

ABAD Adaptive ZD30 v5.0

Lock-then-Residual Multi-Language Test • G2-S1

SEALED OUTCOME

NO PRIMARY LANGUAGE PASSED.

Middle English, medieval Latin, Middle High German, Old/Middle French, and a sealed Old Florentine substitute all failed the required primary-lock gates. Under the pre-registered stopping rule, no tokens were frozen and the residual multi-language stage did not open.

What this means: G2-S1 does not support any of these controlled one-language mappings under the current substitution, abbreviation, verbose-span, and null model.

What it does not mean: It is not proof that the Voynich Manuscript contains none of these languages, and it is not a decryption result. More complex encodings remain outside this test.

Decision table

#	Primary candidate	Coverage	p	Struct . z	Worst null	Result
1	Middle English	41.07%	0.00 5	-0.81	81.4%	FAIL
2	Medieval Latin	6.15%	0.58 2	+0.23	100.0%	FAIL
3	Middle High German	12.90%	0.85 6	-1.16	100.0%	FAIL
4	Old/Middle French	5.81%	0.80 1	-0.40	100.0%	FAIL
5	Old Florentine Italian*	4.20%	0.80 6	+0.23	100.0%	FAIL

* Old Florentine Italian is a declared historical substitute, not Northern Italian.

The protocol, test by test

- 1. **Freeze G2-S1** — Ensure language evidence cannot alter contributor-block membership.
- 2. **Test one primary language** — Ask whether one controlled historical-language mapping reaches usable coverage and coherent held-out structure.
- 3. **Discard failures completely** — Prevent attractive partial word collisions from accumulating across languages.
- 4. **Open residual only after a pass** — Test multilinguality only after a genuine primary layer exists.
- 5. **Re-run the search in every null** — Charge the null distribution for the same model-selection freedom used by the real candidate.
- 6. **Stop if no primary passes** — Keep the protocol from manufacturing a mixed-language explanation out of several failed mappings.

Gate-level findings

Candidate	$p < .05$	Coverage $\geq 40\%$	Structural $z > 0$	Phase $z \geq 0$	No unit $> 50\%$	Page null $\leq 60\%$	Beats null max
Middle English	PASS	PASS	FAIL	FAIL	FAIL	FAIL	PASS
Medieval Latin	FAIL	FAIL	PASS	PASS	FAIL	FAIL	FAIL
Middle High German	FAIL	FAIL	FAIL	PASS	PASS	FAIL	FAIL
Old/Middle French	FAIL	FAIL	FAIL	PASS	PASS	FAIL	FAIL
Old Florentine Italian*	FAIL	FAIL	PASS	PASS	PASS	FAIL	FAIL

Middle English is the instructive case. It crossed the coverage and selection-aware p thresholds, but its structural and phase directions were negative and its worst page was 81.4% unresolved. In other words, the optimizer found many dictionary-shaped collisions without a coherent language layer. The remaining candidates did not approach the coverage gate and also failed their null comparisons.

Attempt details

Candidate	Uncertainty	Phase z	Penalized score	Receipt hash
Middle English	58.93%	-3.327	-10.507	414424abbf49f7...
Medieval Latin	93.85%	+0.361	-17.366	f15b56aa797980...
Middle High German	87.10%	+1.168	-16.639	35c10920a3a4e9...
Old/Middle French	94.19%	+0.986	-17.569	ca8a843c684408...
Old Florentine Italian*	95.80%	+0.958	-18.023	8d1ce1e8f45799...

Corpus ledger

Corpus	Forms	Basis	Lexicon hash
Middle English	229,691	Frozen CME attested-form list	see v4.5 receipt
Medieval Latin	26,463	430,914 corpus tokens	fd02247c8ebbe3...
Middle High German	158,645	2,255,582 corpus tokens	76a47ae6031b43...
Old/Middle French	18,140	191,830 corpus tokens	a87d90e82d569e...
Old Florentine Italian	12,178	91,782 corpus tokens	a896bb12e9cbea...

Source bases: CME attested forms; UD Latin ITTB + UDante; ReM v2.1; UD Old French PROFITEROLE; UD Italian-Old. All locally used source files and derived lexicons are hash-recorded in the machine-readable package.

Scientific interpretation

The v5.0 result closes one specific branch: additive multilingual decoding cannot begin by stacking the unresolved material from these failed primaries. The protocol was designed precisely to prevent that move. A large dictionary may cause more surface matches, but a valid lock must also generalize structurally on held-out pages, remain phase-consistent, control uncertainty page by page, distribute its evidence across units, and beat equally flexible searches on null data.

The strongest positive-looking number remains Middle English coverage at 41.07%. It is not a lock. Its negative structural z (-0.81), strongly negative phase z (-3.33), 81.40% worst-page null rate, and coverage-dominated evidence show that those matches do not form the required coherent layer.

Latin, German, French, and Florentine Italian are clearer failures because coverage remains between 4.20% and 12.90%, far below the 40% floor. None beats its selection-aware null distribution.

Limits

- The corpora differ in size, genre, editorial normalization, and geographical representativeness. Negative results apply to the frozen candidate implementations, not to every historical variety.
- Only Latin had a small pre-declared semantic ontology in this implementation. The other historical corpora lacked a comparable frozen semantic annotation, yielding a neutral semantic unit; this prevents positive semantic claims but does not explain their decisive coverage, page-null, and null-distribution failures.
- Old Florentine is not Northern Italian. It was used only under the protocol clause permitting another sealed historical variety; a genuine Northern Italian corpus remains an unrun candidate.
- The mapping class remains a constrained substitution/abbreviation/verbose/null model. Homophonic, syllabic, nomenclator, non-lexical, and layout-dependent encodings are outside this receipt.

Next defensible move

Do not open a residual language layer on G2-S1. The best next experiment is mechanism-first: keep the frozen block and language-blind structural gates, but pre-register one genuinely different encoding model—such as a controlled syllabic or nomenclator mapping—and require it to beat both the current best single-language baseline and equally flexible selection-aware nulls. If the multilingual hypothesis is revisited, first acquire and seal a representative Northern Italian corpus; do not substitute it silently.

Bottom line: We learned that the apparent language-shaped hits in G2-S1 do not survive as a complete, structurally coherent primary layer. v5.0 therefore stops before multilingual residual decoding.

Receipt and reproducibility

Master specification hash:

d6b01254dad94c7bd27bf7e6648256a8e513ab646bdb55a8d5ee96a574a39a71

Master terminal hash:

b00e58a0ad2266b7d290c5554febdb3fbb2adbe42ac4d51e8aea4115b612dbbc

Frozen block parent hash:

0371430f4dbb9f056f58a465f5ce7e1bb4299d006545f95cf9388816d8e33faf

Corpus manifest hash:

5301ca39612d717dba82220d9394030ca307e7ebccb9730b4fb5b0ce033a92c1

Machine-readable files: MASTER_SPEC.json, MASTER_RECEIPT.json, CORPUS_MANIFEST.json, and five child receipts. Every full historical-language attempt used 200 selection-aware replicates.