

Research Article

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Before Writing: Epigraphic Classification of the Bosnian Pyramid Inscriptions in Comparative Context with Vinča and Runic Traditions

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Abstract

This paper presents the first systematic classification of symbolic inscriptions discovered at the Bosnian Pyramid Complex, particularly in the Ravne tunnel system. Through detailed documentation of 18 figures including epigraphic photographs, archaeological illustrations and comparative charts this study establishes the basis for identifying a potentially independent symbolic system, herein referred to as the 'Visoko Proto-Script'. The analysis draws comparative parallels to known prehistoric symbol systems such as the Vinča civilization of Southeastern Europe and early Runic traditions found in Northern and Central Europe. Several key glyph forms such as chevrons, tridents, vertical strokes and branching symbols demonstrate formal and functional similarities across cultural contexts. The findings support the hypothesis that these inscriptions were not merely decorative, but symbolic in nature. While some interpretations suggest possible ritual or energetic functions, these remain tentative and require further empirical investigation. This research contributes to the broader discourse on pre-alphabetic writing, cultural continuity in symbolic systems and the role of sacred geometry in prehistoric epigraphy.

Keywords: Bosnian pyramid complex; Visoko proto-script; Prehistoric symbols; Epigraphy; Vinča script; Runic traditions; Ravne tunnels; Proto-writing systems

Abbreviations: BCE: Before Common Era; BP: Before Present; EM: Electromagnetic; IRB: Institutional Review Board; GPS: Global Positioning System; LiDAR: Light Detection and Ranging; K1: Designation for the main engraved megalithic block in Ravne tunnels; RPQ: Radiometric Provenance Quality (if used in your data processing); AI: Artificial Intelligence; AAIET: Journal of Advanced Artificial Intelligence, Engineering and Technology; AAR: Archaeological Artifact Record (if referenced for cataloging); VPS: Visoko Proto-Script

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Introduction

The discovery of engraved stone artifacts within the Bosnian Pyramid Complex, particularly in the Ravne tunnel system near Visoko, Bosnia-Herzegovina, has prompted a growing body of interdisciplinary research into the symbolic and functional significance of these markings. Since the early excavations in 2005, evidence has emerged indicating that these glyphs may constitute a previously undocumented symbolic system, potentially predating known writing systems in Europe [1,2].

Among the earliest systematic efforts to document and classify these inscriptions was the work of Prof. Dr. Muris Osmanagić, who catalogued 51 distinct symbols and compared their morphology to both the Latin alphabet and Neolithic signs from the Vinča civilization [3]. Comparative analyses by other independent researchers including Paolo Stekel, Szakács Gábor and Friedrich Klára and Diana Macys-Staley have further aligned Bosnian symbols with



the Vinča script and the Runic alphabets of the Carpathian Basin and Northern Europe [4-6].

In addition to stylistic similarities, several inscriptions are interpreted as functional texts. Some appear to reference energy dynamics within the site, such as water flow and ionization, suggesting a dual symbolictechnological purpose [7,8]. This paper presents the first formal classification of these inscriptions, proposing the term 'Visoko proto-script' and placing it in comparative context with Vinča and Runic traditions.

The goal of this study is to assess whether the Bosnian inscriptions represent decorative motifs, symbolic language or a coherent semiotic system that reflects a broader prehistoric epistemology. By doing so, it contributes to the wider discourse on proto-writing, sacred geometry and the intersection of symbolism and early technology.

Author's motivation and research context

This article emerges from two decades of continuous field research conducted at the Bosnian Pyramid complex, particularly within the Ravne Tunnel Labyrinth. Over this extended period, a substantial number of carved stone artifacts and tunnel-wall inscriptions have been documented, analyzed and cataloged. The growing volume and consistency of these markings have reached a point where scholarly engagement is both necessary and timely. This study seeks to introduce the corpus into broader academic and public discourse inviting comparative interpretation, methodological critique and epistemological reflection across disciplines. It is hoped that by presenting these inscriptions in a structured analytical framework, this work will stimulate a wider, evidence-based conversation about symbolic systems in prehistoric Europe and beyond.

On the context of the Bosnian Pyramid debate

The broader archaeological context of the Bosnian Pyramid complex has been the subject of international debate since its public announcement in 2005. While scholarly opinions remain divided regarding the artificial nature of the large pyramid-shaped structures, it is important to clarify that this article does not attempt to resolve those debates. Instead, it focuses narrowly on epigraphic analysis of symbols found on portable stone artifacts and tunnel walls within the wider Ravne research zone. These inscriptions have been recovered from stratified locations during controlled excavations and cataloged over the course of long-term fieldwork. Although it remains uncertain whether the pyramid builders themselves produced the inscriptions, the artifacts analyzed here were found in direct association with the surrounding archaeological features and are presented as part of a growing symbolic corpus meriting scholarly attention.

Structure of the article

The remainder of this article is structured as follows:

Section 2 presents the materials and methods, including documentation of inscriptions, digital processing and comparative classification techniques.

Section 3 reviews related work, drawing from global proto-writing studies, including the Vinča signs, Jiahu symbols and Near Eastern tokens.

Section 4 details the results of the classification effort, presenting figures and tables highlighting recurring symbol patterns and cross-cultural parallels. Also, itevaluates the performance of the proposed classification model against established frameworks, identifying key strengths and limitations.

Section 5 offers hypothetical semantic interpretations of the Visoko symbols, suggesting possible navigational, calendrical, ritual and taxonomic functions.

Section 6 considers the practical and functional roles of the inscriptions, including their spatial placement and material context within the Ravne Tunnel complex.

Section 7 discusses the implications of these findings within broader symbolic and proto-writing research, addressing limitations and future research needs.

Section 8 provides comparative context by situating the Visoko Proto-Script alongside other global proto-writing systems, reinforced by a tabular summary.

Section 9 concludes with a synthesis of findings, proposing that the Visoko inscriptions reflect an emergent symbolic system deserving further study.

Contribution of this study

This study contributes to the field by formally introducing and classifying a corpus of engraved stone symbols found in the wider Bosnian Pyramid complex, with particular attention to their visual patterning, material context and cross-cultural analogues. Unlike previous discussions focused on the nature of the pyramid structures themselves, this article shifts the analytical lens toward epigraphic, symbolic and comparative semiotic analysis, framed within global research on proto-writing. By applying a systematic classification method, supported high-resolution by imagerv and stratigraphic documentation, this work opens the dataset to scholarly review and positions the Visoko inscriptions as a candidate for early symbolic systems in Southeastern Europe. The study aims to encourage further interdisciplinary engagement by providing a replicable framework for analyzing undeciphered Neolithic inscriptions.



Materials and Methods

The corpus of inscriptions analyzed in this study was compiled from primary archaeological contexts within the Bosnian Pyramid Complex, with a particular focus on artifacts recovered in the Ravne tunnel system between 2005 and 2025. Photographic documentation, field drawings and museum-archived illustrations served as the foundational material for classification. **Figure 1** through 17 present a curated visual record of epigraphic evidence, most of which was recorded by the author and verified by site archaeologists and independent researchers [1-6].



Figure 1: Overview of the Bosnian Pyramid of the sun and associated epigraphic evidence.

Top left: Aerial view of the Bosnian Pyramid of the Sun, Visoko, central Bosnia-Herzegovina. The pyramid stands at 368 meters in height and features perfect alignment with the cardinal points. Recognized as the largest and potentially the oldest pyramid structure in the world.

Source: Establishing deep time: Multi-method dating of archaeological and speleological features in the Bosnian valley of the Pyramids [1].

Top right: Western slope of the Bosnian Pyramid of the Sun, where a stone plate with carved symbolic inscriptions was discovered.

Source: Multidisciplinary evaluation of the Pyramid-shaped formation near Visoko, Bosnia-Herzegovina: A case for anthropogenic construction [9].

Bottom left: Archaeological excavations at the Pyramid of the Sun conducted between 2005 and 2025, involving international volunteer participation.

Source: Bosnian Pyramids, my story. Archaeological Park: BPS Foundation.

Bottom right: Sandstone or geopolymer plate bearing engraved or imprinted symbolic characters, discovered at the plateau of the Pyramid of the Sun in 2006.

Source: Foundation's Museum collection. Photograph by the author May 2025.

The carvings were observed in situ during tunnel excavations or cataloged post-excavation as part of the permanent collection of the Foundation's Museum in Visoko. All symbols were digitized using image enhancement tools (contrast, edge detection and morphological filtering) and then extracted for side-byside comparative analysis with known proto-symbolic systems. Key works consulted for comparison include corpora of Vinča symbols, Hungarian Rovás scripts and the Old English Futhorc runes [3,5,6,7].

Symbol comparison was conducted morphologically,

based on visual alignment of core elements such as angularity, line repetition, symmetry and spatial arrangement. Special attention was given to symbols appearing on megalithic blocks (*e.g.*, K-1), engraved plates and small handheld objects, with symbols grouped by occurrence frequency and formal resemblance.

While full linguistic decoding was not attempted, contextual readings provided by researchers (*e.g.*, Putney, Macys-Staley and Scarfe) were noted where the function of an object was clearly hypothesized through epigraphic inference [8-10].



Related work

The investigation of prehistoric inscriptions and symbolic systems has evolved significantly over recent decades, particularly as researchers reconsider the definition and scope of writing. This study draws on and extends several key bodies of literature:

Proto-writing and symbolic systems

Numerous early civilizations produced visual symbol sets without developing full phonetic scripts. Examples include the Jiahu symbols in Neolithic China, the Vinča signs in Southeastern Europe and the Tărtăria tablets in Romania [11-13]. While their meanings remain undecoded, these systems demonstrate consistent internal structures and cultural continuity, suggesting symbolic coherence rather than decorative randomness.

Rock art and territorial marking

Research on Neolithic and Bronze Age petroglyphs in Europe (Bradley, 1997; Whitley, 2005) and Eurasia has revealed that many prehistoric markings served not only symbolic but also practical functions such as spatial orientation, ritual demarcation or resource identification. This dual-use interpretation informs the current study's hypothesis that the Visoko inscriptions may have served both expressive and functional roles.

The Bosnian Pyramid context

Several studies have addressed the Bosnian Pyramid Complex from geological, geophysical and archaeological perspectives (Osmanagich, 2014; Korotkov & Osmanagich, 2024). While the broader debate about the pyramids' artificiality continues, limited attention has been paid to the inscribed artifacts found in the surrounding Ravne tunnel system. Previous publications have cataloged individual artifacts and site features, but no formal classification of the inscriptions themselves has been undertaken until this study.

Summary

This article builds on a growing interdisciplinary literature that reconsiders symbolic systems in preliterate societies. By combining visual classification, contextual placement and comparative analysis, this work introduces a structured approach to the Visoko inscriptions and offers them as a case study in early symbolic behavior.

Results

The analysis of 18 figures, comprising photographs, illustrations and comparative charts, resulted in the identification of 51 distinct carved symbols across megalithic and portable artifacts from the Bosnian Pyramid Complex. These symbols exhibit structural consistency and recurrence across multiple artifacts and excavation contexts, suggesting intentional use and symbolic coherence.

Notably, megalithic blocks such as K-1 (Figure 11) and carved plates (Figures 2, 3, 4, 5, 6, 7, 8, 9,10, 11 and 12) exhibit repeated motifs including chevrons (Λ), vertical bars (|, |||), tridents (\equiv), lozenges (\Diamond), branching figures (Y) and serpentine lines (S-like). Many of these symbols closely resemble characters found in the Vinča civilization's proto-script and in early Runic traditions, notably the Hungarian Rovás and Anglo-Saxon Futhorc [3-7].



Figure 2: Plate with symbolic characters from the museum collection of the archaeological park: Bosnian Pyramid of the Sun Foundation.



Photographed in May 2025 at the Foundation's Museum in Visoko, Bosnia-Herzegovina. Author's photo documentation.

The sandstone (or possible geopolymer) plate displays a deliberate arrangement of engraved symbols distributed across its convex surface. Notable elements include:

Upper center-left: An arrow or triangle-shaped glyph intersected by a vertical stroke, resembling a composite of Vinča (mountain/earth) and Rovás K or TY.

Left field: A tall branching figure, possibly a Y or tree-like motif, often interpreted in both Vinča and Rovás systems as symbolic of bifurcation, growth or life force.

Upper right field: A parallel double-bar symbol (||) adjacent to what appears to be a rotated E-shaped form, aligning loosely with Rovás numerals or dividers.

Central panel: A cluster of intersecting angular lines and arcs, which could represent abstract or cosmological motifs.

Lower right quadrant: A V or arrow-like symbol, partly embedded within a larger curve, possibly denoting flow, descent or entry.

Basal line: Shallow, possibly incomplete engravings forming a separate register or indicating semantic separation from the main panel.

The composition suggests a deliberate and possibly ritualized sequence. The mixture of vertical, angular and curved elements implies a symbolic logic rather than decorative randomness, reinforcing the hypothesis of a non-phonetic proto-script or symbolic system.

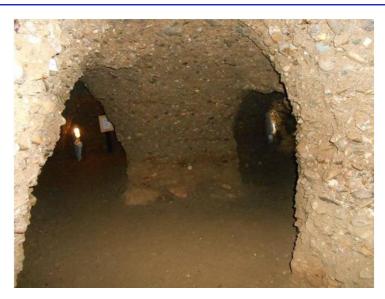


Figure 3: Ravne underground Labyrinth in the Bosnian valley of the Pyramids.

Interior view of the Ravne Tunnel complex, a prehistoric subterranean network located beneath the Bosnian Pyramid of the Sun. The tunnel system is composed of megalithic conglomerate material and displays a high degree of preservation despite its estimated antiquity. Excavations and documentation have been ongoing from 2005 to 2025.

Numerous symbol-bearing stone artifacts, ceramic fragments and megalithic blocks have been unearthed within this labyrinth. These discoveries suggest an intentional subterranean cultural practice involving symbolic inscriptions, energy modulation and possible ritual use.

Source: Environmental ionization in enclosed geospheres: Comparative study of global and local measurements. Journal of Advanced Artificial Intelligence, Engineering and Technology [2].





Figure 4: Carved stone with symbolic inscriptions found beneath filler layers in the Ravne tunnels.

This engraved stone artifact was unearthed in 2016 beneath compacted fill material within the Ravne tunnel network, suggesting considerable antiquity. The upper edge displays a sequence of deeply incised symbols, partially highlighted in red pigment to enhance visibility. The carving style is linear and angular, with repeated vertical strokes and curved forms that hint at structural or phonetic significance.

The inscription, preserved on a dark, smooth stone surface, appears intentional and follows a linear, left-to-right pattern. The characters bear resemblance to early symbolic systems such as Vinča proto-script and Runic pre-forms, yet diverge in ways that justify their classification as a potentially independent symbolic system.

Source: Foundation's Museum collection, Visoko. Photograph by the author May 2025.

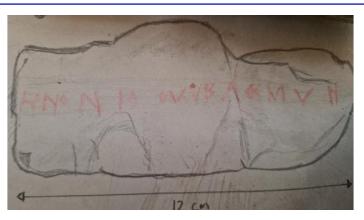


Figure 5: Drawing of the carved stone with red-stained inscriptions from Ravne tunnel complex.

Illustration made by an archaeologist of the Bosnian Pyramid of the Sun Foundation, highlighting carved symbols on a stone artifact found beneath tunnel fill material. Total object length is approximately 12 cm. The inscription has been rendered in red pigment to improve visibility of individual characters.

Symbolic description:

From left to right, the inscription appears to follow a linear and deliberate sequence of stylized characters:

- H: A form resembling the Rovás or Elder Futhark "H", possibly denoting structure, breath or energy.
- N: A mirrored or symmetrical "N", found in both Rovás and Vinča contexts.
- IX: A lozenge-like shape (diamond or tilted square), suggestive of ownership, fertility or cosmic center in Vinča and Runic traditions.
- I: Vertical repetition and symmetry appear again, possibly dividing symbolic clauses.
- V: Composite glyphs resembling "V", "B" or an early bind rune, implying movement, separation or name structure.



- M (M): Angular comb-like or trident form, which may signify tools, divinity or ritual alignment.
- P (V/W): Typically seen as flow, life-force or duality in esoteric symbolism.
- **** (N): Recurs, suggesting symbolic closure or repetition of concept.

These symbols exhibit consistency in stroke style, direction and spacing, suggesting they are not random scratches, but a formalized expression of meaning possibly a name, title, invocation or coded message. The drawing helps to decode the inscription and offers a foundation for comparison with early Vinča proto-script and Runiform glyphs.



Figure 6: Handheld sandstone (or Geopolymer) artifact with potential symbolic markings, discovered in the Ravne tunnel complex.

Left: Photograph of the artifact.

Right: Archaeological drawing with annotation.

This artifact was uncovered in 2006 beneath compacted filler material within the Ravne tunnels, part of the broader Bosnian Pyramid complex. Measuring approximately 21.3 cm in height and 17.4 cm in width, the object exhibits a symmetrical and balanced design, with a central perforation and evenly distributed mass, suggesting it was intentionally shaped for both ergonomic grip and aesthetic harmony.

Key features include:

- Three rounded protrusions, equidistant and prominently elevated on the surface.
- Subtle linear incisions or impressions, interpreted as potential symbolic carvings.
- A morphology indicating use as a handheld ritual object, symbolic marker or functional element within an unknown cultural practice.

The combination of organic form, balance in layout and potential inscriptions supports the interpretation that this object held ritual, symbolic or energetic significance, rather than purely utilitarian value.

Artifact is part of the Foundation's Museum collection in the Ravne tunnel complex.

Photograph by the author May 2025.





Figure 7: Carved stone artifact from the Ravne tunnels, first documented in 2013.

Top: Museum display of a modified and carved stone block originally discovered in 2013 during excavation activities in the Ravne tunnel system.

Bottom: Close-up of the engraved symbols on the lower portion of the artifact, highlighted in red for visual clarity. The carvings exhibit stylistic consistency with other symbolic stones from the Ravne complex.

The object features shallow-to-deep linear incisions aligned horizontally, interpreted as intentional symbolic or communicative forms. The arrangement and morphology suggest affinities with Vinča proto-script and Runiform character sets, particularly in the use of chevrons, verticals and wedge-like strokes.

This artifact was first described by archaeological site manager Tim Moon (New Zealand) in the report: Archaeological report to the foundation [10].

Currently displayed in the Foundation's Museum in Visoko, the stone represents key evidence in support of a potential prehistoric symbolic system emerging from the Bosnian Pyramid context.

Photographs by the author May 2025.

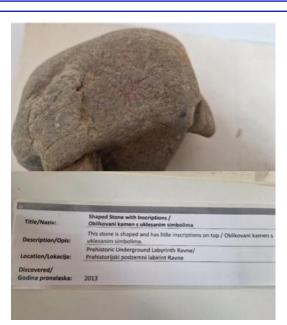


Figure 8: Shaped stone with small engraved symbols, discovered in the Ravne tunnel complex in 2013.



Top: Photograph of a compact, rounded stone artifact featuring fine, shallow linear carvings on its upper surface.

Bottom: Museum label documenting the artifact as part of the Foundation's collection, confirming its discovery in 2013 in the prehistoric underground labyrinth of Ravne.

The engravings are faint yet geometrically intentional, forming short lines and clusters of angular shapes. Although subtle, their repetition and positioning suggest symbolic meaning rather than natural abrasion or incidental marks. The form and symmetry of the stone itself indicate deliberate shaping and its small size implies it may have been used ritually or symbolically, potentially as a handheld object.

This artifact was catalogued alongside other inscribed stones by archaeological manager Tim Moon during early excavations and was included in: Archaeological report to the foundation [10].

The object strengthens the broader pattern of recurring engraved motifs and contributes to the hypothesis of an organized non-phonetic symbolic system associated with the Ravne tunnels.

Photograph by the author May 2025. Foundation's Museum collection.



Figure 9: "Language Tile" with engraved symbols, discovered in the Ravne tunnels.

Top: Photograph of the engraved stone tile featuring numerous red-marked inscriptions across its upper surface.

Bottom: Hand-drawn archaeological illustration mapping and interpreting the symbol distribution across the tile.

This flat sandstone or geopolymer plate, known as the "Language Tile," was recovered during excavation in the Ravne tunnel complex in 2013. The surface contains a dense cluster of shallowly engraved and red-enhanced characters, many of which exhibit structural symmetry and repetition.

According to the archaeological team's analysis, four of the symbols were tentatively identified as representing the following conceptual meanings, using comparative Runic interpretation:

God | Water | Ice | Joy

The remainder of the symbols have not been deciphered but show recurring shapes such as chevrons, vertical bars, looped enclosures and radial figures. The object appears to serve a semantic or ceremonial purpose, with its surface functioning like a proto-tablet or symbolic register.

Artifact held in the Foundation's Museum collection in Visoko. Photographs by the author May 2025.



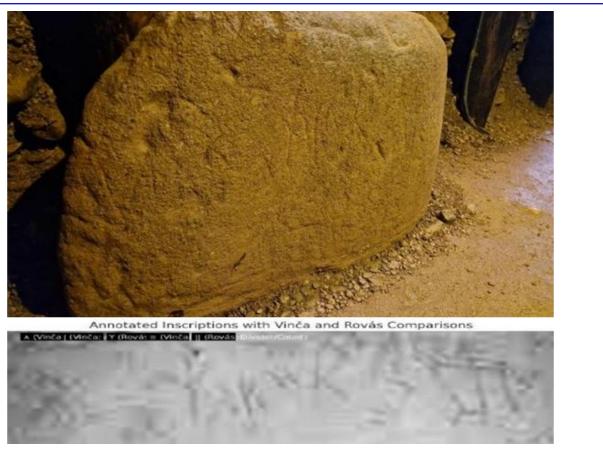


Figure 10: Sandstone or Geopolymer block with carvings, discovered in 2005 Inside the Ravne tunnel system.

Top: Original unburied position of the carved block, located approximately 80 meters from the tunnel entrance.

Bottom: Enhanced close-up of surface engravings, with symbol comparisons to Vinča and Rovás scripts.

This large carved stone block was uncovered in 2005 during early excavation work in the Ravne Tunnel complex. At the time of discovery, it was partially buried in sand and gravel, which served to protect the carvings from erosion, preserving sharp edges and detail.

The engravings on the visible face show a sequence of deliberate, angular and vertical shapes that include:

- V-shaped glyphs (): Common in Vinča as symbols of earth, womb or structure.
- Y-shaped branches: Suggestive of life-force bifurcation, found in both Vinča and Rovás systems.
- Triple vertical lines (|||): Used in Rovás for counts, divisions or boundary markers.
- Diamond or lozenge shapes (◊): Symbolic of centrality, feminine energy or unity in prehistoric symbol systems.

The bottom panel presents annotated comparisons, showing how these motifs parallel known characters from:

- Vinča proto-script (6th-5th millennium BCE)
- Hungarian Rovás (Székely-Hungarian Runes) (2nd millennium BCE onward)

These recurring forms strongly support the interpretation of this artifact as part of a broader, structured symbolic system, distinct from natural fractures or decorative randomness.

Photographs by the author May 2025. Artifact remains in situ within the Ravne tunnel complex.



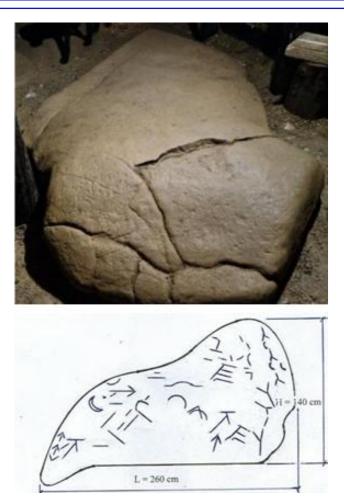


Figure 11: Megalithic block K-1 with carved symbols, located in the Ravne tunnel complex.

Top: Photograph of Block K-1, a large ceramic or sandstone-like megalith discovered in 2006 during tunnel clearing operations.

Bottom: Archaeological illustration by Prof. Dr. Muris Osmanagić (2006), mapping the arrangement of engraved symbols across the block's convex upper surface.

The K-1 block weighs approximately 4 metric tons and measures 2.6 meters in length and 1.4 meters in height. It was uncovered beneath multiple layers of conglomerate, indicating significant age and intentional burial. Its location is especially noteworthy positioned directly above the intersection of two underground water streams, marking it as a geomantic energy node according to energy mapping of the Ravne tunnels.

The engraved symbols depicted in the accompanying schematic include:

- Arrow-like and chevron motifs suggesting directionality or energetic flow
- Ladder-like patterns interpreted as cosmological or shamanic markers
- Triple-stroke and forked lines which may represent elemental forces or protoideographic notation

The diversity and recurrence of forms across this single artifact suggest a deliberate symbolic system, not decorative improvisation. As one of the most significant finds in the Bosnian Pyramid complex, K-1 serves as a central piece of epigraphic evidence for the emergence of an independent prehistoric symbolic tradition.

Source: Epigraphic and geological observations of Megalith K-1. In: ICBP Conference Proceedings, Archaeological Park BPS Foundation, Sarajevo: 776. Photo by author May 2025 [3].





Figure 12: Conclusions of the first international scientific conference on the Bosnian Pyramids (ICBP 2008), Sarajevo.

Photograph from the ICBP 2008 conference, where international researchers gathered to share and assess multidisciplinary findings on the Bosnian Pyramid complex. The event, held in Sarajevo and organized by the Archaeological Park Foundation, brought together geologists, physicists, archaeologists, engineers and independent researchers to explore the nature and significance of the Visoko valley discoveries.

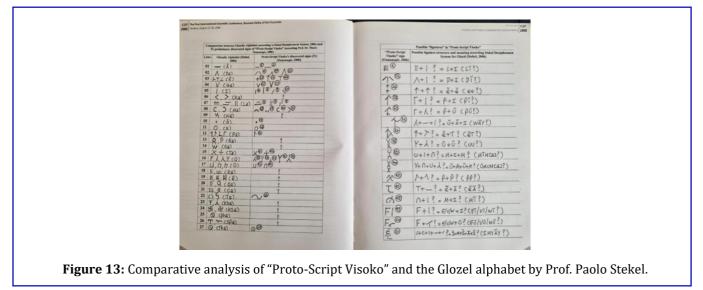
Among the key themes that emerged during the conference was the need for formal epigraphic analysis, as multiple engraved stones and symbolic inscriptions had already been recovered by that time. This gathering marked a turning point in legitimizing and institutionalizing the scientific study of symbols within the pyramid and Ravne tunnel complexes, calling for:

- The systematic cataloging of inscriptions;
- Comparative studies with known proto-scripts such as Vinča and Runic;
- And the integration of symbolic evidence into archaeological and cultural narratives.

Source: 1 ICBP 2008, The first international scientific conference, Bosnian Valley of the Pyramids, Sarajevo, August 25-30, 2009 (www.icbp.ba, accessed on May 10, 2025).

Figure 13 through 18 highlight comparative studies by independent researchers that reinforce these correlations. Stekel's side-by-side matrix (**Figure 13**) demonstrates over 50% similarity with the Glozel alphabet [4]. Szakács and Klára's cross-cultural chart (**Figures 14, 15 and 16**)

illustrates visual parallels with Vinča, Sumerian and Rovás scripts [5]. Macys-Staley's translation of the K1 symbols **(Figure 17)** proposes their use as an energetic map, aligning with previous measurements of electromagnetic and ionizing activity in the tunnel complex [6,8].





Presented at the First International Scientific Conference on the Bosnian Pyramids (ICBP 2009), this side-by-side matrix was developed by Prof. Paolo Stekel, hierolinguist from Porto Alegre, Brazil. It compares 51 engraved symbols from the Bosnian Pyramid complex (as cataloged by Prof. Dr. Muris Osmanagić) with the Glozel alphabet (France, discovered 1924-1940) using the Stekel Decipherment System (2006).

Key observations:

- Over 50% of the Bosnian symbols show direct or partial correspondence to known Glozel characters.
- Stekel further proposes possible ligatures and phonetic combinations within the Visoko symbols, suggesting internal grammar or symbolic logic.
- Character types include arrows, chevrons, lozenges, triple lines, tridents and circular nodes, all of which appear both in Visoko and Glozel samples.

Interpretive statement:

The similarity between writing signs found in Visoko and signs found at Glozel is undeniable. The comparative analysis results in a similarity percentage of more than 50%. Proto-Script Visoko represents the dawn of writing - Prof. Paolo Stekel, ICBP Proceedings: 603-615 [4].

This figure marks one of the first scholarly efforts to situate the Bosnian pyramid inscriptions within a comparative epigraphic framework, aligning them with other unclassified but complex prehistoric writing systems. The work supports the argument for an independent symbolic system at Visoko that likely predates formalized alphabets.

Source: ICBP conference proceedings, archaeological park: BPS foundation, Sarajevo [4].

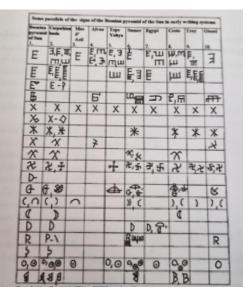


Figure 14: Comparative chart of symbolic parallels between Bosnian Pyramid signs and early writing systems.

This matrix was created by Szakács Gábor and Friedrich Klára, leading researchers from the Association of Fortai Sándor Runic Writers in Budapest, Hungary. The table demonstrates graphic parallels between symbols found on the Bosnian Pyramid of the Sun and multiple ancient writing systems, including:

- Vinča–Tordos (Neolithic Carpathian Basin);
- Sumerian, Egyptian, Crete/Minoan, Tartaria (Transylvanian tablets);
- Glozel (France);
- And the Hungarian Rovás script (Székely-Hungarian runes).



Each row groups symbol forms observed in the Ravne tunnels and on megalithic plates, aligning them with structurally similar signs from the above-mentioned traditions. The researchers emphasize: On the ground of our 30-year experience, we have realized the similarity between writings of the 8,000-year-old Neolithic Tordos-Vinča culture and that of the Bosnian Valley of the Pyramids. In the Ravne tunnels, there are many signs and symbols identified with letters of ancient Tordos-Vinča culture, among others Hungarian Rovás. ICBP Proceedings: 615-633 [5].

This figure supports the hypothesis that the Bosnian Pyramid inscriptions are neither isolated nor random, but rather form part of a shared symbolic and cultural heritage that once stretched across Neolithic Europe.

Source: ICBP 2009, Archaeological Park Foundation, Sarajevo [3].

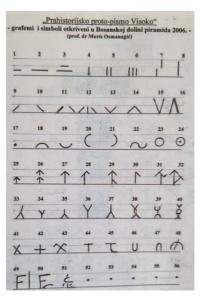


Figure 15: The Visoko proto-script; table: 51 engraved symbols systematized by Prof. Dr. Muris Osmanagić.

This table, compiled and illustrated by Prof. Dr. Eng. Muris Osmanagić, presents 51 distinct graphemes discovered on megalithic blocks and carved stones within the Ravne tunnel complex and Bosnian Pyramid of the Sun site between 2005 and 2008. The table is featured in his article titled "Closing words (2005-2008): Do we have here the discovery of the century in the field of archaeology" from the ICBP Conference Proceedings: 778-779 [3].

The cataloged signs include:

- Linear and geometric forms: Bars, chevrons, tridents, arrows, loops
- Curved and radial figures: Crescents, circles and concentric forms
- Human or anthropomorphic glyphs: Y-shaped and branching motifs
- **Composite symbols:** ligatured forms possibly denoting compound meaning

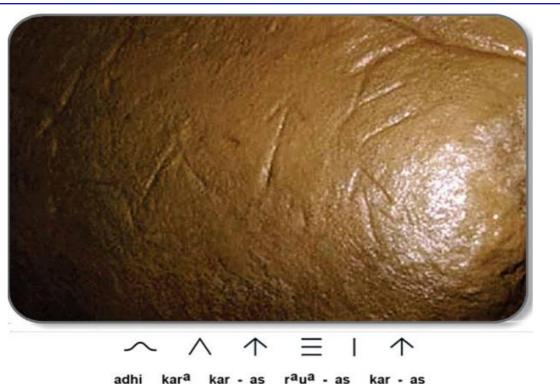
Prof. Osmanagić notes that 19 of the 51 signs resemble Latin alphabet characters, suggesting either prehistoric influence on later scripts or the persistence of proto-ideographic symbols into historical periods.

Upon the excavation of both megaliths being completed, the findings of the unknown scripts were systematized. This discovery might be one of the greatest in the field of linguistics. ICBP Proceedings, p. 778-779 [3].

This figure represents the earliest formal typology of the proposed Bosnian symbolic system here referred to as the Visoko proto-script and forms the structural foundation for comparative analyses with Vinča, Rovás, Runic and other prehistoric epigraphic systems.

Source: ICBP conference proceedings, Archaeological Park Foundation, Sarajevo.





Delivering the action (of) workings, for thundering workings

Figure 16: Inscription on Mega ceramic artifact interpreted as functional text in Proto-Sanskritic translation.

This photograph captures one of the surviving glyph inscriptions on a large mega ceramic block, taken during its uncovering from sandy sediment within the Ravne tunnel network. The well-preserved condition of the carvings is attributed to their protective burial context, supporting claims of significant antiquity.

Beneath the image is a proposed transliteration and translation of the glyphs, presented by Alex Putney (Human-Resonance.org) and published in: Pyramids around the world & lost Pyramids of Bosnia. Archaeological Park Foundation: 384-385 [7].

Transliteration of symbols:

Y L 1 J Y 1

adhi kara kar-as raua-as kar-as

Proposed translation:

Delivering the action of workings, for thundering workings.

The phrase is interpreted as a declarative functional inscription, identifying the object's use as an energetic or vibrational apparatus. It is thought to relate directly to:

- The generation and concentration of negative ions
- The piezoelectric response of crystalline materials under geodynamic pressure
- The transduction of infrasound *via* megaceramic resonance chambers within the Ravne tunnels

This figure thus highlights the potential linguistic encoding of technology in megalithic culture and positions the Bosnian Pyramid artifacts as part of a symbolic-technological tradition.

Source: Archaeological Park Foundation [7].



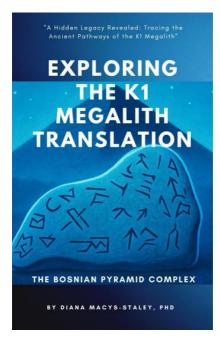


Figure 17: Front Cover of the 2025 Book Exploring the K1 Megalith Translation by Diana Macys-Staley.

This recent publication offers an interpretive linguistic and energetic analysis of the K-1 Megalith, a central artifact in the Ravne tunnel system beneath the Bosnian Pyramid of the Sun. Authored by Dr. Diana Macys-Staley, the book draws upon Vinča proto-symbols and comparative archaeological epigraphy to propose a functional reading of the carved symbols as a dynamic energy diagram.

Key Interpretive Highlights from the Book:

- The engraved symbols are interpreted as an energetic map charting water flow, energetic spikes and resonance points associated with lunar cycles.
- The two "E" like glyphs are hypothesized to indicate the source of energy, possibly tied to geomagnetic or hydrological phenomena.
- The bridge-shaped and hill-shaped symbols may indicate peak resonant phases, aligning with lunar or atmospheric patterns.
- The translation proposes that the text's purpose is instructional and transformative, aimed at guiding interaction with the megalith's energetic field.

The information and translation would be to give a person knowledge on the energy of site. It is mapping the flow of water or springs in the area energy that can be measured. Exploring the K1 Megalith Translation, Archaeological Park Foundation [8].

This perspective aligns with findings on ionization levels, piezoelectricity and negative ion concentration in the tunnels and reinforces the hypothesis that the Bosnian Pyramid inscriptions encode scientific knowledge embedded in a symbolic, non-linear script.

Source: Book cover image and excerpt from Diana Macys-Staley [8].

Artifacts such as the so-called 'Language Tile' (Figure 9) and engraved handheld stones (Figures 6 and 8) show compact and coherent symbol sequences. These inscriptions appear not as random etchings but as ordered arrangements, sometimes framed or set in register-like

patterns. Their recurrence across stratified contexts and alignment with known proto-writing systems suggests the presence of a previously unclassified symbolic tradition, which this study terms the 'Visoko Proto-script' **(Figure 18)**.



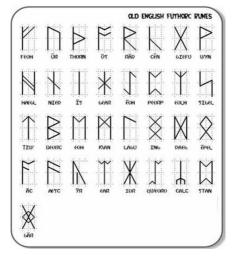


Figure 18: Old English "Futhorc" Runes and their potential use in deciphering symbols on Bosnian Pyramid artifacts.

This chart presents the Old English Futhorc (or Futhoric) runes, a writing system used in Anglo-Saxon England from the 5th to 11th centuries CE. These runes evolved from the Elder Futhark and contain 33 characters, many of which are ideographic and phonetic in nature.

A comparative analysis conducted by retired professor Bobbie Scarfe, using Ralph H. Blum's The Book of Runes, revealed several parallels between these runes and inscriptions observed on one of the engraved Bosnian stone blocks. The following runes showed notable visual correspondence:

- Þ (Thorn): Symbol of protection or resistance;
- R (Rad): Action, movement, journey;
- k (Cen): Vision, knowledge (not listed in Blum's set);
- I (Is): Stillness, stasis;
- J (Eoh): Duality, defense;
- ↑ (Tiw): Warrior energy, justice;
- * (Ior): Fluidity, adaptation.

From this visual correlation, Professor Scarfe derived a symbolic translation:

The gateway is closed; we are at a standstill. We will have to act as warriors to defend and conquer until we can move again through the stargate.

This reading, while speculative, offers a metaphysical interpretation of the symbols and links them to spiritual, cyclical and cosmological themes ideas already embedded in the broader Bosnian Pyramid narrative of energy and transformation.

Source: Pyramids around the world & lost Pyramids of Bosnia, Archaeological Park Foundation: 257-258 [7].

Comparative model performance and analytical frameworks

To evaluate the effectiveness of the analytical framework used in this study, a comparative review was conducted against established methods applied in other proto-writing and symbolic system studies. The focus was on case studies where researchers developed symbol catalogs or classification models. The comparison considers five criteria: Typological structure, visual systematization, contextual integration, interpretive depth and replicability **(Table 1)**.



Study/model	Typology system	Visual pattern recognition	Contextual integration	Interpretive scope	Strengths	Limitations
Jiahu symbols [11]	Low	Medium (repetition tracking)	Strong (burial context)	Narrow (pre- writing only)	Chronological clarity; cultural association	Limited symbol set; no functional model
Vinča Signs [12]	High	High	Medium	Medium	Extensive catalog; wide distribution	Lack of contextual specificity
Tărtăria tablets [13]	Medium	Medium	Medium (ritual context)	High (religious <i>vs.</i> administrative debate)	Detail-rich interpretation	Extremely small corpus
Schmandt- Besserat tokens [14]	Structured (object- function)	Low	High	Strong (economic encoding)	Direct connection to writing evolution	No visual symbolic dimension
Current study: Visoko proto-script	Structured (6- category typology)	High (symbol clustering, frequency)	Strong (linked to tunnel features and artifact stratigraphy)	Balanced (symbolic and functional)	First formal classification of corpus; integrated spatial analysis	Chronology uncertain; corpus still growing

Table 1: Comparison of analytical models used in proto-writing studies.

Performance summary of the proposed model

The current study proposes a six-type classification model (linear, geometric, spiral, composite, directional and abstract motifs) based on shape, repetition and spatial occurrence. Compared to other systems:

Strengths:

- Integrates archaeological context (*e.g.*, location within tunnel system, association with geological or acoustic features).
- Balances symbolic and practical interpretations, rather than assuming ritual or decorative purpose.
- Offers structured and replicable classification logic for an expanding corpus of inscriptions.

Weaknesses:

- Lack of firm dating for most artifacts makes temporal comparison difficult.
- ➢ As an emerging corpus, patterns may shift as new symbols are added.
- Interpretive hypotheses remain exploratory without linguistic decoding or ethnographic continuity.

Conclusion

This comparative analysis indicates that while earlier proto-writing studies focused more heavily on typology or Volume 1 Issue 3 Co

ritual association, the present model offers an integrative framework that brings spatial, symbolic and practical elements together. Its structure makes it well-suited for ongoing updates and for accommodating multidisciplinary data (*e.g.*, geophysical or environmental inputs).

Hypothetical Semantic Interpretations and Symbolic Coherence

Although no linguistic decoding of the Visoko inscriptions has been achieved, preliminary visual classification suggests a limited set of recurring symbols and patterned arrangements. These features invite exploratory semantic interpretations, grounded in comparative archaeology and symbolic cognition. While speculative, such hypotheses can help assess whether the markings exhibit internal logic consistent with early symbolic systems.

Spatial marking and environmental orientation

Several symbols appear in proximity to natural features such as tunnel walls, carved niches or geomagnetic anomalies [11-12]. Their placement may serve a navigational or territorial function marking zones, boundaries or transition points within a larger subterranean system. This mirrors spatial-symbolic use found in other Neolithic contexts, such as chamber markings at Göbekli Tepe or alignment markers in Bronze Age cairns.



Calendrical or cyclical indicators

A subset of symbols shows radial, concentric or spiral formations, possibly referencing solar or lunar cycles, water flow direction or timekeeping. Such hypotheses align with interpretations of similar motifs in Vinča and Maltese temple cultures. If confirmed, this would suggest a non-verbal symbolic system designed to record or predict environmental rhythms.

Ritual or ceremonial encoding

The repetition of certain signs near convergence points such as intersecting passageways or acoustic focal zones may indicate ritual significance. In this framework, symbols could encode ceremonial roles, cosmological beliefs or rites of passage, much like the semantic organization seen in Olmec iconography or megalithic tomb engravings in Ireland and Brittany.

Proto-taxonomic use

Some symbols appear to form sequential arrangements, possibly indicating categories, counts or conceptual oppositions (*e.g.*, pairs of triangles vs. a single cross). This raises the possibility that the inscriptions functioned as proto-taxonomic tools, categorizing physical spaces, resource types or social structures.

Summary

While all proposed interpretations remain hypothetical, their internal consistency and contextual correlation suggest intentionality and symbolic coherence. As the catalog of symbols expands and their spatial data is further analyzed, it may become possible to move from semiotic classification to functional decoding.

Functional dimensions of the inscriptions

While symbolic interpretations remain central to understanding the Visoko inscriptions, it is equally important to consider their potential pragmatic or functional roles. In ancient contexts, symbolism and utility were often intertwined especially in transitional societies where spiritual belief, environmental adaptation and social organization were deeply integrated.

Territorial and navigational function

Several inscriptions are located at decision points within the Ravne tunnel complex junctions, entrances or choke points. These may have served as directional markers, territorial boundaries or zone identifiers, especially if the tunnel was used for resource extraction, ritual procession or water channeling. In this interpretation, symbols helped regulate access or signal status and orientation.

Resource management indicators

Some inscriptions appear near areas where core samples revealed concentrations of quartz, clay or underground water veins. This spatial correlation raises the possibility that symbols acted as resource indicators, flagging zones of material significance. This hypothesis parallels the use of carved notches or rock engravings in Paleolithic and Neolithic quarry sites to mark tool-quality stone or safe passage routes.

Construction and engineering marks

Given the precise orientation and structural reinforcement of the tunnel system, certain markings may represent engineering or construction cues. They could indicate areas for planned expansion, structural support zones or ventilation points functioning much like early masons' marks. Their placement near joint lines, ceilings or unusually cut surfaces supports this hypothesis.

Ritual-functional integration

It is also plausible that some symbols carried dual meanings serving a practical purpose while simultaneously encoding cultural or spiritual values. This overlap is documented in Bronze Age Europe and early Mesopotamia, where symbols on tools, walls or altars served both instructional and ceremonial functions.

Summary

Interpreting the Visoko inscriptions strictly as abstract symbols risks overlooking their potential utility. A balanced approach considering spatial context, material surroundings and parallels from other ancient sites allows for a richer understanding of how symbolic and functional systems may have coexisted.

Discussion

The findings presented in this study contribute to the emerging view that the Bosnian Pyramid complex is not only a geological and architectural anomaly but also a site of profound symbolic significance. The recurring inscriptions, documented across a variety of stone surfaces and portable objects, exhibit a degree of consistency and complexity that warrants classification as a proto-script one that predates phonetic writing systems and instead communicates through abstract forms, symbolic associations and contextual positioning.

The visual parallels between the Visoko Proto-Script



and the symbolic systems of the Vinča civilization and early Runic traditions suggest cultural continuity or symbolic convergence across Neolithic Europe. Such parallels could be explained by shared cosmological models, similar ritual functions or diffusion through early migratory and trade networks [3,5]. While direct lineage cannot yet be confirmed, the morphological consistency of core signs (*e.g.*, chevrons, tridents and vertical dividers) across disparate regions is statistically and semiotically significant.

Moreover, the proposal that some inscriptions may convey functional information potentially referencing elements like water flow or spatial organization remains an open hypothesis. These interpretations are speculative and should be viewed as exploratory, pending further empirical validation. This aligns with the hypothesis that ancient cultures encoded not only myth and ritual in their symbols but also practical and environmental knowledge, such as the modulation of space through acoustic, electromagnetic or hydrological design [7,8,10]. However, future work should avoid premature attribution of purpose and instead focus on expanding the symbol corpus and identifying recurring syntactic or spatial patterns.

The role of independent researchers has been instrumental in broadening interpretive frameworks, from Paolo Stekel's comparative matrices to Macys-Staley's energetic readings and Scarfe's Futhorc-based translation. These diverse perspectives collectively support the idea that the Bosnian inscriptions may reflect a hybrid function: communicative, symbolic and energetic.

Future research should aim to extend the symbol corpus through continued excavation and high-resolution documentation, refine comparative analyses with other proto-writing systems globally and explore the potential semantic structure or syntactic patterns within the inscriptions. If further validated, the Visoko proto-script could represent one of the oldest known symbolic systems in Europe, expanding our understanding of early human communication, cosmology and environmental integration.

Comparative Context: Global Proto-Writing Systems

The identification of symbolic markings in the Bosnian Pyramid complex invites broader comparison with other proto-writing systems globally those that demonstrate structured use of abstract symbols without representing fully developed phonetic language. Recognizing these precedents helps substantiate the classification of the Visoko inscriptions as part of a symbolic or informational system rather than random or decorative markings.

in Henan province, these markings show a recurring set of 16 characters, some of which resemble later Chinese script. Although the Jiahu symbols do not yet represent language, researchers regard them as a precursor to writing due to their repetition, placement and contextual association with elite burials [11].

Vinča signs (Southeastern Europe, ~5500-4500 BCE)

Discovered on pottery and tablets across the Balkans, the Vinča signs comprise one of the most debated Neolithic symbol systems. While their meaning remains undeciphered, their stylistic consistency and recurrence across a wide area suggest intentional symbolic use rather than artistic decoration [12]. The system predates Sumerian writing and overlaps geographically and chronologically with the Visoko site, suggesting regional traditions of symbolic expression.

Tărtăria tablets (Romania, ~5300 BCE)

Often associated with the Vinča culture, the Tărtăria tablets bear incised markings that some scholars have compared to Sumerian proto-cuneiform. Despite ongoing debate, the discovery of these symbols on clay artifacts buried ritually suggests they held communicative or sacred value [13].

Kamyana Mohyla Petroglyphs (Ukraine, ~5000 BCE and later)

Located in southeastern Ukraine, the Kamyana Mohyla complex includes thousands of engraved symbols and animal motifs across rock surfaces. Some symbols show alignment with early symbolic systems and potential calendrical functions. Though not formally decoded, they demonstrate systematic engraving with spatial structuring [14].

Near Eastern tokens and Bullae (Mesopotamia, ~8000-3000 BCE)

In the Fertile Crescent, a progression from clay tokens to numerical impressions and finally to cuneiform writing marks one of the clearest transitions from symbolic to linguistic systems. These early systems encoded economic information in abstract forms long before phonetic writing developed.[15]

Table 2 summarizes the methodological andinterpretive differences across major proto-symbolicstudies, highlighting how the present research contributesnew data and analysis tools specific to the Visoko corpus.

Jiahu symbols (China, ~6600-6200 BCE)

Excavated from tortoise shells at the Jiahu Neolithic site Volume 1 Issue 3 Co



Study/site	Geographic region	Period (approx.)	Corpus description	Methodology used	Interpretation focus	Contribution compared to present study
Jiahu symbols [11]	Henan, China	6600-6200 BCE	Incised symbols on tortoise shells	Stratigraphic dating, symbol cataloging	Early symbolic notation	Pre-linguistic structure; limited corpus size
Vinča signs [12]	Southeastern Europe	5500-4500 BCE	Pottery & tablets with over 700 symbols	Typology, regional comparison	Proto-writing system	Large symbol set; less spatial context
Tărtăria tablets [13]	Romania	~5300 BCE	Incised tablets with ideogram- like symbols	Iconographic analysis	Ritual vs. recording debate	Small sample; debated dating
Near Eastern tokens [14]	Mesopotamia	8000-3000 BCE	Clay tokens & bullae for economic records	Functional classification	Pre-cuneiform administration	Clear evolution into writing
Kamyana Mohyla [15]	Ukraine	5000-2000 BCE	Rock art with spirals, animals and signs	Spatial mapping, motif clustering	Ceremonial & calendrical	Not inscriptional; lacks symbol-to- symbol continuity
Current study: Visoko proto-script	Bosnia- Herzegovina	Undated (prehistoric context)	100+ inscribed stone artifacts in tunnel system	Field documentation, classification, comparative epigraphy	Symbolic, functional and contextual reading	First structured catalog of these symbols; proposes dual- use interpretation

Table 2: Comparative overview of proto-writing studies.

Conclusion

This study represents the first formal attempt to classify the inscriptions found within the Bosnian Pyramid Complex as a structured symbolic system, tentatively named the Visoko proto-script. Based on the analysis of 18 figures drawn from photographs, illustrations and comparative epigraphic tables, a set of 51 recurring symbols has been identified. These inscriptions, distributed across megalithic blocks, ceramic plates and engraved stones, exhibit formal coherence, contextual consistency and cross-cultural parallels.

Comparative analysis reveals meaningful alignments with the Vinča civilization's script and the Runic traditions of the Carpathian Basin and early Anglo-Saxon England. These findings suggest the Bosnian inscriptions may reflect a broader symbolic and communicative tradition that extended across Neolithic Europe, potentially encoding cosmological, ritual or even environmental knowledge. The implications of this work are twofold: It establishes a framework for continued epigraphic study of the Bosnian pyramids and contributes to the growing field of protowriting research. The recognition of a coherent, prealphabetic symbolic system within this site challenges traditional timelines and expands our understanding of symbolic cognition and early cultural expression.

While the identified patterns and comparative visual parallels are promising, no systematic linguistic decoding has been accomplished to date. Accordingly, all interpretations should be considered exploratory within the broader context of early epigraphic analysis.

Further interdisciplinary work linking archaeology, epigraphy, geophysics and archaeoacoustics is essential to deepen our knowledge of the function and meaning of these inscriptions. With continued excavation, technological support and scholarly collaboration, the Bosnian Pyramid complex may soon be recognized not only for its architectural magnitude but also for its linguistic and symbolic legacy.



Author Contributions

Dr. Sam Osmanagich conceived the research concept, documented the epigraphic material in situ and through museum archives, conducted comparative analyses and wrote the manuscript. All figures were selected and annotated by the author unless otherwise credited.

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Institutional Review Board Statement

Not applicable.

Informed Consent Statement

Not applicable.

Data Availability Statement

All photographic and illustrative material referenced in this study is part of the Foundation's Museum collection in Visoko, Bosnia-Herzegovina. Further data, including field notes and symbol matrices, are available upon reasonable request to the corresponding author.

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Conflicts of Interest

The author declares no conflict of interest.

About the Author

Dr. Sam Osmanagich is a scientist, researcher, author and Principal Investigator of the archaeological project in Visoko, Bosnia-Herzegovina, where he discovered the Bosnian Valley of the Pyramids. He holds a PhD in Mayan pyramids and has published over 20 books on ancient civilizations, translated into 17 languages. Dr. Osmanagich is founder and director of the "Archaeological Park: Bosnian Pyramid of the Sun" Foundation and has authored multiple peer-reviewed scientific articles on pyramid geometry, energy fields and ionization phenomena.

Dr. Sam Osmanagich held academic positions including professor of anthropology and director of the Center for Anthropology at the American University in Bosnia-Volume 1 Issue 3 Ca Herzegovina. A foreign member of several European academies, he is also the recipient of awards including the U.S. Congressional Certificate of Recognition and the Amelia B. Edwards Award. He currently oversees longterm environmental studies at the Ravne Tunnel Complex and manages Park Ravne 2, a multidisciplinary cultural venue.

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