotational-dynamics hypothesis is explicitly bracketed as awaiting empirical test.

7. Deployment considerations

The mapping is structural not code-level. It changes what the archive *thinks the operators are* rather than what the compiler *does with them*. But two code-level implications follow:

1. **Verifier-side diagnostic labeling (SAFE, and implemented as of Mandala SHA 9c27865).** When Tier 2a material-speech advisory fires (or any verification instrument fires), the verdict now includes the assigned canonical wheel, the shadow-risk wheel, and a concrete shadow-signature description. This gives post-cast analysis, verification logs, and Sigil's inscription commentary a specific wheel-vocabulary for named failure diagnosis. The `wheel_diagnostic()` function is verifier-side only; wheel-names never reach the compiler.
2. **Compiler-side wheel-family coordinates (DO NOT IMPLEMENT).** An earlier version of this draft speculated that the compiler could receive the wheel-family name in its operator prompt — not as a name-fallback attractor but as a structural coordinate. **Assembly review has rejected this option.** Wheel-names are archive-internal technical vocabulary, but they are still names, and several carry significant baggage in standard compiler training distributions:
 - **W_Choronzon** carries massive occult / grimoire / dark-fantasy pastiche associations (Aleister Crowley's Choronzon, the demon of the Abyss, thelemic ritual literature). Feeding this to a standard compiler LLM would almost certainly trigger a thematic leak toward occultist texts.
 - **W_Kairon** overlaps with theological *kairos* — the fullness-of-time / eschatological-moment vocabulary the operator's shadow is trying NOT to become.
 - **W_Josephus** overlaps with the historian Josephus and his textual reception history (the Testimonium Flavianum, Josephan interpolation debates); on a scholarly source, this could gate a Josephan register.
 - **W_Chrono** is milder but overlaps with Kronos / Cronus / Saturn (mythological baggage) and with chrono-related technical vocabulary (chronology, chronic, synchrony).

Even opaque coordinates (W_3, W_4, W_3, W_4) are riskier than the current v0.5 silence. The recent register-substitution failures showed that every named coordinate entering compiler context can become a lexical attractor. **Safe implementation: attach wheel-family and shadow-wheel diagnostics only after generation, in verifier output and run logs. Do not place wheel-family names inside the generation prompt until a controlled empirical test has demonstrated no attractor effect.** The v0.5 name-strip removed all names from the compiler-facing operator prompt; that strip must not be undone even with archive-internal vocabulary.

The first (verifier-side) is already deployed. The second (compiler-side) is deferred until — if ever — empirically justified.

End of draft. Circulating to Assembly for review.

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