

# Bashplemi Inscription Project: Research Dossier

Brian Doyle Lampton

January 20, 2026

## Abstract

## Contents

<b>1</b>	<b>How to use this dossier</b>	<b>2</b>
<b>2</b>	<b>Introduction</b>	<b>3</b>
<b>3</b>	<b>Evidence base</b>	<b>4</b>
3.1	Imaging and provenance . . . . .	4
3.2	Register segmentation . . . . .	4
3.3	Sign inventory and normalization . . . . .	4
3.4	Frequency and distribution records . . . . .	4
3.5	Damage and uncertainty log . . . . .	5
3.6	Evidence checklist . . . . .	5
<b>4</b>	<b>Structural epigraphy core</b>	<b>5</b>
4.1	Anchor paper . . . . .	6
4.2	Operator system summary . . . . .	6
4.3	Register functions . . . . .	6
4.4	Category and inventory system . . . . .	7
4.5	Measure grammar . . . . .	7
4.6	Authority and seal architecture . . . . .	7
4.7	Predictive framework . . . . .	7
<b>5</b>	<b>Models and hypotheses</b>	<b>7</b>
5.1	Document-type candidates . . . . .	8
5.2	Model fit criteria . . . . .	8
5.3	Failure criteria . . . . .	8
5.4	Competing model notes . . . . .	9
<b>6</b>	<b>Comparative contexts</b>	<b>9</b>
6.1	Comparative method . . . . .	9
6.2	Proto-administrative and early document traditions . . . . .	10
6.3	Seal and emblem systems . . . . .	10
6.4	Regional and corridor contexts . . . . .	10
6.5	Boundaries of comparison . . . . .	11

<b>7</b>	<b>Synthesis and implications</b>	<b>11</b>
7.1	Institutional profile implied by the inscription . . . . .	11
7.2	Why the inscription behaves as a real text . . . . .	11
7.3	Institutional implications . . . . .	12
7.4	Interpretive boundaries . . . . .	12
7.5	Why Bashplemi matters . . . . .	12
<b>8</b>	<b>Open research directions</b>	<b>12</b>
8.1	Predictions for future finds . . . . .	13
8.2	Expected variation zones . . . . .	13
8.3	Targeted archaeological implications . . . . .	13
8.4	Analytical extensions . . . . .	14
8.5	Project continuity . . . . .	14
<b>A</b>	<b>Dossier navigation map</b>	<b>14</b>
	<b>References</b>	<b>15</b>

## Abstract

The Bashplemi Inscription Project investigates an undeciphered stone tablet discovered near Lake Bashplemi in southern Georgia that bears a seven-register carved inscription. Rather than pursuing linguistic decipherment, the project applies a structural epigraphy methodology focused on internal evidence.

Analysis demonstrates that the inscription exhibits a closed-class operator system, differentiated functional registers, category determinatives, divider-bounded measure phrases, a formal closure clause, and a terminal emblematic seal. Together these features define a coherent document architecture incompatible with decorative, mnemonic, or purely pictorial interpretations.

The Bashplemi tablet is therefore treated as a real document encoding institutional behavior, most consistent with proto-administrative or cult-administrative traditions. This dossier serves as an organizational framework integrating the evidence base, the formal structural epigraphy paper, controlled document-type models, comparative contexts, synthesis, and open research directions. A strict separation is maintained between primary evidence, analytical results, and exploratory interpretation.

The project establishes falsifiable predictions for future finds and provides a transparent foundation for continued interdisciplinary investigation of the Bashplemi inscription and early structured writing practices in the Caucasus region.

## 1 How to use this dossier

This dossier is a structured container for the Bashplemi inscription project. It is designed to:

- preserve an evidence-first record of the artifact and transcription,
- document the structural epigraphy results in a reproducible form,
- track competing document-type models and their failure criteria,
- collect comparative parallels and context without forcing derivation,
- maintain a controlled space for synthesis and open research directions.

This dossier is intentionally modular. Each section can be expanded over time without changing the overall structure. A strict separation is maintained between:

- Evidence (what is on the stone),
- Analysis (what the internal structure supports),
- Synthesis (interpretive framing and external comparisons).

## 2 Introduction

The Bashplemi stone tablet is a carved lithic artifact discovered near Lake Bashplemi in the Dmanisi region of southern Georgia. The object bears a multi-register inscription composed of approximately sixty glyph tokens representing on the order of thirty-nine distinct sign classes. No known writing system has yet been demonstrated to account for its signs or their organization.

Public discussion of the tablet has understandably emphasized its undeciphered status and the visual unfamiliarity of its symbols. The Bashplemi Inscription Project adopts a different entry point. Rather than asking what the signs “mean” in linguistic terms, the project asks what the inscription is doing as a system.

This dossier documents a research program grounded in structural epigraphy. Its primary objective is to determine whether the Bashplemi inscription encodes a coherent document architecture and, if so, what institutional behaviors such an architecture implies. The project treats the tablet as a formal artifact whose internal constraints can be studied independently of language identification, iconographic guesswork, or historical affiliation.

The dossier is organized around three explicitly separated layers:

- Evidence: what is physically present on the artifact, including imagery, segmentation, sign inventories, and frequency records.
- Analysis: the structural epigraphy core establishing operator ecology, register functions, measure grammar, and authority architecture.
- Synthesis: controlled models, comparative contexts, and higher-level implications derived from the analytical core.

This separation is foundational. Evidence is preserved without interpretation. Structural results are extracted through internal patterning alone. Interpretive and comparative work is introduced only after the grammar and document architecture have been established.

The analytical spine of the project is the companion paper, *The Bashplemi Tablet as a Structured Proto-Administrative Text*. That work demonstrates that the inscription exhibits a closed-class operator system, differentiated registers, category determinatives, divider-bounded measure phrases, a binding clause, and a terminal emblematic seal. These features jointly define a document-level grammar.

The present dossier functions as an integrative container. It links the evidence base to the formal analysis, records developing document-type models, situates the findings within broader comparative contexts, and maintains a controlled environment for synthesis and future research.

This document is therefore not a decipherment attempt. It is a research architecture. Its purpose is to make the Bashplemi tablet available as a structured analytical case study and to provide a transparent framework through which additional data, critiques, and discoveries can be systematically incorporated.

## 3 Evidence base

This section defines the evidence layer of the Bashplemi Inscription Project. All materials documented here are treated as primary data. No interpretive assumptions are embedded in this layer. Its purpose is to preserve a stable reference frame against which all analytical and synthetic work can be evaluated.

### 3.1 Imaging and provenance

The Bashplemi tablet is currently documented through published photographs and line drawings. Available imagery includes overall views of the artifact, close-ups of individual registers, and enhanced tracings of the carved glyphs.

All images used by the project are archived with source attribution, resolution metadata, and capture conditions where available. Each image is labeled according to register orientation and cropping extent. Any discrepancies between photographic sources and published tracings are logged explicitly.

Provenance data include reported find location near Lake Bashplemi, regional context within the Dmanisi area, and associated archaeological materials used to suggest a Late Bronze to Early Iron Age horizon. No claims beyond published context reports are introduced into the evidence layer.

### 3.2 Register segmentation

The inscription is segmented into seven horizontal registers following the visible line structure of the carving. Register boundaries are defined conservatively based on spacing, alignment, and incision continuity.

Each register is indexed sequentially from top to bottom. Glyph positions within each register are numbered left to right according to the most widely published orientation. Where erosion, chipping, or breakage obscures sign boundaries, the uncertainty is recorded rather than resolved.

Any alternative segmentations proposed in the literature or by project participants are logged separately and do not overwrite the primary segmentation used for structural analysis.

### 3.3 Sign inventory and normalization

A sign inventory has been constructed by grouping visually identical or near-identical glyphs into equivalence classes. Each class is assigned a stable internal identifier used consistently across transcriptions, frequency tables, and analytical documents.

Normalization criteria include stroke topology, enclosed regions, branching structure, and orientation. Minor carving irregularities are treated as execution variance rather than distinct signs unless consistent distinguishing features are observed.

Both total token counts and distinct sign-class counts are maintained. At present, the inventory comprises approximately sixty tokens and approximately thirty-nine sign classes. These numbers remain subject to revision if higher-resolution imagery or additional artifacts become available.

### 3.4 Frequency and distribution records

For each sign class, the project maintains:

- total frequency,
- register distribution,

- positional tendencies (initial, medial, terminal),
- adjacency patterns,
- participation in operator, measure, or seal environments.

These records are preserved as separate tables and spreadsheets and are treated as evidence artifacts. Analytical interpretations derived from them are maintained only in the analysis layer.

### 3.5 Damage and uncertainty log

All areas of surface damage, abrasion, or carving ambiguity are documented in a dedicated uncertainty log. This includes:

- incomplete glyphs,
- merged or truncated strokes,
- register boundary ambiguity,
- possible missing tokens at edges.

Uncertain positions are flagged in the transcription and excluded from any operator or measure classification unless their behavior is independently constrained by context.

### 3.6 Evidence checklist

The following items define completeness of the evidence base:

- high-resolution images archived and labeled,
- register segmentation file with indexed positions,
- sign inventory with equivalence criteria,
- frequency and distribution tables,
- adjacency matrices or logs,
- damage and uncertainty register.

All subsequent analytical work in this project is required to reference these materials explicitly.

## 4 Structural epigraphy core

This section anchors the Bashplemi Inscription Project to its formal analytical foundation. The results summarized here are derived from the companion structural epigraphy paper and constitute the fixed analytical core of the project. All higher-level models, comparisons, and syntheses are required to remain consistent with this layer.

## 4.1 Anchor paper

The formal structural analysis of the Bashplemi tablet is documented in the companion paper:

*The Bashplemi Tablet as a Structured Proto-Administrative Text.*

This paper establishes the operator system, register architecture, category and measure grammar, authority and seal ecology, and predictive model through internal evidence alone. It serves as the analytical spine of the project. The present dossier does not replace that paper, but organizes supporting materials, derivative models, and ongoing work around it.

Any revision to the structural conclusions must be justified at the level of operator behavior, register symmetry, or falsifiable predictions as defined in the anchor paper.

## 4.2 Operator system summary

The inscription contains a closed-class set of glyphs that exhibit restricted placement, limited combinatorial behavior, and stable positional ecology. These include:

- punctuation signs delimiting blocks,
- divider signs introducing compact sterile fields,
- category determinatives scoping content domains,
- action operators linking content blocks to formal acts,
- relation operators connecting acts to entity tokens.

These operators do not appear in open-class runs, measure phrases, or the seal block. Their consistent recurrence in parallel environments demonstrates the presence of grammatical infrastructure.

## 4.3 Register functions

The tablet is organized into seven registers with differentiated functional roles:

- a short header establishing authority context,
- a domain inventory defining recognized classes,
- two quantified act registers encoding formal transactions,
- a binding register consolidating selected content,
- a compact final dedication clause,
- and a terminal emblematic seal block.

Parallelism between the two quantified registers and the pairing of closure and seal define the document architecture.

## 4.4 Category and inventory system

A recurrent determinative sign functions as a category marker. It appears once per major content block and introduces class-scoped domains. Register 2 defines a maximal inventory under authority scope. Registers 3 and 4 embed category blocks within transactional constructions. Register 5 selectively reintroduces content classes within a declarative frame.

This system establishes classification as a central organizing principle of the inscription.

## 4.5 Measure grammar

Divider-introduced compact fields occur exclusively in the quantified registers. These fields exhibit a fixed internal slot ordering and draw from a restricted sub-inventory of glyphs.

The minimal supported frame is:

/ M1 M2 M3 (M4)

One slot displays high reuse consistent with magnitude or numeral behavior. Measure phrases are systematically coupled to category-marked blocks.

## 4.6 Authority and seal architecture

The closure of the tablet consists of a compact grammatical clause linking an action operator, a relation operator, and a unique entity token. This is immediately followed by an emblematic seal block containing no operators.

Authority-linked signs recur across header, transactional, closure, and seal environments, defining a hierarchy of domain, identity, recipient, and emblematic validation. This dual-channel system links textual declaration and symbolic ratification.

## 4.7 Predictive framework

The structural epigraphy core establishes a predictive model specifying:

- grammar invariants that should recur across related inscriptions,
- variation zones expected to change between documents,
- and falsifiable expectations for operator ecology, measure phrases, closure clauses, and seals.

This framework governs all subsequent modeling, comparison, and synthesis within the dossier.

# 5 Models and hypotheses

This section documents candidate models for the function and genre of the Bashplemi inscription. All models presented here are constrained by the structural epigraphy core and must remain consistent with operator ecology, register architecture, measure grammar, and authority structure. No model in this section modifies the evidence layer or the analytical spine.

## 5.1 Document-type candidates

Based on the extracted grammar and document architecture, the following broad document-type candidates are considered:

- dedicatory or offering record,
- sanctuary or cult-administrative transaction record,
- institutional inventory with formal validation,
- construction or resource accounting document,
- legal or quasi-legal binding declaration,
- hybrid ritual-administrative document.

Each candidate is evaluated only at the level of structural fit, not through assumed vocabulary, iconographic identification, or historical derivation.

## 5.2 Model fit criteria

For a document-type model to be considered viable, it must account simultaneously for:

- the presence of a domain inventory register,
- category determinatives scoping content blocks,
- divider-bounded measure phrases,
- multiple quantified act registers,
- a binding or consolidating clause,
- a compact dedication or closure grammar,
- and a terminal emblematic seal block.

Models that explain only subsets of these features are treated as incomplete.

Particular weight is assigned to closure behavior and authority architecture, as these are difficult to reconcile with decorative, mnemonic, or narrative interpretations.

## 5.3 Failure criteria

Explicit failure conditions are maintained for all models. Any proposed model must be abandoned or revised if future data demonstrate:

- absence of a stable closed-class operator set,
- lack of consistent register differentiation,
- violation of measure phrase slot ordering,
- uncoupling of category determinatives from quantified fields,



- disappearance of the closure plus seal structure,
- or operator migration into open-class or seal environments.

The discovery of additional inscriptions that consistently violate these constraints would falsify the current structural framework and require reevaluation of all dependent models.

## 5.4 Competing model notes

This subsection serves as a controlled workspace for recording the strengths, weaknesses, and open questions associated with each document-type candidate.

Notes entered here must:

- reference specific structural features,
- identify which predictions are supported or strained,
- distinguish between structural fit and cultural plausibility,
- and specify what new evidence would discriminate between models.

Speculative narratives, linguistic proposals, and cross-cultural analogies are not housed in this section. Those are reserved for the comparative and synthesis layers, where their relationship to the evidence base and analytical core can be made explicit.

## 6 Comparative contexts

This section situates the Bashplemi inscription within broader comparative frameworks. Comparative material is introduced only after the internal structural grammar has been established. All external parallels are evaluated on the basis of document architecture, operator behavior, and functional roles rather than on visual resemblance or assumed linguistic relationships.

### 6.1 Comparative method

Comparative analysis within this project follows three constraints:

- comparisons are made at the level of structural and functional architecture,
- no external system is treated as a source or ancestor without independent archaeological evidence,
- no external symbol is mapped onto a Bashplemi glyph.

The purpose of comparison is to identify known document traditions that exhibit similar combinations of inventory, classification, quantification, declaration, and authority validation. Comparison serves to bound plausible cultural contexts and institutional behaviors, not to propose decipherments.

## 6.2 Proto-administrative and early document traditions

Across several early writing-related traditions, the earliest surviving texts are not narratives but documents that regulate material and institutional activity. These commonly include:

- inventories defining recognized domains,
- classification of goods or entities,
- quantified statements of transfer or dedication,
- formal closure clauses,
- and symbolic or seal-based validation.

The Bashplemi tablet conforms closely to this structural profile. Its register differentiation, measure grammar, and authority architecture align it with early document traditions concerned with administration, ritual economy, or institutional record-keeping.

This correspondence supports interpretation of the inscription as a formal document rather than as ornamentation or symbolic art.

## 6.3 Seal and emblem systems

Many early institutional traditions employ a dual-channel authority system in which textual declarations are accompanied by emblematic or seal-based validation. In such systems, seals often:

- contain a restricted sign inventory,
- exclude grammatical operators,
- recur in stable configurations,
- and encode institutional identity rather than narrative content.

The Bashplemi seal block exhibits these properties. Its separation from grammatical registers and its internal restriction suggest that it participates in an emblematic authority system rather than in the syntax of the inscription. Comparative seal traditions therefore provide an appropriate functional framework for understanding the Bashplemi closure architecture.

## 6.4 Regional and corridor contexts

The Caucasus region occupies a long-standing corridor between Anatolia, the Near East, the Eurasian steppe, and the Black Sea sphere. Archaeological evidence demonstrates repeated phases of exchange, technological transmission, and institutional development across this zone.

Comparative context for the Bashplemi tablet therefore includes:

- early administrative and cult-economic systems to the south and west,
- local and regional inscriptional experiments,
- and the possibility of short-lived or micro-traditions of formal marking.

The comparative role of these contexts is to define the range of cultural systems capable of producing a document with the Bashplemi structural profile, not to assert direct historical lineage.

## 6.5 Boundaries of comparison

All comparative references are provisional and subordinate to the internal evidence. Any external parallel must remain compatible with the extracted operator ecology, register architecture, and predictive model. Where comparisons conflict with internal constraints, they are to be treated as heuristics only and not as explanatory accounts.

## 7 Synthesis and implications

This section integrates the evidence base, structural epigraphy core, and model space into a coherent interpretive frame. It addresses what the Bashplemi tablet implies about the social and institutional environment that produced it, while maintaining explicit boundaries between supported inference and exploratory synthesis.

### 7.1 Institutional profile implied by the inscription

The document architecture extracted from the Bashplemi tablet requires a social environment capable of sustaining classification systems, formalized acts, and authority validation. The coordinated presence of domain inventories, category determinatives, quantified clauses, a binding register, a compact dedication clause, and a seal block implies:

- recognized and repeatable categories of goods or entities,
- formal acts governed by explicit procedural structure,
- institutional memory extending beyond a single event,
- and an authority system that legitimizes recorded acts.

Such features are not produced by casual marking traditions. They presuppose an organized setting in which material, ritual, or administrative activities are subject to structured regulation. The inscription therefore reflects not merely symbolic expression but institutional practice.

### 7.2 Why the inscription behaves as a real text

Several convergent properties distinguish the Bashplemi tablet from decorative or purely iconographic artifacts:

- a closed-class operator set exhibiting grammatical constraints,
- register-level differentiation with distinct functional roles,
- recurrent parallel constructions,
- a specialized measure grammar isolated from open-class runs,
- a formal closure clause assigning the document to an authority,
- and a non-grammatical emblematic seal.

No single feature is decisive in isolation. Together, they form a mutually reinforcing system that supports document-level interpretation. The tablet does not merely depict; it organizes, delimits, quantifies, and validates.

### 7.3 Institutional implications

The Bashplemi inscription indicates the existence of at least one localized tradition of formal inscription within the Caucasus region during the Late Bronze or Early Iron Age. Whether this tradition was long-lived or short-lived, centralized or episodic, remains unknown. What is structurally supported is the presence of an institutional setting in which symbolic marking was employed to regulate or memorialize formal acts.

This suggests the operation of:

- sanctuary or cult-administrative centers,
- managed repositories or offering domains,
- or institutional spaces requiring durable record-making.

Such settings are historically associated with the earliest phases of writing and proto-writing, in which symbolic systems emerge to support accountability, ritual obligation, and authority relations.

### 7.4 Interpretive boundaries

The synthesis presented here remains constrained by the structural epigraphy core. No claims are made regarding:

- the spoken language of the inscribers,
- the lexical meaning of any glyph,
- the identity of any authority or recipient,
- or the specific cultural or religious practices involved.

The dossier distinguishes between what is required by the document structure and what remains open to investigation. All higher-level interpretations must remain compatible with the extracted grammar and predictive framework. Where speculation is introduced in future work, it must be explicitly labeled and tethered to evidence or testable models.

### 7.5 Why Bashplemi matters

The Bashplemi tablet expands the known landscape of early structured inscription. It demonstrates that formal document traditions were not confined to a small number of historically dominant centers but could arise in localized contexts where institutional needs demanded them.

As such, Bashplemi is not only an undeciphered curiosity. It is evidence for a regional experiment in formal symbolic administration. Its study contributes to broader questions concerning how writing-related practices emerge, diversify, and sometimes disappear in the archaeological record.

## 8 Open research directions

This section defines forward-looking research paths that remain explicitly grounded in the evidence base and structural epigraphy core. Its purpose is to preserve testability, guide future work, and prevent the project from collapsing into static interpretation.

## 8.1 Predictions for future finds

The structural framework established for the Bashplemi tablet generates specific, falsifiable expectations for any related inscriptions that may be discovered. Such finds should, if structurally affiliated, exhibit:

- a closed-class operator inventory with restricted placement,
- register-level differentiation of functional roles,
- category determinatives introducing scoped content domains,
- divider-bounded measure fields with fixed slot ordering,
- a formal closure clause,
- and a distinct emblematic or seal block.

While surface glyph forms may vary, these grammatical and architectural properties should recur. The absence of these features in multiple future finds would challenge the current model.

## 8.2 Expected variation zones

The predictive model also specifies regions of likely variability. These include:

- the number and content of inventory entries,
- the specific categories invoked,
- the number and magnitude of quantified acts,
- the identity token appearing in the closure clause,
- and the internal composition of the seal block.

Such variation would reflect document-specific circumstances rather than grammatical change.

## 8.3 Targeted archaeological implications

If the Bashplemi tablet belongs to a cult-administrative or sanctuary economy context, certain archaeological correlates become plausible targets of investigation, including:

- architectural spaces associated with ritual or managed deposition,
- concentrations of standardized objects or containers,
- localized seal or emblem traditions,
- and evidence of repeat inscription or marking activity.

These implications are not claims but structured expectations that can inform fieldwork and contextual analysis.

## 8.4 Analytical extensions

Several analytical efforts are identified as high priority:

- production of a fully normalized sign catalog with consistent drawn forms,
- expansion of adjacency and positional statistics,
- construction of explicit grammar diagrams and measure schemata,
- computational clustering of glyph environments,
- and formal comparison against known proto-administrative corpora.

These analyses can be conducted without linguistic assumptions and will strengthen or challenge the existing framework.

## 8.5 Project continuity

The Bashplemi Inscription Project is intended to remain open, modular, and revision-controlled. All new data, analyses, and interpretations should be integrated through the evidence and structural layers before entering the synthesis layer.

The long-term aim is to maintain a transparent research environment in which the Bashplemi tablet can be studied as both a fixed artifact and an evolving analytical case study in early structured inscription.

# A Dossier navigation map

This appendix is a quick index to the dossier components.

Component	Contents
Evidence base	Images, segmentation, sign inventory, frequency counts, damage log.
Structural epigraphy	Operator system, register functions, measure grammar, authority and seal architecture.
Models and hypotheses	Document-type candidates, fit criteria, failure criteria, reconstruction templates.
Comparative contexts	Structural parallels, seal systems, regional context, methodological boundaries.
Synthesis	Institutional profile and implications, with explicit interpretive boundaries.
Open research	Predictions for future finds, next analyses, and collaboration directions.

## References

- [1] R. Shengelia, L. Gordeziani, N. Tushabramishvili, N. Poporadze, and O. Zourabichvili, “Discovery of unknown script characters in Georgia: The Bashplemi Lake Tablet,” *Journal of Ancient History and Archaeology*, vol. 11, no. 3, 2024. Available: <https://jaha.org.ro/index.php/JAHA/article/view/1035>.
- [2] A. Villellas, “Stone tablet found with carved symbols that do not match any known language,” Earth.com, January 18, 2026. Available: <https://www.earth.com/news/stone-tablet-found-with-carved-symbols-that-do-not-match-any-known-language/>.
- [3] B. D. Lampton, “The Bashplemi Tablet as a Structured Proto-Administrative Text,” Zenodo, 2026. Available: <https://zenodo.org/records/18314464>.