



Research Article

Settlement Organization and Early State Formation in the Iori-Alazani Interfluve: Evidence from the Ancient City of Didnauri

Konstantine Kote Pitskhelauri* 

National Agency for Cultural Heritage Preservation of Georgia, Tbilisi, Georgia

Abstract

The emergence of early state societies in the South Caucasus remains a fundamental issue in Near Eastern archaeology. This study examines the Late Bronze-Early Iron Age settlement system of the Iori-Alazani interfluve in eastern Georgia, with particular emphasis on the recently discovered ancient city of Didnauri, to evaluate its significance for understanding the development of complex socio-political organization. Drawing upon archaeological evidence from settlement patterns, fortifications, urban planning, funerary practices, material culture, and regional landscape analysis, the paper argues that the Iori-Alazani interfluve constituted an integrated and hierarchically organized territorial system rather than a collection of isolated communities. Didnauri, covering approximately 35 hectares and enclosed by monumental defensive walls, functioned as the principal administrative, economic, and ritual center within a wider network of fortified and rural settlements. The archaeological record demonstrates increasing social differentiation, centralized resource management, specialized craft production, and long-distance cultural interactions linking eastern Georgia with Anatolia, northern Mesopotamia, and the broader Ancient Near East. These features collectively indicate the emergence of institutions capable of coordinating large-scale labor, territorial administration, and economic organization. The study further argues that the development of social complexity in eastern Georgia resulted from indigenous processes of political centralization, combined with the selective adaptation of external cultural influences, rather than from direct diffusion from established Near Eastern states. By situating the Didnauri settlement system within broader comparative debates on early state formation, the paper highlights the South Caucasus as an active participant in the development of complex societies during the late second and early first millennia BCE. The evidence presented contributes to a reassessment of the origins of statehood beyond the traditional centers of the Ancient Near East and underscores the importance of eastern Georgia in the archaeology of early political organization.

Keywords

Early State Formation, South Caucasus, Iori-Alazani Interfluve, Late Bronze Age, Early Iron Age, Settlement Systems

1. Introduction

The emergence of early state societies represents one of the central questions in the archaeology of the Ancient Near East and the South Caucasus. Although the development of complex

political organization has been extensively investigated in Mesopotamia, Anatolia, and the Levant, the role of the South Cau-

*Correspondence: Konstantine Kote Pitskhelauri (kote.pitskhelauri@tsu.ge)

Received: 13 July 2026; Accepted: 10 August 2026; Published: 9 September 2026



Copyright: © The Author(s), 2026. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

casus in these broader historical processes remains insufficiently understood. Recent archaeological discoveries increasingly suggest that this region should not be regarded as a peripheral cultural zone, but rather as an integral component of the wider Ancient Near Eastern world. [10-15]

One of the most significant areas for investigating these processes is the Iori–Alazani interfluvium in eastern Georgia. Over the past decades, archaeological research has revealed an exceptionally dense settlement system dating to the Late Bronze and Early Iron Ages, including fortified settlements, cemeteries, sanctuaries, and, most importantly, the recently identified ancient city of Didnauri. Together, these discoveries provide new evidence for the emergence of large-scale socio-political organization during the late second and early first millennia BCE. [5, 6]

The present study examines archaeological evidence from the Great Shiraki Plain and the surrounding Iori Plateau with the aim of evaluating whether this settlement system demonstrates the principal characteristics of early state formation. Particular attention is devoted to settlement patterns, defensive architecture, urban planning, material culture, and long-

distance cultural interactions, especially those connecting the South Caucasus with contemporary civilizations of the Ancient Near East.

The central argument advanced in this article is that the archaeological evidence from the Iori–Alazani interfluvium reflects the existence of an integrated socio-economic and political system that possessed many of the defining characteristics of early statehood. Rather than representing isolated settlements, the archaeological remains indicate a hierarchically organized regional network centered on Didnauri, whose development appears to have been closely connected with the broader political and cultural transformations that affected the Ancient Near East during the transition from the Late Bronze Age to the Early Iron Age. [8]

By placing the archaeological evidence from eastern Georgia within this wider comparative framework, this article contributes to current discussions concerning the origins of complex societies and the formation of early states in the South Caucasus.



Figure 1. Archaeological Sites on the Great Shiraki Plain.

2. Geographical Setting and Research Background

The study area is located in the eastern part of Georgia, within the Iori-Alazani interfluvium, on the Great Shiraki Plain and the adjacent Iori Plateau. This geographically well-defined region occupies a strategic position between the Alazani and Iori rivers and forms a natural corridor linking the South Caucasus with the Ancient Near East. The plateau consists of fertile plains enclosed by mountain ranges, creating a naturally protected landscape that was particularly suitable for long-term settlement and agricultural development.

Palaeoenvironmental observations and archaeological evidence indicate that during the Late Bronze and Early Iron Ages the natural conditions of the region differed considerably from those of today. Ancient river channels, traces of which remain visible across the plains, suggest the existence of a more favorable hydrological system capable of supporting intensive agriculture and a relatively dense population. [9]

Archaeological investigations carried out over several decades have revealed a remarkable concentration of settlements, cemeteries, sanctuaries, and defensive structures dating to the late second and early first millennia BCE. These discoveries demonstrate that the Iori Plateau was not occupied by isolated communities but rather by settlements integrated within a broader regional system. [3, 5, 6]

The importance of this region increased substantially following the identification in 2014 of the ancient city of „Didnauri“ through satellite imagery and subsequent archaeological investigations. This discovery has transformed our understanding of the settlement organization of eastern Georgia during the Late Bronze and Early Iron Ages and provides an exceptional opportunity to examine the emergence of complex socio-political organization in the South Caucasus. [2]

The following sections analyse the principal archaeological evidence from this settlement system in order to evaluate its significance for understanding the origins of early statehood in eastern Georgia.

2.1. The Settlement System of the Iori-Alazani Interfluvium

The settlement system of the Iori-Alazani Interfluvium represents one of the most significant examples of complex social

organization in the South Caucasus during the Late Bronze Age and Early Iron Age transition. Archaeological investigations conducted in the eastern part of Georgia, particularly in the Shiraki Plain and adjacent territories, have revealed a highly structured network of settlements characterized by functional differentiation, territorial integration, and hierarchical organization.

Unlike dispersed rural settlement patterns traditionally associated with prehistoric communities of the Caucasus, the Iori-Alazani Interfluvium demonstrates evidence for a coordinated settlement landscape consisting of fortified hilltop sites, smaller habitation complexes, burial grounds, and a central fortified settlement. Recent studies of the Shiraki Plain have identified two principal settlement categories: fortified plain settlements of the “Didnauri type” and hillfort settlements represented by sites such as Nazarlebi. Their spatial arrangement suggests a deliberate system of territorial control, communication, and defense. [7]

At the center of this settlement network was the large fortified settlement of Didnauri, located in the Great Shiraki Valley. Archaeological evidence indicates that Didnauri functioned as a central place within a wider socio-economic and political system. The settlement was distinguished by monumental fortifications, planned internal organization, water-management structures, and specialized architectural features, indicating a level of social coordination beyond that of a simple village community.

The surrounding smaller settlements, distributed across the hills and valleys of the Iori Plateau, appear to have formed an integrated territorial network. Their location provided control over approaches, natural corridors, and agricultural zones, while their relationship with central fortified sites reflects emerging patterns of political authority and resource management. GIS-based landscape analyses further demonstrate that many hillforts were strategically positioned to maintain visual communication and oversee extensive areas of the Shiraki Plain.

Thus, the settlement system of the Iori-Alazani Interfluvium should be interpreted not merely as a collection of independent settlements, but as a coherent socio-political landscape reflecting processes of increasing centralization, territorial organization, and early state formation in eastern Georgia during the late 2nd and early 1st millennia BC.

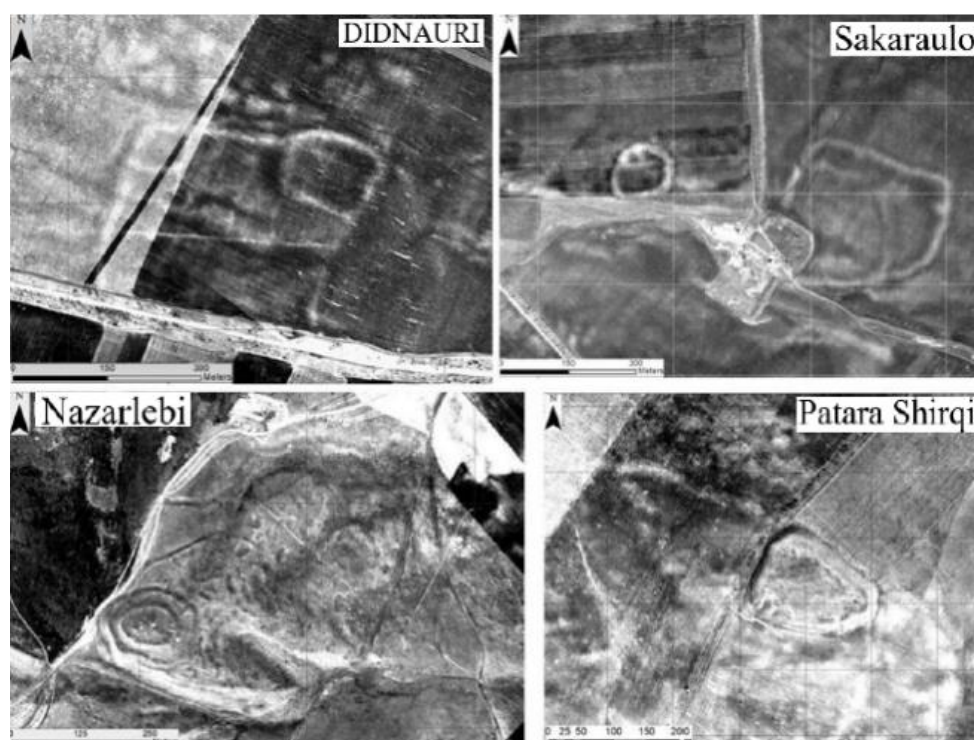


Figure 2. The Ancient City of Didnauri and the Small Settlements on the Great Shiraki Plain.

2.2. The Ancient City of Didnauri

Didnauri is one of the most significant Late Bronze Age-

Early Iron Age archaeological discoveries in the South Caucasus. The site is located in the western part of the Shiraki Plain, in Dedoplistskaro Municipality, southeastern Georgia. It was identified through satellite imagery in 2014, revealing the remains of a large fortified settlement.

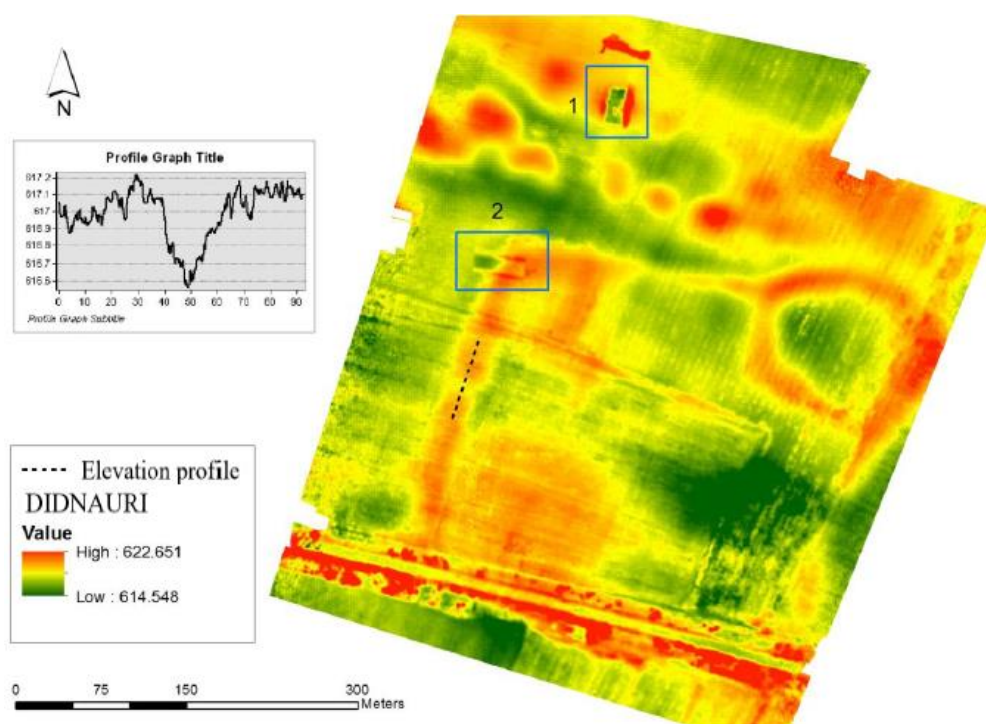


Figure 3. Digital elevation model of Didnauri ancient city. Dotted line shows the elevation profile at possible gates. DEM created with close range Aerial photogrammetric survey.

2.3. Chronology and Historical Context

Archaeological investigations date Didnauri mainly to the 12th-9th centuries BCE, although some studies based on radiocarbon and artifact analysis have proposed earlier Late Bronze Age phases. The settlement belongs to a period when complex social organization, regional networks, and early forms of political centralization were developing in eastern Georgia and the wider South Caucasus.

2.4. Urban Structure and Fortifications

The settlement occupies approximately 35 hectares and appears to have functioned as a major regional center. It was surrounded by a massive defensive system: a wall approximately 1.5 km long and about 7 m wide, constructed using stone, clay, and wooden elements. Within the settlement archaeologists have identified large architectural complexes, ritual structures, residential buildings, and elements of a water-supply system.



Figure 4. *The Ancient City of Didnauri: A Paved Street and Traces of Building Foundations.*

The scale of Didnauri is exceptional because it challenges traditional views of settlement organization in the South Caucasus during the Late Bronze Age. Rather than isolated villages, the evidence suggests a coordinated settlement network with a central administrative and economic hub.

2.5. The Didnauri Regional System

Around Didnauri, archaeologists have recorded numerous smaller settlements dating to the same period. These sites likely formed a connected socio-economic landscape in which

Didnauri served as a central place for administration, production, exchange, and possibly religious activities.

2.6. Burials and Material Culture

A large cemetery associated with Didnauri has produced important evidence about social hierarchy and identity. Excavations revealed elite burials containing bronze objects, weapons, ceramics, and other materials indicating differentiated social status. Archaeological finds from the site include gray-burnished pottery, bronze artifacts, stone tools, and clay objects. [1]

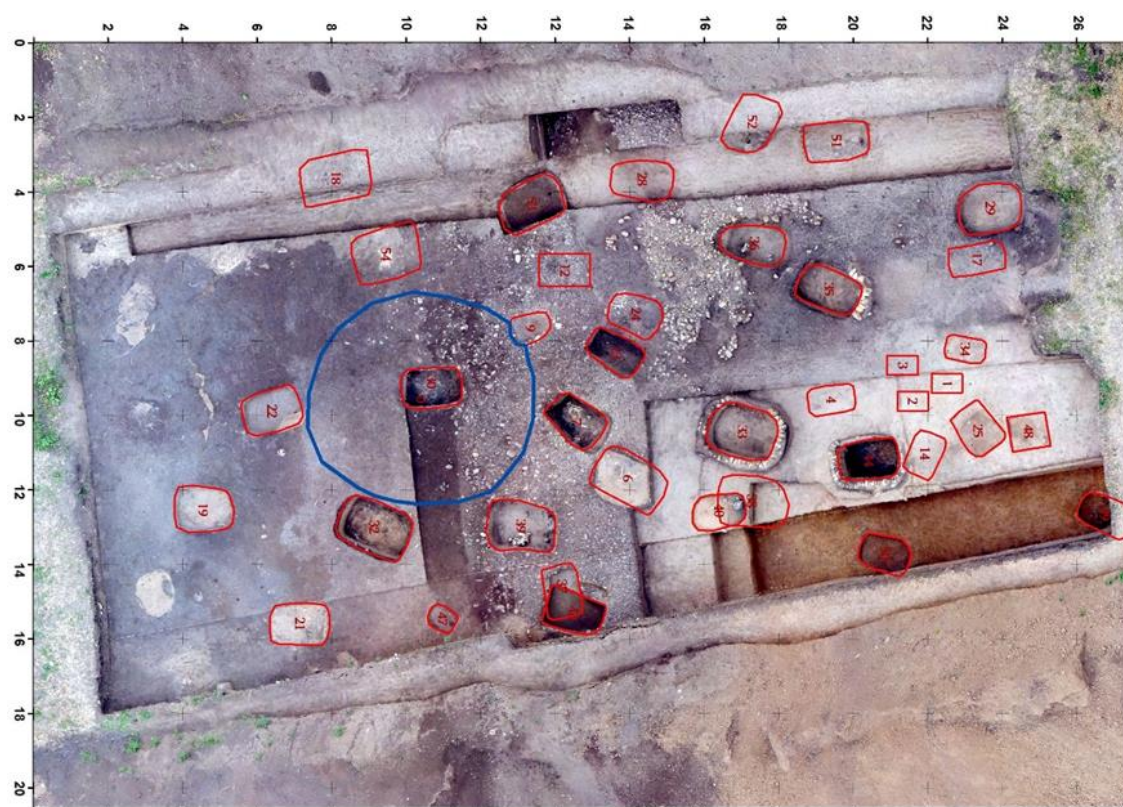


Figure 5. Plan of the Northern Necropolis of the Ancient City of Didnauri.



Figure 6. Excavated Graves in the Necropolis.

2.7. Significance for Early State Formation Studies

Didnauri is particularly important for discussions of early state formation in eastern Georgia. Its large scale, defensive architecture, organized water management, specialized buildings, and surrounding settlement network suggest the emer-

gence of more complex political structures before the formation of historically documented states. [4]

2.8. Material Culture and Near Eastern Connections: Evidence from the Iori-Alazani Interfluvium

The material culture of the Iori-Alazani interfluvium provides important insights into the region's participation in broader

networks of interaction that connected the South Caucasus with the ancient Near East. Rather than representing an isolated cultural sphere, eastern Georgia during the Late Bronze and Early Iron Ages was integrated into a dynamic system of exchange, technological transmission, and ideological communication that extended across the Caucasus, eastern Anatolia, and northern Mesopotamia. Archaeological evidence from settlements, cemeteries, and production areas demonstrates that local communities actively engaged with external influences while simultaneously maintaining distinctive regional traditions.

One of the most significant indicators of these connections is the development of complex settlement structures and specialized craft production. The emergence of large fortified and strategically organized settlements in the Iori-Alazani region reflects not only demographic growth but also increasing levels of social coordination and economic specialization. The

architectural organization of sites such as the ancient city of Didnauri suggests the existence of planned spatial arrangements, communal infrastructure, and forms of centralized management that parallel broader processes observed in contemporary Near Eastern societies.

Ceramic assemblages represent one of the primary categories through which cultural interactions can be examined. Although pottery production in the Iori-Alazani interfluvium demonstrates strong local traditions, certain technological characteristics, decorative elements, and functional categories reveal connections with neighboring regions. Similarities with ceramic traditions of eastern Anatolia and the southern Caucasus indicate the existence of shared technological knowledge and communication networks rather than direct cultural replacement. These interactions likely occurred through mobility of craftsmen, exchange of goods, and the circulation of technological practices.



Figure 7. Ceramic Artifacts Discovered at the Didnauri Cemetery and Ancient City.

Metallurgical evidence provides further testimony to the region's involvement in wider economic systems. The South Caucasus occupied a strategic position within the ancient Near Eastern metal exchange network due to its rich mineral resources and long-standing traditions of bronze production. The presence of sophisticated metal objects, production remains, and evidence for specialized craftsmanship indicates

that communities of the Iori-Alazani interfluvium participated in technological developments that connected local production with wider regional demands. Metallurgy, therefore, functioned not only as an economic activity but also as a mechanism through which social authority and elite identity were expressed.



Figure 8. Bronze Model of a War Chariot and a Warrior's Burial.

The relationship between local traditions and Near Eastern cultural influences is particularly visible in the organization of power and symbolic practices. Certain elements of settlement planning, defensive architecture, and material expressions of status demonstrate parallels with contemporary developments in eastern Anatolia and northern Mesopotamia. However, these similarities should not be interpreted as passive adoption of foreign models. Instead, the archaeological record suggests selective adaptation, whereby local communities incorporated external innovations according to their own social and environmental conditions.

The Iori-Alazani interfluvium occupied a crucial geographical position between the Caucasus mountain zone and the Near Eastern cultural sphere. This location facilitated interaction routes that connected different ecological and cultural regions, allowing the movement of materials, technologies, and ideas. The archaeological record from Didnauri and related sites demonstrates that these contacts contributed to increasing social complexity and the formation of larger political and economic structures during the Late Bronze and Early Iron Ages.

From this perspective, the material culture of the region should be understood as evidence of connectivity rather than cultural dependency. The communities of eastern Georgia were active participants in wider processes of transformation

that shaped the ancient Near East and the Caucasus. The emergence of large settlements, intensified craft production, and increasingly organized social systems reflects a regional trajectory toward early forms of political integration and state formation.

2.9. Evidence for Early State Formation in the Iori-Alazani Interfluvium

The emergence of early state institutions in the South Caucasus remains one of the most significant questions in the archaeology of social complexity. Recent investigations in eastern Georgia, particularly within the Iori-Alazani interfluvium, provide new insights into the processes through which increasingly centralized forms of political organization developed during the Late Bronze and Early Iron Ages. Archaeological evidence from settlement organization, monumental architecture, craft specialization, storage facilities, and long-distance exchange networks suggests the presence of socio-economic mechanisms that extended beyond simple village communities and reflected new levels of administrative and territorial integration.

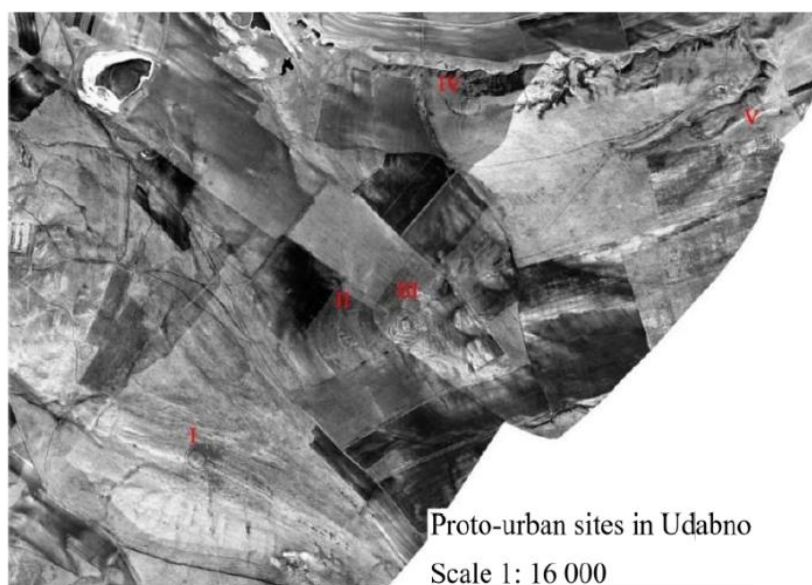


Figure 9. Proto-Cities of Udabno.

The archaeological complex of Didnauri represents a particularly important case study, demonstrating features commonly associated with early urban and proto-state formations: planned settlement layout, differentiation of functional spaces, large-scale construction activities, and evidence for organized production and resource management. These characteristics indicate that communities of the region participated in broader

processes of political centralization and institutional development that connected the South Caucasus with contemporary developments in the Near East.

3. Discussion

The archaeological evidence from the Iori-Alazani Interfluvium provides important insights into the processes that

shaped the emergence of complex social and political organization in eastern Georgia during the Late Bronze and Early Iron Age. The settlement patterns, monumental architecture, evidence of specialized production, and long-distance cultural connections indicate that the region was not a peripheral zone but an active participant in broader Near Eastern processes of social transformation.

The case of the ancient settlement of “Didnauri” is particularly significant for reassessing the mechanisms of early state formation in the South Caucasus. Its large-scale urban layout, defensive structures, planned organization, and concentration of material resources suggest the existence of coordinated communal authority capable of mobilizing labor and managing economic activities. Rather than representing an isolated fortified settlement, Didnauri appears to reflect a more complex stage of social integration, in which political institutions and territorial organization were becoming increasingly formalized.

The evidence from the Iori-Alazani Interfluvium also challenges traditional models that view early state development as a phenomenon primarily transmitted from the major centers of Mesopotamia and Anatolia. While interaction with the Near East clearly influenced technological and cultural developments, local trajectories of complexity formation played a decisive role. The emergence of hierarchical settlement systems in eastern Georgia should therefore be understood as the result of both regional innovation and participation in wider interregional networks. [10-12]

The material culture demonstrates intensive connections with neighboring regions, including eastern Anatolia, northern Mesopotamia, and the broader Caucasus. These connections involved not only the exchange of objects but also the circulation of technologies, symbolic practices, and organizational concepts. However, the adoption of external influences was selective and transformed within local cultural contexts, contributing to the formation of distinctive social structures in eastern Georgia.

The archaeological record from the Iori-Alazani Interfluvium further suggests that environmental factors, control over agricultural resources, and strategic geographic position contributed significantly to the rise of centralized communities. The fertile landscapes between the Iori and Alazani rivers created favorable conditions for surplus production, while the region’s location at the crossroads of major communication routes facilitated economic and cultural interaction.

Taken together, the evidence supports the interpretation that eastern Georgia witnessed indigenous processes of increasing social complexity that eventually approached early forms of state organization. The case of Didnauri expands current discussions on the origins of political institutions in the South Caucasus and contributes to a broader understanding of how early states emerged beyond the traditionally recognized centers of the ancient Near East.

4. Conclusion

The archaeological evidence from the Iori-Alazani Interfluvium provides new perspectives on the emergence of complex societies and early political organization in eastern Georgia during the Late Bronze and Early Iron Age. The discoveries associated with the ancient settlement of Didnauri demonstrate that the region was characterized by a high level of social coordination, economic organization, and territorial planning, challenging earlier perceptions of the South Caucasus as a peripheral area in relation to the ancient Near Eastern world.

The settlement structure, monumental architecture, defensive systems, and associated material culture indicate the presence of institutions capable of organizing collective labor, managing resources, and maintaining large-scale communal projects. These features suggest that Didnauri represents an important stage in the development of centralized authority and contributes valuable evidence for understanding the formation of early state-like structures in the region.

At the same time, the emergence of complexity in the Iori-Alazani Interfluvium should not be interpreted simply as a consequence of external influence from the major civilizations of the Near East. Although interactions with Anatolia, Mesopotamia, and neighboring regions played an important role in technological exchange and cultural transformation, the archaeological record reveals a distinctly local trajectory of social development. The communities of eastern Georgia actively adapted external innovations within their own cultural and environmental contexts, producing unique forms of organization and identity.

The case of Didnauri highlights the importance of integrating the South Caucasus into broader discussions of early state formation. Rather than representing a marginal zone between larger civilizations, eastern Georgia emerges as a dynamic region where processes of urbanization, political centralization, and social differentiation developed through the interaction of local traditions and wider interregional networks.

Future research, including expanded excavations, scientific analyses, and comparative studies with contemporary Near Eastern and Caucasian sites, will be essential for refining chronological frameworks and further evaluating the nature of political organization in the region. Nevertheless, the current evidence demonstrates that the Iori-Alazani Interfluvium played a significant role in the formation of early complex societies and provides a crucial case study for understanding alternative pathways toward statehood beyond the traditional centers of the ancient world.

Abbreviations

BC	Before Christ
BCE	Before Common Era
CE	Common Era

Author Contributions

Konstantine Pitskhelauri: Conceptualization, Data curation, Formal Analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing

Conflicts of Interest

The author declares no conflicts of interest.

References

- [1] Asatiani, N., and B. Maisuradze. 2001. "The Hill-Tombs of Dedoplistskaro District." *Archaeological Collection III*, XXII-XXVI. Tbilisi.
- [2] Fiori, S., K. Hopper, E. Rova, and D. Kvavadze. 2024. "The Kurgans of the Alazani Valley in Eastern Georgia: A New Assessment via Remote Sensing and Targeted Field Survey." *Journal of Archaeological Science: Reports* 57: 104659. <https://doi.org/10.1016/j.jasrep.2024.104659>
- [3] Furtwängler, A., F. Knauss, and I. Motzenbäcker. 1998. "Archäologische Expedition in Kachetien." *Eurasia Antiqua* 4: 309-364.
- [4] Gamkrelidze, G. 2025. "The Origin of Statehood in Georgia and Archaeology." *Archeologia*.
- [5] Maisuradze, V. 1988. "Shiraki Archaeological Expedition: Field Archaeological Research." Tbilisi.
- [6] Motzenbäcker, I. 1998. "Ausgrabungen in Širaki." *Eurasia Antiqua* 4.
- [7] Pitskhelauri, K. 2011. "The Morphology of Nazrlebi Burial Ground." *Khornabuji I*. Tbilisi.
- [8] Pitskhelauri, K. 2021. "At the Beginnings of the Statehood in Eastern Georgia (on the Example of the Land between the Rivers Iori and Alazani)." *Spekali: Bilingual Scholarly Peer-Reviewed Journal of the Faculty of Humanities, Ivane Javakishvili Tbilisi State University*. <https://doi.org/10.55804/jtsuSPEKALI-18-4>
- [9] Varazashvili, V. L. 1992. *Early Agricultural Culture of the Iori-Alazani Basin* Tbilisi: Metsniereba (In Russian).
- [10] Algaze, G. 2005. *The Uruk World System: The Dynamics of*

Expansion of Early Mesopotamian Civilization. Chicago: University of Chicago Press.

- [11] Flannery, K. V. 1972. "The Cultural Evolution of Civilizations." *Annual Review of Ecology and Systematics* 3: 399-426. <https://doi.org/10.1146/annurev.es.03.110172.002151>
- [12] Johnson, A. W., and T. Earle. 2000. *The Evolution of Human Societies: From Foraging Group to Agrarian State*. Stanford: Stanford University Press. <https://doi.org/10.1515/9780804764513>
- [13] Renfrew, C. 1972. *The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium BC*. London: Methuen.
- [14] Trigger, B. G. 2003. *Understanding Early Civilizations: A Comparative Study*. Cambridge: Cambridge University Press. DOI <https://doi.org/10.1017/CBO9780511840630>
- [15] Yoffee, N. 2005. *Myths of the Archaic State: Evolution of the Earliest Cities, States, and Civilizations*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511489662>

Biography



Konstantine Kote Pitskhelauri is an archaeologist and Associate Professor at the Institute of Archaeology, Faculty of Humanities, Ivane Javakishvili Tbilisi State University. He received his academic education in archaeology and has devoted his scholarly career to the study of the prehistoric and early historic periods of the South Caucasus.

His primary research interests focus on the archaeology of the Bronze and Iron Ages, with particular emphasis on settlement archaeology, social organization, cultural transformations, and the development of complex societies in ancient Georgia. His research also addresses archaeological landscapes, material culture, and the interaction between human communities and their environments. Konstantine Pitskhelauri has participated in and conducted archaeological field investigations and excavations at significant archaeological sites in Georgia. He is the author of two monographs and more than twenty scholarly articles. His research contributes to the understanding of settlement patterns, cultural processes, and socio-economic developments in the South Caucasus.