ABAD Adaptive ZD30

Voynich Manuscript Master Test Ledger

Version 1 foundations through Version 3.1 structural closure

Purpose of this report

A compact, audit-friendly record of what every major test was designed to answer, what happened, and how each result redirected the research program. Tests are presented in execution order. A pass means a predeclared statistical or structural gate passed; it does not mean the manuscript was decrypted.

Current bottom line

Question	Current answer
Has any English, Middle English, Latin, Old English, or mixed mapping passed?	No.
Is there reproducible structure?	Yes. Final-glyph and suffix behavior predicts broad next-token structural classes.
Does the mechanism cross sections and Currier A/B?	Some predictive information crosses, but a universal 17-glyph model fails.
What shared core survived?	Six final glyphs: l, n, o, r, s, y.
Do those six form their own sequential language?	No. Their Markov sequence does not survive complexity control.
Best present interpretation	Compact boundary-control markers inside a larger, context-dependent structural system.

Phase I - Adaptive validation and mapping controls

The first phase converted the qualitative ABAD idea into frozen, reproducible tests and closed increasingly flexible language-mapping branches.

v1.0 - Middle-term package freeze

SEALED	Package sealed; not yet an evidentiary run.

- **Purpose:** Freeze dictionaries, ontology, expansion grammar, composite weights, and selection-aware null rules before testing candidate translations.
- **Result:** Package sealed; not yet an evidentiary run.
- **What it changed:** Removed discretionary rule changes during later testing.

v1.1 - Executable adaptive mapping

FAIL	No candidate passed.

- **Purpose:** Replace mapping-invariant token recurrence with mapping-dependent morphology, semantics, grammar, illustration shifts, and held-out coverage.
- **Result:** No candidate passed.
- **What it changed:** Confirmed that Adaptive ZD30 could reject mappings, but did not identify a translation.

v1.2 - Targeted care/caring morphology

FAIL	No candidate passed.

- **Purpose:** Test whether the observed care/caring-style pair behaved like productive held-out morphology rather than an isolated English-looking collision.
- **Result:** No candidate passed.
- **What it changed:** The pair was the correct kind of evidence but was not unique against matched Voynich suffix controls.

v1.3 - Anchor-reverse run

FAIL	No candidate passed.

- **Purpose:** Freeze proposed word anchors, reverse the mapping direction, and test whether the signal survived without forward-only tuning.
- **Result:** No candidate passed.
- **What it changed:** Anchor evidence did not survive a frozen reverse ledger.

v1.4 - Discovery-aware reverse and forward-backward-forward

FAIL	No candidate passed.

- **Purpose:** Repeat anchor discovery inside every null and test forward, reverse, and forward-again stability.
- **Result:** No candidate passed.
- **What it changed:** Closed the possibility that direction cycling alone validated the proposed words.

v1.6 - Full anchor rediscovery null

FAIL	Failed.

- **Purpose:** Make every null repeat the complete anchor-search procedure, matching the real run's selection pressure.
- **Result:** Failed.
- **What it changed:** Showed that the apparent anchor elevation could be produced by discovery and selection.

Phase II - Structural discovery before language mapping

Structural - QOK / 54-family atlas

CONFIRMED	Forward-looking suffix rules appeared; previous-class prediction was weak or negative.

- **Purpose:** Determine whether prefix families predict the next broad structural class under double page-and-family holdout.
- **Result:** Forward-looking suffix rules appeared; previous-class prediction was weak or negative.
- **What it changed:** Moved the program toward first-order forward structure.

Structural - Stratified grammar

CONFIRMED	Currier B, Hands 2/3, and non-Herbal material were strongest.

- **Purpose:** Test stability by Currier language, section, and scribal hand.
- **Result:** Currier B, Hands 2/3, and non-Herbal material were strongest.
- **What it changed:** Defined the frozen strong-B stream.

Structural - Hand rule inventories

CONFIRMED	Shared rules existed, with strength and concentration differences.

- **Purpose:** Measure whether Hands 1, 2, and 3 use different suffix-rule inventories or merely different densities.
- **Result:** Shared rules existed, with strength and concentration differences.
- **What it changed:** Supported one system expressed unevenly rather than completely different hand languages.

Structural - Second-order memory

CONFIRMED	No reliable corrected second-order improvement.

- **Purpose:** Ask whether previous suffix or previous class adds prediction beyond the current suffix.
- **Result:** No reliable corrected second-order improvement.
- **What it changed:** Established a mainly first-order structural effect.

Structural - Entropy / information gain

CONFIRMED	Approximately 0.18 bits in the restricted stream; the gain was diffuse.

- **Purpose:** Quantify uncertainty removed by the current suffix.
- **Result:** Approximately 0.18 bits in the restricted stream; the gain was diffuse.
- **What it changed:** Showed a real but weak probabilistic constraint, not a deterministic grammar.

Structural - Illustration conditioning

CONFIRMED	Biological/balneological contexts concentrated the signal.

- **Purpose:** Test whether suffix rules strengthen or change with illustration category.
- **Result:** Biological/balneological contexts concentrated the signal.
- **What it changed:** Made illustration context a structural moderator rather than translation evidence.

Phase III - Constrained language candidates

v1.7 - Structure-gated candidate mapping

FAIL	No candidate passed.

- **Purpose:** Allow language hypotheses only after the frozen ABAD structural filter, then evaluate with Adaptive ZD30.
- **Result:** No candidate passed.
- **What it changed:** English-like appearance did not overcome coverage, uncertainty, and null gates.

v1.8 - Hand-split language selection

FAIL	No hand-specific candidate passed.

- **Purpose:** Allow each hand to prefer a different candidate language while preserving identical gates.
- **Result:** No hand-specific candidate passed.
- **What it changed:** Reduced support for a simple changing-language explanation.

v1.9 - Abbreviation-tolerant English

FAIL	Failed.

- **Purpose:** Permit frozen medieval abbreviations, 2-4-token verbose forms, and costly nulls to address extreme noncoverage.
- **Result:** Failed.
- **What it changed:** Sparse English-compatible hits could not reach coverage and composite gates after complexity penalties.

v1.10 - Latin plus Middle English

FAIL	Failed.

- **Purpose:** Test a mixed medieval register with separate abbreviation inventories.
- **Result:** Failed.
- **What it changed:** A Latin-English mixture did not rescue held-out coverage or ZD30 significance.

v1.11 - Old English plus Middle English

FAIL	Failed.

- **Purpose:** Test whether older English forms explained the unresolved vocabulary.
- **Result:** Failed.
- **What it changed:** Expanded historical-English coverage did not produce a validated mapping.

v1.12 - Pure Middle English

FAIL	Failed.

- **Purpose:** Run a clean Middle English-only test with the frozen 229,691-form lexicon.
- **Result:** Failed.
- **What it changed:** The large lexicon still did not clear the 40% held-out coverage and composite gates.

v1.13 - Middle English with controlled scribal variation

MIXED	Failed overall; one Hand-2 biological verso pocket reached elevated descriptive coverage.

- **Purpose:** Allow only documented final-e, ending, consonant, er/re/ar, and limited nasal variants.
- **Result:** Failed overall; one Hand-2 biological verso pocket reached elevated descriptive coverage.
- **What it changed:** Triggered subgroup, geometry, and carrier analyses without permitting a decryption claim.

v1.14 - Limited homophonic Middle English

FAIL	Failed.

- **Purpose:** Allow at most three costed readings per Voynich form and require improvement over v1.13 on identical folds.
- **Result:** Failed.
- **What it changed:** Closed the K=3 homophonic Middle-English branch under the frozen design.

Phase IV - v1.13 pocket diagnostics

v1.13 diagnostic - Page/hand/section diagnostic

MIXED	A 10-page Hand-2 biological verso pocket was highest.

- **Purpose:** Locate where pooled v1.13 coverage was concentrated.
- **Result:** A 10-page Hand-2 biological verso pocket was highest.
- **What it changed:** Converted an overall failure into a frozen descriptive subgroup question.

v1.13 diagnostic - Selection-aware subgroup null

MIXED	The pocket did not establish a valid language mapping.

- **Purpose:** Test whether the chosen pocket remained unusual after repeating subgroup selection in nulls.
- **Result:** The pocket did not establish a valid language mapping.
- **What it changed:** Prevented post-hoc pocket selection from becoming evidence by itself.

v1.13 diagnostic - Surface characterization

MIXED	The pocket had measurable surface and density differences.

- **Purpose:** Compare glyph inventory, geometry, affixes, illustration proximity, and resolved/null clustering.
- **Result:** The pocket had measurable surface and density differences.
- **What it changed:** Suggested mechanical structure could elevate dictionary collisions.

v1.13 diagnostic - Geometry-matched coverage

MIXED	The pocket remained descriptively elevated but not sufficient for linguistic success.

- **Purpose:** Compare pocket coverage with contrast material matched on line length and page density.
- **Result:** The pocket remained descriptively elevated but not sufficient for linguistic success.
- **What it changed:** Kept the pocket interesting while separating it from simple geometry.

v1.13 diagnostic - Top-10 carrier removal

MIXED	Coverage fell substantially; a residual remained descriptive.

- **Purpose:** Remove the most frequent resolved families and measure residual coverage.
- **Result:** Coverage fell substantially; a residual remained descriptive.
- **What it changed:** Showed that a small repetitive carrier set produced much of the effect.

v1.13 diagnostic - Held-out secondary carriers

MIXED	The residual did not become confirmed language evidence.

- **Purpose:** Discover secondary carriers on five pages and test them on five untouched pages.
- **Result:** The residual did not become confirmed language evidence.
- **What it changed:** Closed the selected residual-trail interpretation under the current mapping.

Phase V - Structure-first generative program

v2.0 - Structure-first generator

FAIL	Failed the complete predeclared model criteria.

- **Purpose:** Remove dictionaries and ask whether a minimal generative model reproduces suffix-to-class transitions, hand/section effects, and B-versus-A differences.
- **Result:** Failed the complete predeclared model criteria.
- **What it changed:** Forced a move toward lower-dimensional native features.

v2.1 - Clustered suffix generator

FAIL	Failed.

- **Purpose:** Compress suffixes into behaviorally equivalent clusters and charge for clusters and transition parameters.
- **Result:** Failed.
- **What it changed:** The suffix inventory could not yet be compressed into a parsimonious generator.

v2.2 - Native-feature generator

MIXED	Failed the full protocol but isolated final glyph as the strongest compact feature.

- **Purpose:** Search simpler native token features without language priors.
- **Result:** Failed the full protocol but isolated final glyph as the strongest compact feature.
- **What it changed:** Led directly to the frozen final-glyph test.

v2.3 - Final-glyph hierarchical shrinkage

MIXED	B gained +0.11375 bits/token and A +0.02882; overall protocol failed because A was not flat.

- **Purpose:** Test one frozen feature - final EVA glyph - with nested shrinkage and within-page nulls.
- **Result:** B gained +0.11375 bits/token and A +0.02882; overall protocol failed because A was not flat.
- **What it changed:** Confirmed real final-glyph information in both streams and invalidated the assumed flat-A contrast.

v2.4 - Shared-mechanism strength difference

FAIL	Failed; delta p = 0.189.

- **Purpose:** Test whether B's gain was reliably stronger than A under label-aware nulls.
- **Result:** Failed; delta p = 0.189.
- **What it changed:** Showed that the raw B>A difference was composition-confounded.

v2.5 - Composition-matched replication

MIXED	Technical pass, but matching quality was poor.

- **Purpose:** Match A/B pages on geometry and final-glyph composition before comparing gains.
- **Result:** Technical pass, but matching quality was poor.
- **What it changed:** Result was not accepted as decisive; motivated strict common support.

v2.5b - Strict common-support replication

PASS	14 pairs; B-A delta +0.06782, p = 0.03483; passed.

- **Purpose:** Repeat the comparison only on page pairs satisfying fixed geometry and glyph-distribution calipers.
- **Result:** 14 pairs; B-A delta +0.06782, p = 0.03483; passed.
- **What it changed:** Established a B>A pocket under strict matched support, while leaving hand/section imbalance unresolved.

Phase VI - Moderator and transport tests

v2.6 - Page-level moderator model

FAIL	Currier increment p = 0.209; bootstrap interval crossed zero; failed.

- **Purpose:** Attribute final-glyph gain to geometry, hand, section, or Currier using leakage-controlled page outcomes.
- **Result:** Currier increment p = 0.209; bootstrap interval crossed zero; failed.
- **What it changed:** Section explained more variation than hand or Currier identity.

v2.7 - Section-held-out transport

PASS	All supported pairs transported bidirectionally; corrected p values 0.00498-0.00995.

- **Purpose:** Train final-glyph rules in one section and apply them unchanged to another.
- **Result:** All supported pairs transported bidirectionally; corrected p values 0.00498-0.00995.
- **What it changed:** Showed section differences are largely strength/uniformity changes in a shared mechanism.

v2.8 - Cross-Currier transport

PASS	Both directions beat source-intercept nulls; corrected p = 0.00498.

- **Purpose:** Train on strong B and test unchanged on A, then reverse.
- **Result:** Both directions beat source-intercept nulls; corrected p = 0.00498.
- **What it changed:** Established cross-stream compatibility, but dominant-class agreement was only about 40%.

v2.9 - Shared-plus-deviation hierarchy

FAIL	Shared gain was slightly negative; deviation p = 1.000; failed.

- **Purpose:** Fit one pooled glyph skeleton with calibrated A/B base rates, then test costed Currier deviations.
- **Result:** Shared gain was slightly negative; deviation p = 1.000; failed.
- **What it changed:** Showed that a universal all-17-glyph rule was too broad and that page composition could mimic deviations.

Phase VII - Compact shared core and sequence test

v3.0 - Compact shared-glyph core

PASS	Six glyphs - l, n, o, r, s, y - appeared in 5/5 folds; penalized gain +0.03897; p = 0.00995.

- **Purpose:** Discover the smallest cross-stream subset using training-only likelihood-ratio agreement, explicit complexity charges, and correspondence-scrambling nulls.
- **Result:** Six glyphs - l, n, o, r, s, y - appeared in 5/5 folds; penalized gain +0.03897; p = 0.00995.
- **What it changed:** Confirmed that the shared mechanism is concentrated in a six-glyph core rather than all 17 glyphs.

v3.1 - Core sequential grammar

FAIL	Complexity-adjusted within-stream models failed; only A-to-B transport survived; second-order memory failed.

- **Purpose:** Test whether the six glyphs plus OTHER form a first- or second-order token-to-token grammar that transports across A/B.
- **Result:** Complexity-adjusted within-stream models failed; only A-to-B transport survived; second-order memory failed.
- **What it changed:** The core behaves as predictive boundary markers, not an autonomous seven-state language.

Current scientific position

The program has produced a reproducible structural result, not a decryption. The most defensible object is a six-final-glyph boundary-control core that predicts broad next-token structural classes across Currier streams. Natural-language mappings tested through v1.14 did not pass. The next high-value test is a sparse six-family model of core final glyph to next ABAD class, conditioned on section and line position.

Interpretation guardrails

- A statistically significant structural dependency is not automatically linguistic.
- A dictionary collision, including care/caring, is not a translation unless it survives held-out, matched, selection-aware controls.
- A passed transport test means predictive information crossed a boundary under its declared comparator; it does not mean the two streams are identical.
- A failed broad model can coexist with a passed compact subset when subset discovery is repeated inside the null and complexity is charged.
- No completed test justifies a full Voynich decryption claim.

Key sealed receipts

Version	Terminal receipt hash
v2.6	00a7bfe2bcce811996fd9148ac3e8b2ca4d3e97350eb1248f45edcdf4984257f
v2.7	6470e86890b12cd786fadcd590dea3e7edd6e70f2442aabd50e405a99a99c564
v2.8	007618c32b8ed7614799ce26ca6e91e926f6d5084519ad9846ae6f0cf65cc1f0
v2.9	97ead556f3e57422708e94022d37c7a88413cd5b691dde958452807e5324eeb8
v3.0	4782c620f7ea853d967a92f3a3d4d9daad695a4daa476a24d7f9334617e8f7c1
v3.1	01826c4b56ff864ee66083281513eb3f1cd7e6d97a74bf90a19d5375f3a1f45e

Prepared 14 August 2026. Results are reported according to their frozen protocols and should be interpreted within each protocol's declared comparator and null construction.