



Zulmabad Fortress and Urartian Presence in North-western Iran: Insights from Recent Archaeological Investigations

Nezahat Ceylan^{*1} Alpaslan Ceylan¹ and Oktay Özgül²

**Corresponding Author; ¹Department of History, Faculty of Humanities, Kyrgyz-Turkish Manas University, Bishkek, Kyrgyzstan.
E-mail: nezahat.ceylan@manas.edu.kg*

² Department of History, Yalova University, Yalova, Türkiye.

Received: 10/ 03/ 2025; Received in Revised form: 21/ 04/ 2025; Accepted: 23/ 05/ 2025; Published: 20/ 06/ 2025

Abstract

Situated at the crossroads of the Caucasus, Central Asia, and Anatolia, Iran's north-western region holds immense historical and cultural significance within the broader Middle Eastern landscape, characterized by its rich archaeological diversity. Since the Late Bronze and Early Iron Ages, this area has supported semi-nomadic societies and sustained dynamic interactions with eastern Anatolia. The powerful Urartian state expanded into this region, constructing numerous fortresses and settlements as part of its frontier defence system. Inscriptions from the reigns of Urartian kings Ispuini and Menua reference large-scale architectural projects, reflecting the state's enduring legacy. Archaeological surface surveys conducted by A. Ceylan between 1998 and 2019 across the Caucasus and north-western Iran—particularly in Tabriz, Ardabil, and Ahar—have revisited known sites and uncovered new fortresses, tumuli, and settlements. Among these, Zulmabad Fortress, located 36 km from Varzegan at an elevation of 2,080 metres, stands out for its strategic placement atop a steep mountain with a commanding view of the surrounding landscape. Adjacent tumuli further underscore the site's historical importance. This study focuses on Zulmabad Fortress, employing photogrammetric analysis, ceramic typology, and architectural documentation to reveal its Urartian characteristics. Despite damage over time, the fortress remains a significant example of Urartian military architecture in Iran.

Keywords: Northwest Iran, Urartians, Zulmabad Fortress, Iron Age, Archaeological Survey.

Article Type: Review Article

Introduction

Iran is located in the Northern Hemisphere between latitudes 25° and 40° N (Figure. 1). The fertile soils of north-western Iran, favourable climatic conditions, rich vegetation, and abundant hunting and gathering resources have made this region attractive for human settlement throughout history. The availability of arable land, sufficient rainfall and snowfall, proximity to water sources, and presence of game animals supported both sedentary and semi-nomadic lifestyles in the region (Hole 1987: 47). The socio-economic and political significance of this area is emphasized in inscriptions from the Assyrian and Urartian periods, which document the region as a zone of conflict between these ri-

val powers. A notable example is the Urartian inscription at Taštepe, located in the alluvial plain of Solduz, approximately 40 km east of Hasanlu. This inscription, attributed to King Menua, confirms Urartian control over the region between Mahabad and Miandoab during the 9th and 8th centuries BCE, providing a crucial marker in historical geography (Salvini 2004: 66).

Iran's geography includes a vast plateau bordered by various mountain ranges and coastlines. The northern coast along the Caspian Sea features fertile alluvial plains such as Mazandaran, Gorgan, Gilan, and Talish. The Caspian coastline stretches approximately 500 km, from Astara in the northwest to the Gorgan River in the southeast. In



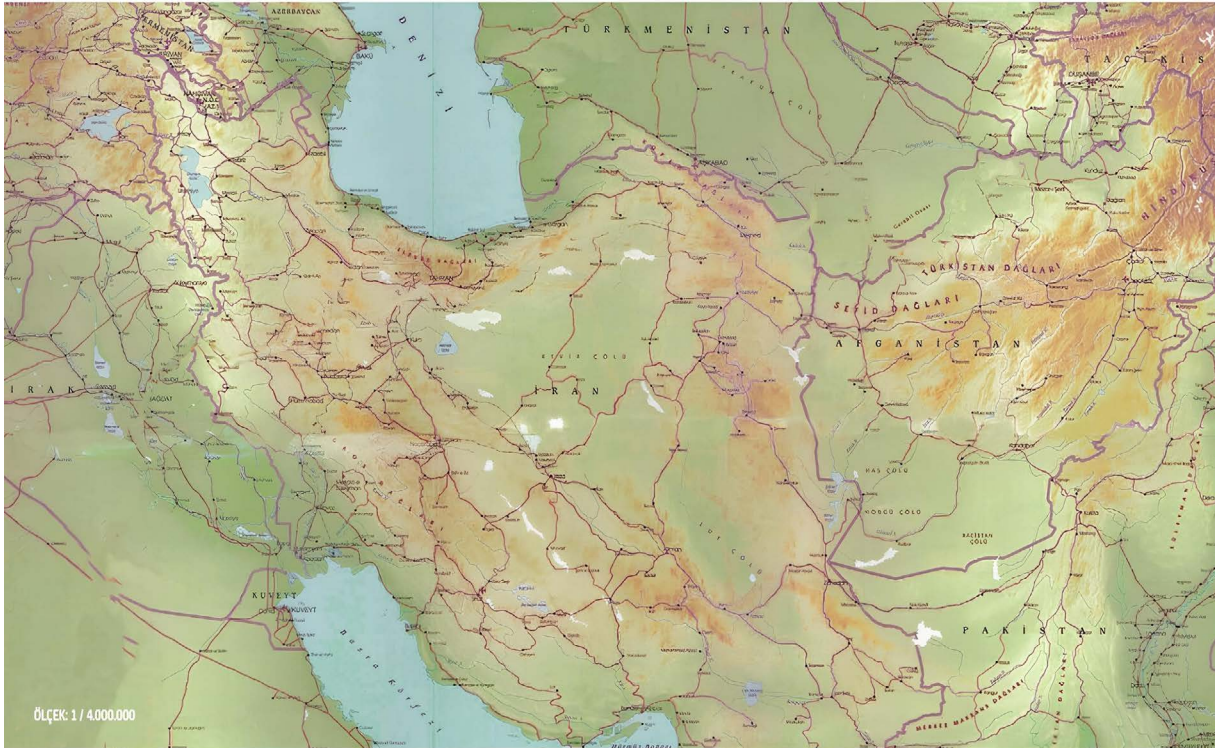


Figure 1: Geographic map of Iran, illustrating its latitudinal extent and major physical features relevant to archaeological study

(After: Ceylan 2023: 14)

the south, the Minab River divides the coastline into two parts: the Persian Gulf Coast and the Makran Coast extending to the border with Pakistan. A major geographical unit, the Iranian-Azerbaijani Plateau, is situated between the Caspian Sea, the Caucasus, and Mesopotamia. Surrounded by mountain ranges, it is bounded by the Kafilankuh Mountains to the east, Sahand to the south, Savalan and Bozkush to the northeast, and Lake Urmia to the west (Perfereç 2007: 8).

Most lakes in Iran are saline, with Lake Urmia being the largest and most prominent. Due to its high salinity, Lake Urmia is unable to sustain fish or aquatic life. Namak Lake is another significant saline lake, fed by short rivers from the Alborz Mountains (Ozey 2012: 142). Iran receives only one-third of the global average rainfall and less than half the average for Asia. While central regions receive minimal precipitation, the Alborz and Caspian coasts average 1000-1300 mm annually. Seasonal variation exists: winter rains fall in the south and southeast, autumn in the north, and spring in central and north-eastern areas. Summers are typically dry. Vegetation varies by region. The Alborz and Zagros Mountains support Mediterranean-type vegetation, including elm, maple, hackberry, and walnut in the Zagros range. Date palms are common in southern Iran, while steppe vegetation dominates the inte-

rior. The Persian Gulf coast experiences a tropical climate with Mediterranean-compatible vegetation (Bediî 1983: 109). Iran's terrain is predominantly mountainous and desert, with only about 20% arable land. Land use includes 40% pasture, 35% desert, 15% forest, and 10% farmland. Around 33% of the population is engaged in agriculture. Farming regions are scattered among interior valleys and coastal plains along the Caspian and Oman Seas. Main crops include cotton, tea, rice, wheat, poppy, tobacco, and dates. The Caspian region's alluvial soils support rice, cotton, tea, and citrus. Gilan and Mazandaran are prominent rice-producing areas, while barley and wheat are common in the west and northwest (Bediî 1991: 84).

While this study centres on north-western Iran and Zulmabad Fortress in particular, it is important to contextualize the region within the broader framework of Iran's diverse cultural and environmental landscapes. In eastern Iran, especially the south-eastern regions, irrigation-based agriculture played a crucial role in the emergence and development of early settlements. This area contributed significantly to the economic dynamics of prehistoric Iran, particularly during the third millennium BCE. The socio-economic expansion of Mesopotamia during this time led to a growing demand for luxury and utilitarian goods, prompting intensified mining

of semi-precious stones and the rise of a thriving lapidary industry in south-eastern Iran. Despite regional variations in resources, communities across this area developed along comparable lines, forming a culturally coherent zone during this period (Mortazavi 2005: 106).

Similarly, the western regions of Iran—particularly the forested highlands of the Zagros Mountains—have long supported pastoral economies. Nomadic pastoralism, centred on sheep and goat herding, has historically been a fundamental livelihood. During the Late Chalcolithic and Bronze Age, the Zagros region came under the influence of the Uruk expansion, which extended from southern Mesopotamia into north-eastern Syria and south-eastern Anatolia. Situated along key trade routes, the Zagros region witnessed the formation of commercial outposts such as Tell Hamoukar, Habuba Kabira, Jebel Aruda, and Arslantepe. These settlements, particularly in the Euphrates and Khabur basins, featured characteristic architectural elements—most notably tripartite buildings—and played a strategic role in mediating trade, facilitating interregional interactions, and contributing to the socio-political complexity and urbanisation of the broader Near East (Faraji Cheshme-Zangi *et al.* 2022).

Based on surface surveys, and in light of previous excavations and surface surveys conducted in the region, surface investigations were carried out at Zulmabad Castle. During these investigations, high-resolution photography, architectural drawing, ceramic drawing, and scaling methods were employed to examine the castle's functions during the Bronze and Iron Ages. The extent of the damage sustained by the castle was revealed through the scaling method, and particularly, aspects of the castle that shed light on Iron Age architecture (both military and civil) in the region were evaluated.

A Chronological Overview of Prehistoric and Early Historic Settlements in Iran

Scientific studies have confirmed the presence of Palaeolithic settlements in Iran. Since the 1990s, extensive research in Palaeolithic archaeology has identified multiple sites from the Lower, Middle, and Upper Palaeolithic periods. Previously, most of the known Lower and Middle Palaeolithic sites were concentrated in south-eastern Iran, particularly in the Baluchestan region, such as Ladiz (Vahdati Nasab *et al.* 2010). The Middle Palaeolithic period

also includes areas such as Kashan, Natanz, Isfahan, Semnan, and the Qazvin Plain. The Upper Palaeolithic in Iran dates back to around 30,000 BCE, especially in the Zagros region. In addition, Upper Palaeolithic evidence has been found in Malaverd near Kermanshah, around the Sialk region in the Iranian Central Plateau, and at Safid-Ab and Kaleh-Guseh (Azarnoush and Helwing 2012: 192).

Epipaleolithic data have been documented in rock shelters during rescue excavations related to the construction of the third dam, the most prominent site being Dah-Duzi Cave. Evidence of the transition from the Epipaleolithic to the Neolithic has been discovered at Komishan Cave near Behshahr in Mazandaran Province. Our understanding of the Neolithic period in Iran primarily stems from the Zagros region. During this time, Neolithic communities in Iran preferred to settle in the relatively flat valleys of the Zagros and tended to avoid arid valleys and mountainous areas. Major Neolithic settlement zones in Iran include the Khuzestan Plain, the Zagros region, northeastern Kopet Dag, and southern Iran (Voigt 1983: 50; Braidwood 1995: 94; Ceylan 2015: 35).

The beginning of the Chalcolithic period in the region is associated with the Halaf culture. Scientific studies show that this period began around the sixth millennium BCE and lasted until approximately 4800 BCE. After the decline of the Halaf culture due to external invasions, the Ubaid culture emerged, coinciding with the formation of the Sumerian civilisation (Braidwood 1990: 210; Childe 2010: 110). The Ubaid culture is characterized by widespread use of copper. In Iran, pottery from the Susa I phase shows notable similarities to Ubaid pottery in Mesopotamia. In western Iran, the influence of the Uruk culture is visible by the late fourth millennium BCE. Key areas where the Ubaid culture expanded into north-western Iran include Hajji Firuz, Yanik Tepe, Pisdeli Tepe, and Sivan Tepe. During the Chalcolithic, the region around Lake Urmia in Iran and the lands east of the Aras River in eastern Anatolia, extending towards Erzurum, appear to have formed a connected cultural zone (Forde Johnson 1974: 86; Mellaart 1975: 234; Hajizadeh 1995: 26; Helwing 2003: 80; Günaşdı 2013: 44; Ceylan 2015: 477).

The Bronze Age marked a turning point in the development of productive economies. A culture that emerged during the Early Bronze Age and had a significant influence on eastern Anatolia, the Caucasus,

Iran, and Levant is referred to by various names in scholarly literature, such as the Khirbet Kerak culture, the Kura-Araxes culture, the Transcaucasian Neolithic culture, the Early Bronze Age culture of eastern Anatolia, and the Yanik Tepe culture (Burney 1958: 165; Mellaart 1958: 9; Piotrovskii 1962: 7–27; Dzhaparidze 1964: 2; Chubinishvili 1964: 163–173; Krupnov 1964: 31–42; Dyson 1968: 14–16; Lang 1970: 71; Burney and Lang 1971: 43; Burney 1977: 118). The Yanik Tepe culture derives its name from a site located 31 km southwest of Tabriz, on the eastern shore of Lake Urmia. Excavations by Burney (1977) at Yanik Tepe revealed 40 settlement layers dating from the Neolithic period (around 6000 BCE) to the Sasanian period. Settlements from the Middle and Late Bronze Age — corresponding to the second and third phases of the Bronze Age — are also known across Iran. These periods are marked by distinct cultural shifts, especially in ceramic styles and burial traditions.

Although scholars differ on the exact chronology of the onset of the Iron Age in Iran, the prevailing view places the beginning of the Early Iron Age between 1400 and 1050 BCE (Danti 2013: 332). The Iron Age in Iran is divided into three phases: I, II, and III. The Iron Age chronology is based on stratigraphic sequences excavated at Hasanlu. Numerous Iron Age settlement sites have been identified in Iran, including Shahr-e Sokhta in the Meshgin Shahr region of Ardabil, Hasanlu, Buka, Kalaychi Tepe, the Blue Mosque (Masjed-e Kabud), Sorkh Dom Laki, Sangtarashan Tepe, Ziwiyeh Fortress, the Kultepe cemetery, Ozbaki Tepe, Mamurin Tepe, Shamshirgah, the Sarm cemetery, Sialk Tepe, Jamshidabad, Ghandab-e Karand, Gohar Tepe, and Bazgir (Biscione 2009: 127; Ceylan 2015a: 55) (see Figures. 2–4). However, in southeast Iran, the Iron Age remains largely unknown due to environmental conditions, resulting in a cultural gap in the region (Mortazavi 2006).

During the Iron Age, the Kingdom of Urartu emerged as a dominant power in northwestern Iran, establishing its capital at Tushpa and expanding through a network of fortresses and settlements as part of its strategic policy (Ceylan 2015a: 332). Spanning a vast territory across modern-day Turkey, Iran, Georgia, Armenia, and Iraq from the 9th to 6th centuries BCE, Urartu solidified its status as a formidable Iron Age state (Figure. 3). Founded by King Sarduri I (830–825/810 BCE), the kingdom

saw continued expansion under his successor Ishpuini (810–786 BCE), who ruled alongside his son Menua. Two significant Urartian inscriptions from their reigns, the Karagündüz inscription (Lehmann-Haupt 1928: no. 15, tab. 43, 44; Melikishvili 1954: no. 24; König 1955–1957: no. 7; Hulin 1958: 237, no. 3; Pecorella and Salvini 1984: 57–62; Payne 2006: 38; Salvini 2008: 137; Ceylan and Ceylan 2016: 11;) and the Kalatgah inscription (Dyson et al. 1969: 180; Friedrich 1969: 121; Muscarella 1969: 5; Kleiss 1971: 63; Kroll 1976: 92; Kleiss and Hauptmann 1976: no. 4; Salvini 1979: 170; Payne 2006: 35), have survived, documenting conquests and regional control.

These inscriptions detail Urartian campaigns, such as King Meshta's conquest of cities like Qua, Sharitu, Nigibi, and Barshua, with detailed records of plundered humans and animals, including horses, camels, donkeys, and livestock, reflecting the region's wealth (Payne 2006: 35). The Kalatgah Fortress, constructed south of the Urmiye Desert, and the capture of Hasanlu, a pivotal Urartian centre, underscore Menua's achievements (Dyson 1960: 121; Muscarella 1965: 41; Muscarella 1971b: 263; Hamlin 1976: 111; Dyson 1977: 548; Zimansky 1985: 40; Dyson and Voight 1989: 107; Dyson and Muscarella 1989: 1; Hajizadeh 1995: 120; Biscione 2012: 80; Ceylan 2015a: 195; Ceylan 2015b: 190). The region's mineral wealth, pine and oak forests, and strategic position along trade routes intensified conflicts between Urartians and Assyrians (Kroll 2011: 150; Ceylan and Ceylan 2016: 17). The Taštepe Inscription further records Menua's capture of Meshta and the Manna region, highlighting the enrichment of Urartu through spoils and taxes (Muscarella 1971a: 46; Nobari 1997: 189; Biscione 2012: 79).

Subsequent rulers, such as Argishti I, continued aggressive campaigns in Iran, targeting regions like Şimerhadım and the Sapaili, as noted in the Tavankale inscription (Ceylan 2015: 270). Sarduri II (764–735 BCE) expanded into Babylonia and Barmuata, with the Seqendel (Sığındıl) Fortress inscription detailing his conquests and wealth acquisition (Melikishvili 1954: 155; Melikishvili 1960a: 59; Salvini 1981: 69; Salvini 2006: 72; Payne 2006: 208). However, a significant defeat by Assyrian King Tiglath-Pileser in 743 BCE weakened Urartu (Luckenbill 1926: 769, 772, 801; Ceylan 1994: 215). Rusa I's campaigns, documented in inscrip-

tions like Mergeh Karvan, Mahmut Abad, and Movana (Salvini 1977: 125; Pecorella and Salvini 1984: 77; Diakonoff 1988: 133; Diakonoff 1989: 90, no. 4; Payne 2006: 271; Ceylan 2015a: 263), targeted the Manna region and Musasir, a religious centre under Assyrian-aligned King Urzana. Rusa's support for anti-Manna factions led to conflicts with Assyrian King Sargon, culminating in Rusa's defeat and suicide in the 714 BCE Uauash Battle (Luckenbill 1926: 178).

Under Argishti II (714–685 BCE), Urartu regained influence in northwestern Iran, as evidenced by the Razlık and Kırkızlar inscriptions (Melikishvili 1954: 445; Benedict 1965: 34–42, no. 2; Payne 2006: 27). Rusa II (684–645 BCE) allied with the Scythians, resettling them in the Manna region to counter Assyria (Diakonoff 1963: 12; Erzen 1992: 38; Payne 2006: 299). Key fortresses like *Bastam*, *Danalu*, *Sangar*, *Kale Siyah*, and *Kız Kalesi* were built to strengthen Urartian control (Nobari 1997: 124; Kroll 2011: 163; Ceylan 2015: 177). The Scythians, initially Urartian allies, later joined the Medes and Babylonians to destroy Nineveh in 612

BCE, ending Assyrian dominance (Olmstead *et al.* 1923: 627; Ceylan and Ceylan 2016: 23). Urartian control persisted under Sarduri III (645–635 BCE), but the destruction of Bastam by the Medes in 590 BCE marked the decline of Urartian influence (Kleiss 1970: 52; Pigott 1980: 149; Biscione 2012: 80; Ceylan and Ceylan 2016: 24).

Urartian fortresses, such as Livar, İsmail Ağa, and Kalatgah, characterized by stone foundations, adobe walls, and rectangular towers, reflect a distinctive architectural style (Kleiss and Hauptmann 1976: 35–36; Ceylan 2008, 201; Ceylan 2015a: 200–201; Özgül 2016: 137–157; Günaşdı 2016: 113–135). These strongholds, visually interconnected, controlled the region's fertile plains and trade routes (Figures. 2 - 4). However, limited excavations restrict knowledge of 7th-century settlements. By the mid-7th century, most Urartian fortresses were burnt or abandoned, and Urartu faded from historical records, with the region transitioning to Median and later Achaemenid control (Fuchs 2012: 144–145; Kroll 2020: 11).

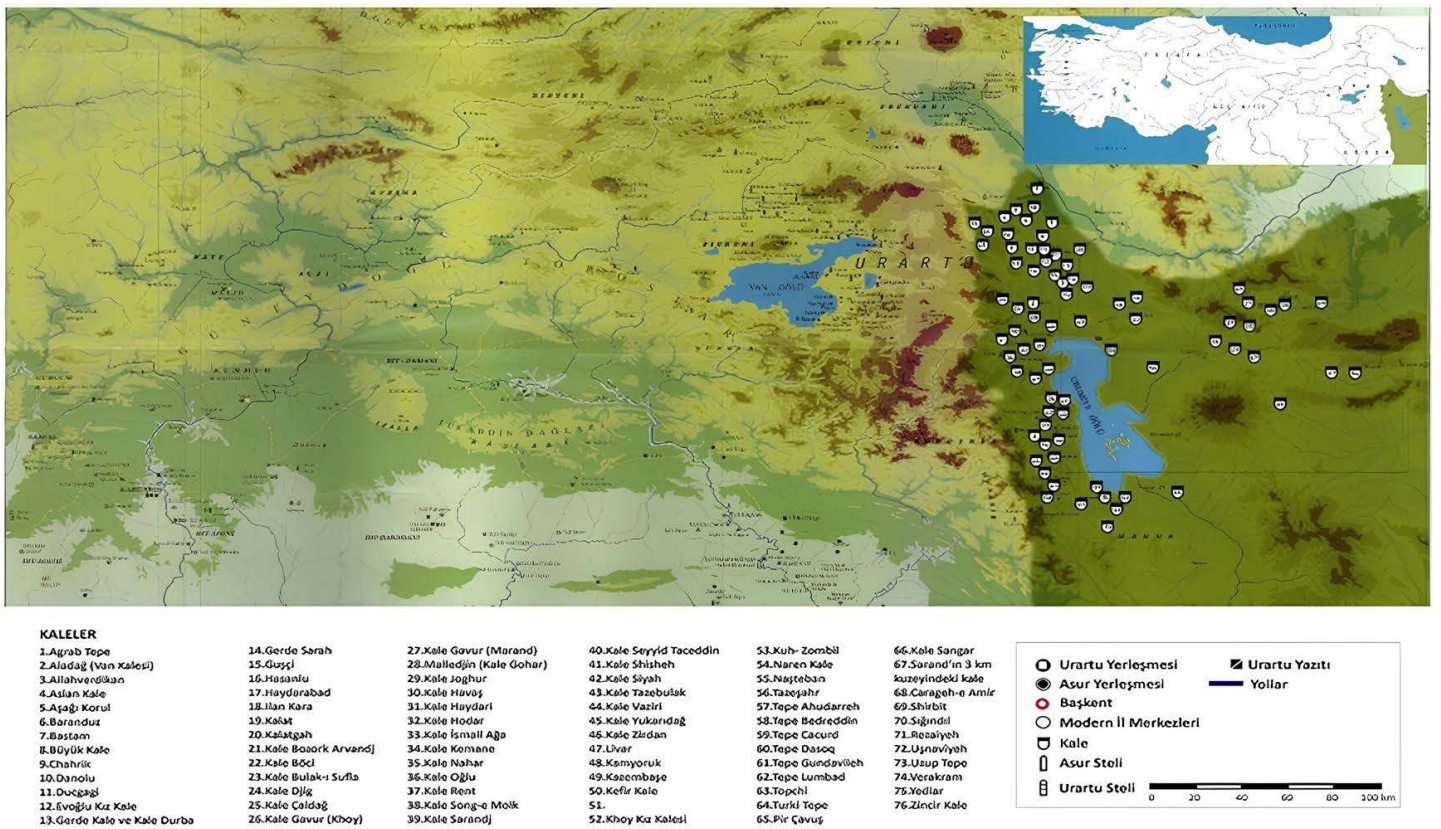


Figure 2: Fortresses Found in Northwestern Iran (After: Ceylan 2015a: 333)

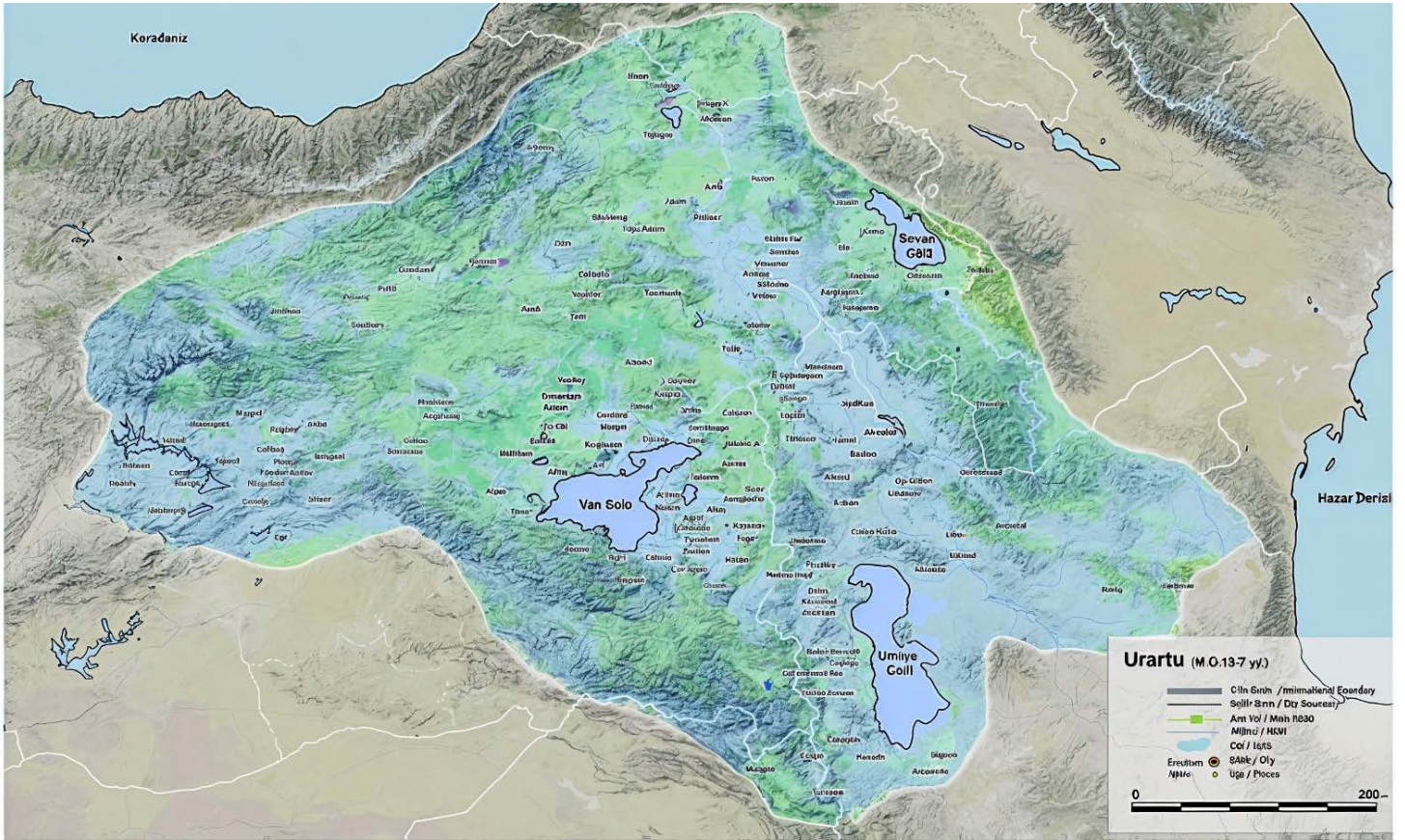
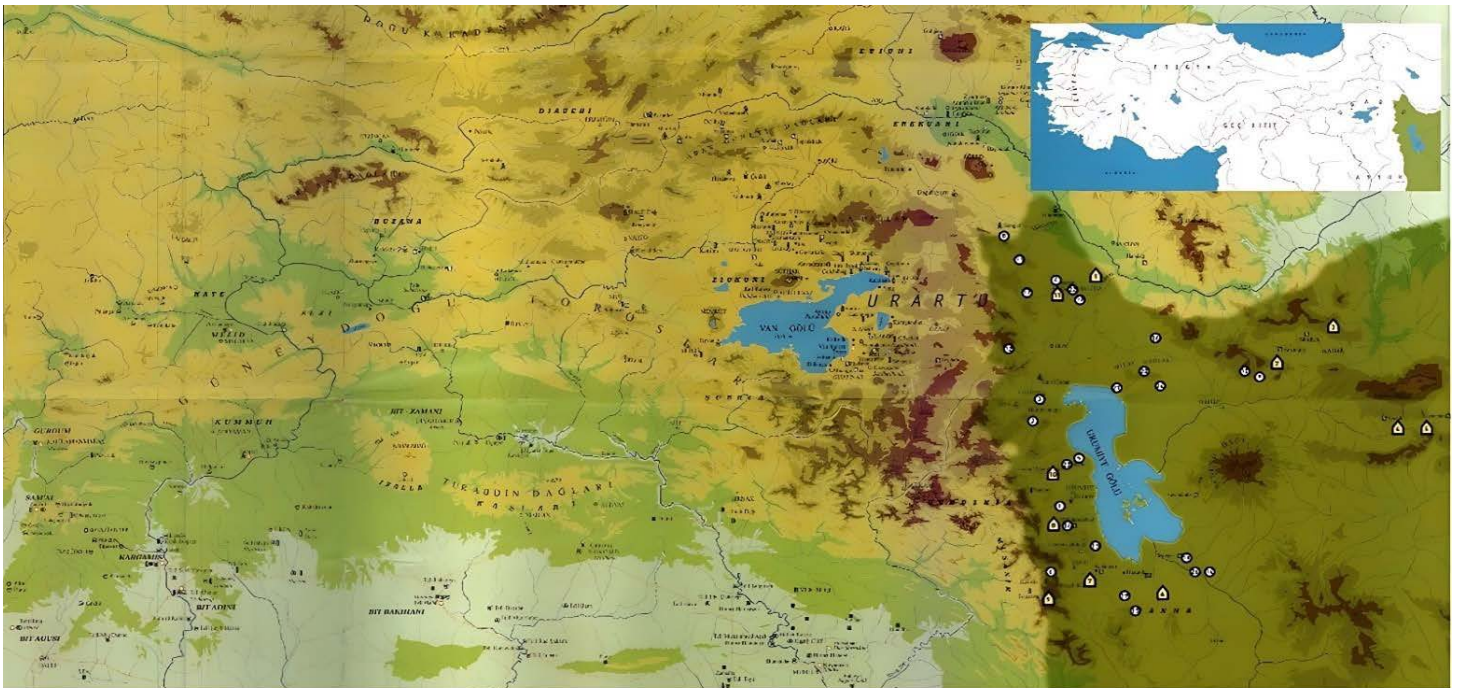


Figure 3: Urartu Expansion Map (After: Ceylan 2015a: 332)



- YERLEŞMELER**
- 1- Aın-e Rum'un 6 km Kuzeyinde Yer alan Bir Yerleşmedir
 - 2- Bardiljan (Kroll 38)
 - 3- Haftavan Tepe
 - 4- Hidir Ali
 - 5- Kahramanlı
 - 6- Kaniki Zar
 - 7- Kara Kilise
 - 8- Kışmış Tepe
 - 9- Kuh-e Zamburan
 - 10- Kız Chadu
 - 11- Kharab Aghol
 - 12- Kotur Tepe
 - 13- ...

- 14- Leilan
- 15- Mahabatın Güneyindeki Tepe
- 16- Molledjin
- 17- Sunat
- 18- Şahtepe
- 19- Tepe Kara Ziaeddin
- 20- Tepe Parpar
- 21- Tasudj Tepe
- 22- Tepe Kasyan
- 23- Tepe Sarandil
- 24- Marond Tepe
- 25- Ravaz

- YAZITLAR**
- 1- Kalatgah
 - 2- Sigindil Yazıtı
 - 3- Shisheh
 - 4- Nasyeban
 - 5- Razlık
 - 6- Javanika Yazıtı
 - 7- Taştepe
 - 8- Meigeli Korsu Yazıtı
 - 9- Kelçin Yazıtı
 - 10- Mahmud Abad Yazıtı
 - 11- Movonia Yazıtı

Yerleşmeler

- Yazıtlar
- Asur Yerleşmesi
- ⊕ Başkent
- Modern İl Merkezleri
- ▭ Asur Steli
- ▭ Urartu Steli

Urartu Yazıtı

Yollar

0 20 40 60 80 100 km

Figure 4: Settlements and Inscriptions Found in Northwestern Iran (After: Ceylan 2015: 660)

Zulmabad Fortress

In the course of archaeological surface surveys in northwestern Iran, several Urartian fortresses—such as İsmail Fortress, Sygyndyl (*Sığındıl*) Fortress, and Zulmabad Fortress—were examined. In addition, archaeological sites contributing to the region's ancient chronology, including Hasanlu, were also assessed. Zulmabad Fortress is situated approximately 600 metres northeast of Zulmabad (Savari) village (see Figure 5a–b). The site lies 44.7 km from the city of Ahar and 47 km from Tabriz, Iran's second-largest city.



Figure. 5A–B. General views of Zulmabad Fortress from different angles (Photo by A. Ceylan 2013).

The fortress is located at an elevation of 2,380 metres above sea level, rising 186 metres above the nearby village. It is positioned at coordinates 38°30'13.741" N, 46°23'18.073" E. Constructed atop a steep hill, the structure exhibits features characteristic of Urartian architecture. To the south, the Eher River partially irrigates the surrounding landscape. Pirali Stream (northwest), Qashbesh Stream (west), and Fatima Stream (southwest) converge near the village and flow eastward. The site is encircled by multiple natural springs, providing an ample supply of drinking water—a key factor in the strategic siting of many ancient fortifications. Unlike many other sites in the region, no water shortage appears to have affected Zulmabad Fortress. Adjacent to the fortified hill stands a barren, vegetation-free elevation. Due to the absence of ceramic sherds or architectural traces, no functional interpretation can yet be proposed for this peak. Noteworthy agricultural lands are located north of the site, along the

Toli Siyah (Toli Qiyah) Stream. Orchards and vineyards thrive in the lower elevations, while grains such as wheat and barley are cultivated farther uphill. The settlement of Verzigan is located 29.9 km east of Zulmabad. Due to its high-altitude location, the fortress commands a strategic view over the landscape. The structure is oriented northeast–southwest and measures 74.8 metres in length. Its width varies: 33.5 metres at the widest point (southeast–northwest) and narrowing to 19.7 metres in the northeast. The fortress features a northwest-facing rectangular entrance gate, 2.5 metres wide and 6.5

metres deep, flanked by walls measuring 4.8 metres in thickness. A partially preserved structure west of the gate measures 14.55 metres by 10.88 metres. While damage has caused some variation in wall thickness, most ramparts measure between 2.7 and 2.8 metres. The fortification system includes curtain walls and bastions. Inside the fortress, eight rooms or compartments have been identified, generally square or circular in shape, measuring approximately 8×10 and 6×8 metres. These rooms, constructed with walls averaging 30–40 cm in thickness, are yet to be functionally identified. These drawings illustrate the structural variability and architectural planning of the fortress walls, with emphasis on bastion placement, wall thickness, and internal segmentation. The use of cyclopean masonry, including the irregularity in stone dimensions and construction techniques, is evident across all sections. (see Figures 6, 7, 8).

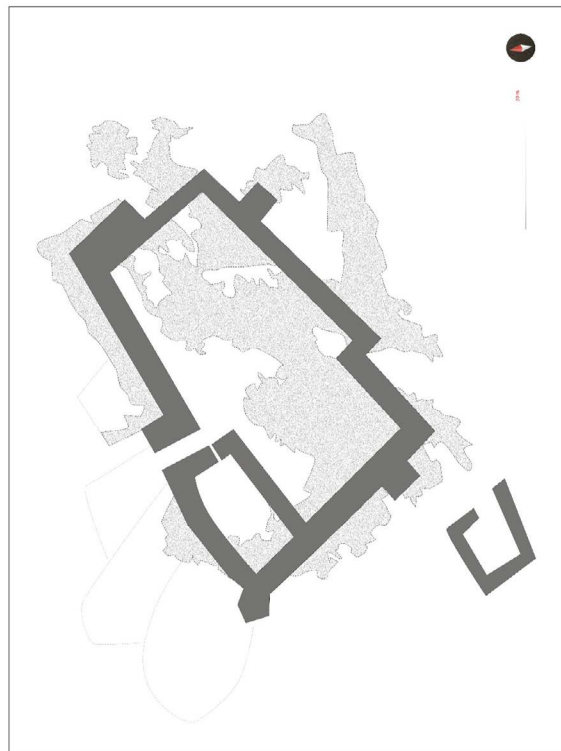


Figure.6: Ground plan of Zulmabad Fortress
(Photos by A Ceylan, 2013).

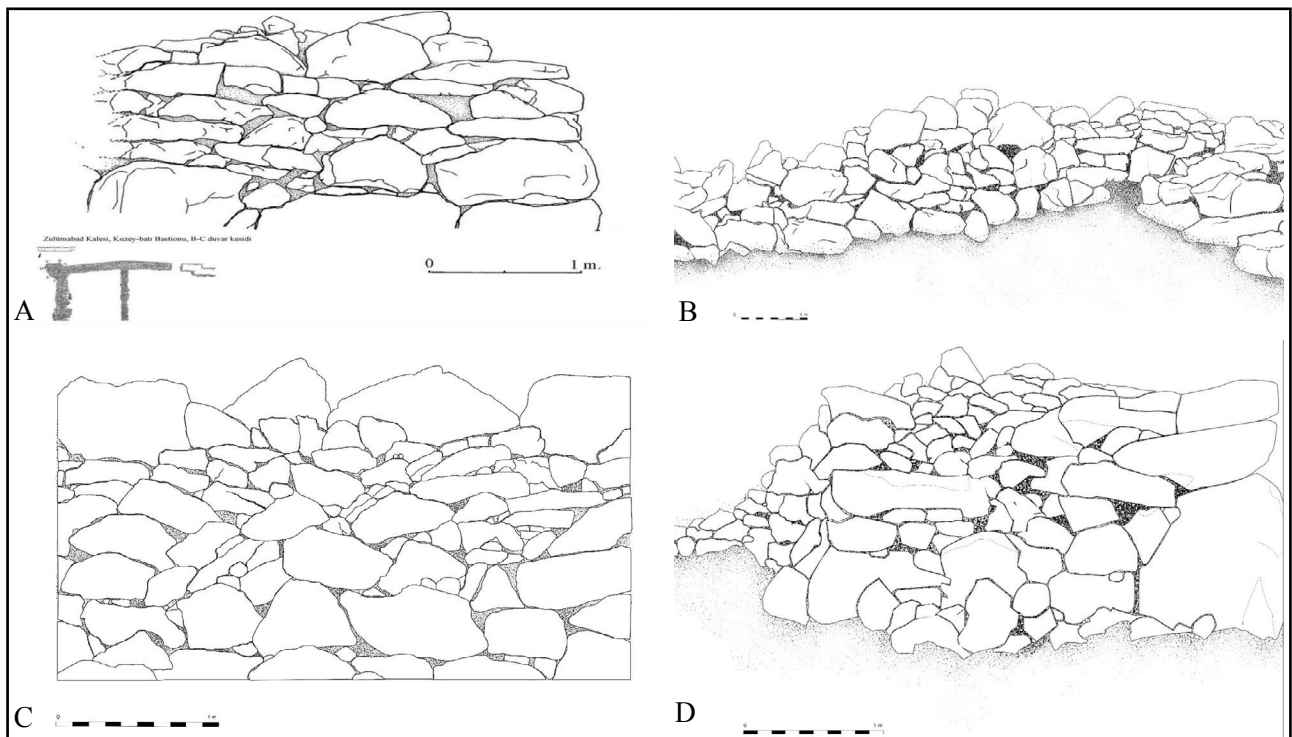


Figure. 7: A-D: Different views of the architectural drawings of the defensive ramparts of Zulmabad Fortress (Photo by A Ceylan, 2013).



Figure 8: Architectural Structures Inside Zulmabad Fortress (Photos by A. Ceylan 2013).

A satellite view offers additional insights into the fortress layout (Figure. 9), while photographs and line drawings provide detail on wall construction techniques (Figures 10 a-d). Although the cause of the fortress's destruction remains unknown, some curtain wall sections remain standing. Surviving walls have been measured between 2.3 and 3.0 metres in height, with some segments consisting of

8 stone rows and others up to 12. Stones used in construction vary in size, with larger blocks measuring up to 160×130 – 140 cm, and the smallest around 10×20 cm (Figures.7 c-d; 10 a-b). Rubble and smaller stones were used as infill between larger blocks. The curtain walls were constructed in the cyclopean technique, with roughly dressed outer faces and natural inner surfaces.

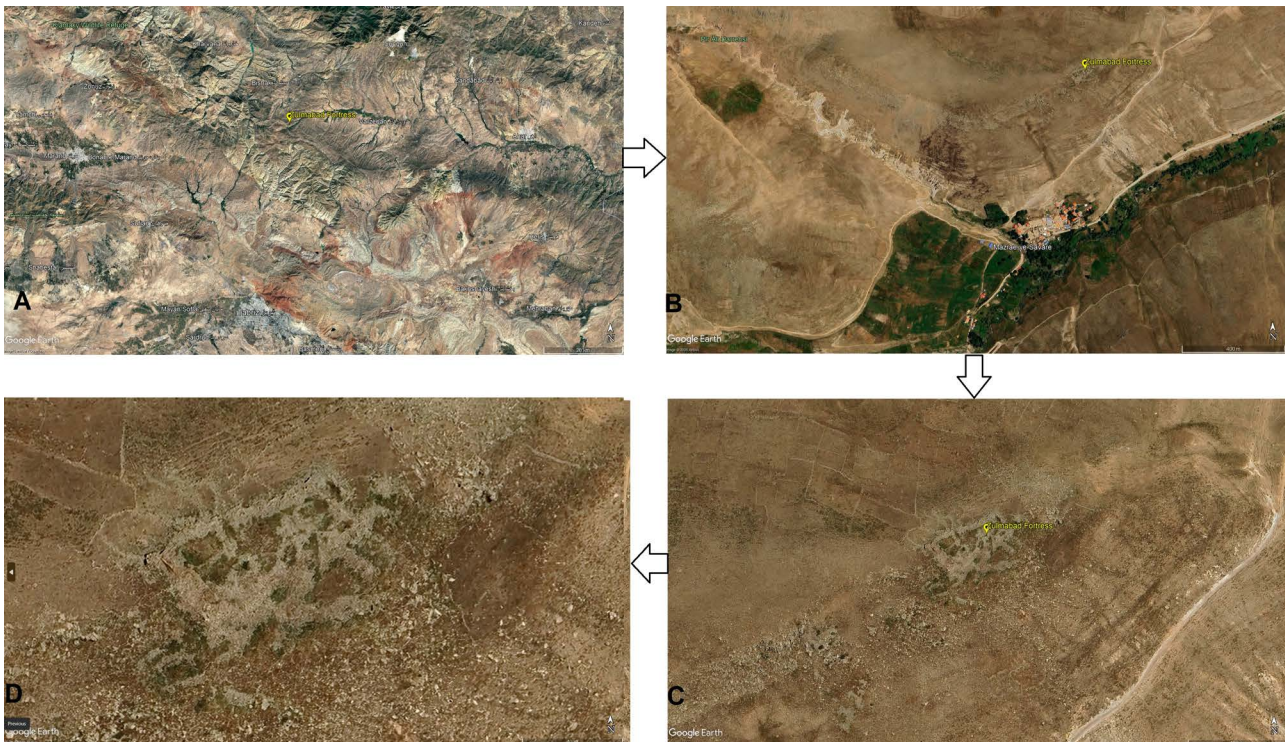


Figure 9: Satellite images from Google Earth showing the archaeological site of Zulmabad Fortress (labeled in yellow) in northwestern Iran. (A) Wide view of the region including Zulmabad Fortress, approximately 44.7 km from Ahar and 47 km from Tabriz. (B) Closer view highlighting Zulmabad Fortress near Zulmabad (Savari) village. (C) Detailed view of Zulmabad Fortress ruins. (D) Comparative wide view of the surrounding archaeological landscape (After: Google earth 20/05/2025)



Figure 10: Different views of photographs showcasing wall construction techniques (a-d) (Photo by A. Ceylan 2013).

A square-shaped architectural feature measuring 16.70×13.20 metres has been recorded at the south-western end of the site (Figure. 11), though its function remains unidentified. Additional segmented structures located in the western part of the site—divided into four sections—may have functioned as reinforcement for the entrance gate or had another architectural role. The region's active fault lines suggest that seismic activity may have contributed

to the collapse of upper sections and stone displacements, visible along the terraces facing the fortress.

Locations of ceramic finds are documented within the fortress. Images of the ceramics, including Early Bronze Age, Middle Bronze Age, and Early Iron Age wares, along with select Urartian palace-type ceramics, often referred to as "Bianili," are presented in Figure 12. a-d.



Figure 11: Zulmabad Fortress Fortification Walls (Photo by A. Ceylan 2013).

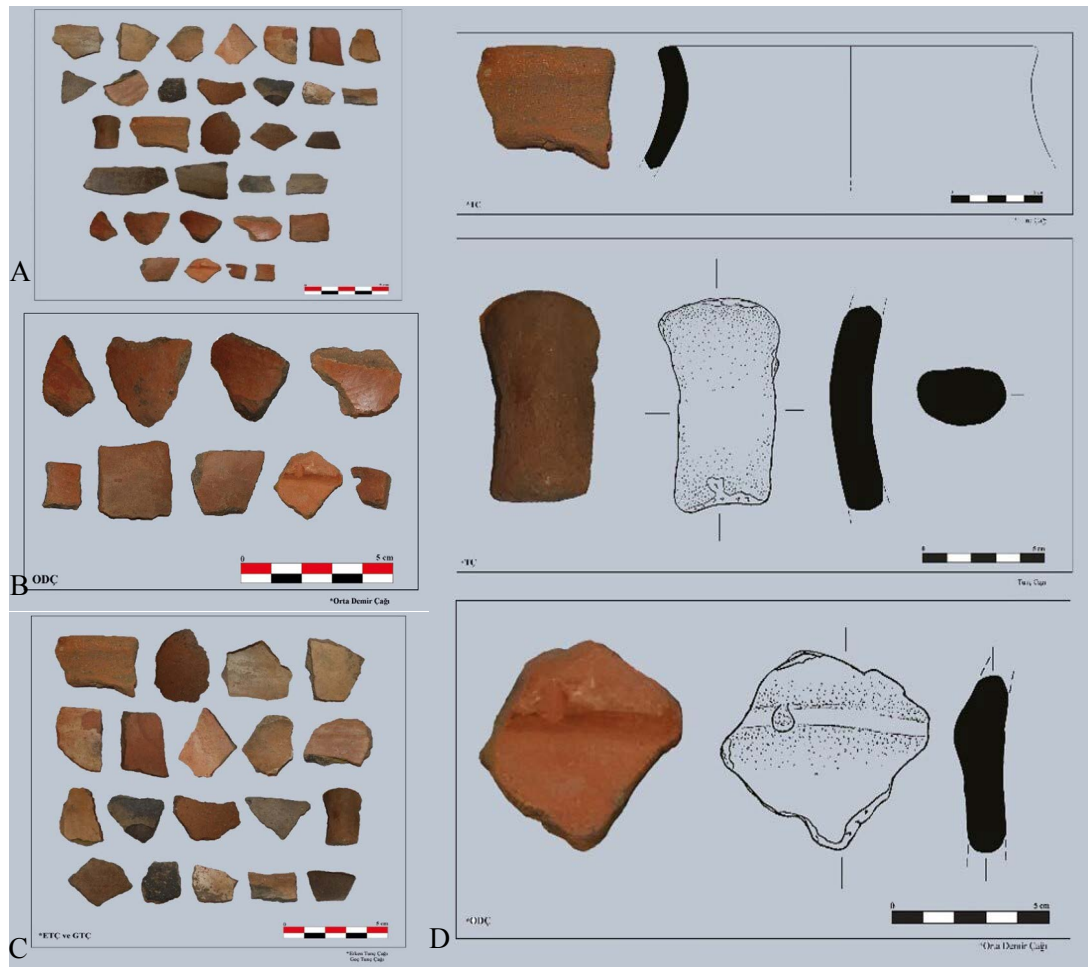


Figure 12: A-D: Urartian and Bronze Age ceramic fragments recovered from interior spaces (Photo by A. Ceylan 2013).

Discussion

Investigations at Zulmabad Fortress highlight its significance as a prominent stronghold in the ancient landscape, strategically positioned to control key regional routes and resources. The architecture, characterized by Cyclopean masonry techniques, robust defensive walls, and a strategic layout, provides compelling evidence for its construction during the Late Bronze Age or Early Iron Age. Massive, roughly hewn stones used in the Cyclopean style, observed in the fortress's ramparts (Figure 7a-d), indicate advanced engineering capabilities and suggest a need for defence against external threats during this period. Ceramic assemblages recovered from within the fortress's internal spaces further support this chronology, encompassing Early Bronze Age, Middle Bronze Age, and Early Iron Age wares, alongside distinctive Urartian palace-type ceramics, often referred to as "Bianili". Locations of these ceramic finds are documented within the fortress, with detailed photographs and line drawings illustrating their forms. (Figures 12. a-d).

Field surveys conducted in the surrounding area, combined with prior scholarly investigations, have identified a dense network of Bronze and Iron Age fortresses and settlements around Zulmabad Fortress, reinforcing its regional importance. Sığındıl Fortress (also referred to as Segendel in some sources) was carefully examined during our surface surveys, and an Urartian inscription found in situ offered valuable insights into the Urartian fortress network and architectural style (Figure 13). Among these, Sığındıl Fortress is particularly significant due to its proximity and the discovery of an Urartian inscription attributed to King Sarduri II (764–734 BCE), describing a military campaign in the land of Puluadi, capturing 21 fortresses and 44 cities, including the formidable city of Libluini, often associated with Sığındıl. This inscription, examined during surface surveys, provides critical insights into Urartian architectural and political influence in the region, suggesting that Zulmabad Fortress was integrated into a broader defensive and administrative network during the Middle Iron Age. Architec-

tural parallels with Sığındıl, such as fortified walls and strategic hilltop locations, further support this interpretation.

The ceramic evidence, combined with architectural features, indicates that Zulmabad Fortress served as a hub for cultural and economic exchange. The variety of ceramic wares, including Urartian "Bianili" types (Figure.14), suggests interactions with both local and distant communities, potentially linked to trade networks extending from the Zagros to northern Mesopotamia. The strategic placement of Zulmabad and its neighboring fortresses, many exhibiting similar defensive designs, supports the hypothesis that these sites were utilized across the Early and Middle Iron Ages to secure territorial control and protect against regional conflicts. Continued analysis of the ceramics and their spatial distribution within the fortress is expected to refine the understanding of its occupational history and cultural connections.



Figure. 13: Segendel Fortress and Its Inscription
(Photo by A. Ceylan 2013)



Figure. 14: A collection of Urartian "Bianili" ceramic types discovered at Zulmabad Fortress (Photo by A. Ceylan 2013)

Conclusion

Based on available evidence, it is likely that Zulmabad Fortress was established during the Late Bronze Age and remained in use through the Early and Middle Iron Ages, with its prominence peaking during the Urartian period (Middle Iron Age). The fortress's Cyclopean masonry, ceramic assemblages, and integration into a regional network of strongholds, such as Sığındıl Fortress, underscore its strategic and cultural significance. The Urartian inscription at Sığındıl, referencing King Sarduri II's campaigns, suggests that Zulmabad may have functioned as a secondary stronghold or administrative centre within the Urartian defensive system. However, no evidence clarifies the fortress's fate after the Urartian withdrawal from the region. Architectural features or artefacts from the Middle Ages have not been identified, indicating that Zulmabad likely lost its significance by this period, possibly due to destruction, abandonment, or shifting regional power dynamics. (Melikishvili 1960b: 29 vd.; Ceylan, 2015a: 259; Ceylan and Ceylan 2016: 15).

The circumstances of the fortress's destruction—whether by fire, conflict, or natural causes such as seismic activity linked to the region's active fault lines—remain undetermined. Planned excavations at Zulmabad Fortress are expected to clarify the causes of its decline and confirm its occupational phases. The most pressing threat to the fortress is posed by unauthorized excavations, which endanger the site's integrity and the preservation of its archaeological record. Immediate protective measures, including site monitoring and legal enforcement, are deemed essential to safeguard Zulmabad and its neighbouring fortresses. Future investigations, combining systematic excavations and advanced analytical techniques, are anticipated to further illuminate the fortress's role in the Bronze and Iron Age socio-political landscape and its connections to broader Urartian and regional networks.

Acknowledgement

We express our sincere gratitude to the Cultural Directorates of Tabriz and Ardabil, as well as the Museum Directorates of these provinces, for their invaluable support and cooperation during our research in Iran. We are also deeply thankful to Yashar Azartash, Samad Karrari, and Hashem Ardabil for their generous assistance and contributions to this study.

We would also like to extend our appreciation to the anonymous reviewers for their insightful comments and constructive suggestions, which greatly improved the quality of this paper.

References

- Atalay, İ. 2011. *World Geography*. Istanbul: Inkilap Bookstore.
- Azarnoush, M & B. Helwing. 2012. Recent Archaeological Research in Iran Prehistory to Iron Age, *Archaeologische Mitteilungen aus Iran und Turan* (37):190-235. <https://api.semanticscholar.org/CorpusID:190253374>
- Bedii, R. 1983. *Geography Mufessel-i Iran I-II*, [In Persian]. Tehran: Eghbal.
- Bedii, R. 1991. *Geography Mufessel-i Iran III*, [In Persian]. Tehran: Eghbal.
- Benedict, W. C. 1965. Two Urartian Inscriptions from Azerbaijan, *Journal of Cuneiform Studies* 19(2): 35-40. <https://doi.org/10.2307/1359603>
- Biscione, R. 2009. "The Distribution Op Pre- And Protohistoric Hillports In Iran" *SMEA* 51(1): 123-143
- Biscione, R. 2012. Urartian Fortifications in Iran: An Attempt at a Hierarchical Classification, In S. Kroll; C. Gruber; U. Hellwag; M. Roaf & P. Zimansky, (eds.), *The Proceedings of the Symposium held in Munich Bianili-Urartu Symposium2007*. Louvain : Peeters, 77-88.
- Braidwood, R. J. 1990. *The Man Before History*. Istanbul: Archeology and Art Publications.
- Braidwood, R. J. 1995. *The Man Before History*. Istanbul: Archeology and Art Publications.
- Burney, C. A. 1958. Eastern Anatolia in the Chalcolithic and Early Bronze Age, *Anatolian Studies* 8(1): 157-209. <https://doi.org/10.2307/3642418>
- Burney, C. A & D. M. Lang. 1971. *The People of the Hill. Ancient Ararat and Caucasus*. Oxford: Phaidon.
- Burney, C. A. 1977. *From Village to Empire: An Introduction Near Eastern Archaeology*. Oxford: Phaidon.
- Ceylan, A. 1994. *Antik Anadolu'da (II. ve I. Binyıl) Devletler Arası İlişkiler ve Antlaşmalar* [Interstate Relations and Treaties in Ancient Anatolia (II. and I. Millennium)], Unpublished Ph.D. Thesis. Erzurum: Atatürk University Institute of Social Sciences.
- Ceylan, A. 2008. *Doğu Anadolu Araştırmaları Erzurum-Erzincan-Kars-Iğdir 1998 - 2008* , [Eastern Anatolian Studies Erzurum-Erzincan-Kars-Iğdir (1998-2008)]. Erzurum: Atatürk University Publications.
- Ceylan, A. 2015. *Eastern Anatolian Studies Erzurum-Erzincan-Kars-Iğdir(2008-2014)*. Erzurum: Atatürk University Publications.
- Ceylan, N. 2015a. *Kuzeybatı İran'da Urartu yerleşmeleri*, [Urartian Settlements in North-western Iran], Unpublished Ph.D. Thesis, Kars: Caucasus University Institute of Social Sciences.
- Ceylan, N. 2015b. Kuzeybatı İran'da Önemli Bir Yerleşme: Hasanlu, [An Important Settlement in Northwest Iran: Hasanlu], *Trakya University Journal of the Faculty of Letters* 5(1):189-221. <https://doi.org/10.5281/zenodo.14838774>
- Ceylan, N & A. Ceylan. 2016. İran Coğrafyasında Urartular, [Urartians in Iranian Geography], *Kafdagı* (1)1: 11-32
- Ceylan, N. 2023. *Antik Çağda İran Tarihi*, [History of Iran in the Ancient Age]. Istanbul: Akçağ Publications.
- Childe. V. G. 2010. *Prehistory of the East*. Ankara: Turkish Historical Society.
- Chubinishvili, T.N. 1964. *The Interconnections between the Caucasian "Kura-Araxes" and the Near East Cultures in the Third Millennium B.C*. Moscow: International Congress of Anthropological and Ethnological Sciences.
- Danti, M. D. 2013. *Ancient Iran The Late Bronze and Early Iran Age in Northwestern Iran*. London: Oxford Universtiy Press.
- Diakonoff, I. M. 1963. *Urartian letters and documents*, [In Russian]. Leningrad: Izd-Vo Akad.
- Diakonoff, I. M. 1988. On Some Directions in Urartian Language and New Urartian Texts, [In Russian], *Drevnij Vostok* 5(1):133-180.
- Diakonoff, I. M. 1989. On Some New Trends in Urartu Philology and Some New Urartian Texts, *Archäologischer Mitteilungen aus Iran (AMI)* 22 (1): 77-102.

- Dyson, R. H. Jr. 1960. Hasanlu and Early Iran, *Archaeology* 13(2): 118-129. <http://www.jstor.org/stable/41666821>
- Dyson, R. H. Jr. 1968. The Archaeological Evidence of the Second Millenium B.C. on the Persian Plateau, In I. E. S. Edwards; C. J. Gadd; N. G. L. Hammond & E. Sollberger, (eds.), *The Cambridge Ancient History (chapter)*. Cambridge: Cambridge University Press, 686–715. <https://doi.org/10.1017/chol9780521082303.019>
- Dyson, R. H. Jr; O. W. Muscarella & M.M. Voigt. 1969. Hasanlu Project 1968: Hajji Firuz, Dinkha Tepe, Se Girdan, Qalatgah. *Iran* 7(1):1-181.
- Dyson, R. H. Jr. 1977. The Architecture of Hasanlu, periods I to V, *AJA* 81(4): 548-552. <https://doi.org/10.2307/503285>
- Dyson, R. H & M. M Voight. 1989. *East of Assyria: The Highland Settlement of Hasanlu*. Michigan : University Museum.
- Dyson, R. H. Jr. & O. W. Muscarella. 1989. Constructing the Chronology and Historical Implications of Hasanlu IV. *Iran* (27): 1-27. <https://doi.org/10.2307/4299813>
- Dzhaparidze, O.M. 1964. *The Culture of Early Agricultural Tribes in the Territory of Georgia. Volume.VII*. Moscow: International Congress of Antropological and Ethnological Sciences.
- Erzen, A. 1992. *Eastern Anatolia and the Urartians, Turkish Historical Society*. Ankara: Türk Tarih Kurumu Basımevi(TTK).
- Faraji Cheshme-Zangi, H;M.Mortazavi & F. Mo sapour-Negari. 2022. “Evaluation of New Diffusion in Architecture of Uruk Sites”,[In Persian], *Pazhoheshha-ye Bastan Shenasi Iran* 12(34): 61-86. <https://doi.org/10.22084/nb.2021.23963.2323>
- Forde, J & L. Johnston 1974. *History from the Earth: An Introduction to Archaeology*. London : Phaidon Press.
- Friedrich, J. 1969. Urartäische Inschriften aus Iran, [Urartian Inscriptions from Iran], *Archäologischer Mitteilungen aus Iran (AMI)* 2(1): 121-122.
- Fuchs, A. 2012. Urartu in der Zeit, [Urartu in the Time], In S. Kroll; C. Gruber; U. Hellwag; M. Roaf & P. Zimansky, (eds.), *Biainili – Urartu. The Proceedings of the Symposium held in Munich 2007*. Munich: Peeters, 135-161.
- Günasdı, Y. 2013. *Historical and Archaeological Data in Karasu Basin*, Unpublished Ph.D. Thesis, Erzurum: Atatürk University Institute of Social Sciences.
- Günasdı, Y. 2016. Geçitler Ülkesinde Önemli Bir Urartu Kalesi: Avnik, [An Important Urartian Fortress in the Land of Passes: Avnik], *TÜ-BA-AR Journal of Archaeology of the Turkish Academy of Sciences* 19(1): 113-135.
- Hajizadeh, K. 1995. *A Study of Urartian Settlement in The N.W. Iran (700-900 B.C)*, [In Persian], Unpublished Ph.D. Thesis. Tahran: Tarbiat Modares University.
- Hamlin, C. 1976. Dalma Tepe, *Iran* 13(1): 111-127. <https://doi.org/10.2307/4300529>- <https://www.jstor.org/stable/4300529>
- Helwing, B. 2003. İran’da İlk Kentler [The First Cities in Iran], *ArkeoAtlas* 2(1): 80-89.
- Herodotos,(n.n). 1983. *Herodot Tarihi*, [History of Herodotus]. Istanbul: Remzi Bookstore.
- Hole, F. 1987. *The Archaeology of Western Iran Settlement and Society from Prehistory to the Islamic Conquest*?. Washington, D.C. : Smithsonian Institution Press.
- Hulin, P. 1958. Urartian Stones in the Van Museum, *Anatolian Studies* 8(1): 237. <https://doi.org/10.2307/3642422>
- Hejabari Nobari, A. R. 1997. *L’architecture Militaire Urartienne de Téhéran*, [The Urartian Mititary Architecture of Tehran], Unpublished Ph.D. Thesis.Tehran: Tarbiat Modares University.
- Kleiss, W. 1970. Bericht über Erkundungsfahrten in Nordwest-Iran im Jahre 1969, [Report on Exploratory Trips in Northwest Iran in 1969], *Archäologischer Mitteilungen aus Iran (AMI)* 3 (1): 52.

- Kleiss, W. 1971. Bericht Über Erkundungsfahrten in Iran im Jahre 1970, [Report on Exploratory Trips in Iran in 1970], *Archäologischer Mitteilungen aus Iran (AMI)* 4(1): 51-111.
- Kleiss, W & H. Hauptmann. 1976. *Topographische Karte Von Urartu. Archäologische Mitteilungen Aus Iran Ergänzungsband 3*, [Topographic Map of Urartu. Archaeological Reports from Iran Supplementary Volume 3]. Berlin: Dietrich Reimer Verlag.
- König, F.W. 1955. *Handbuch der Chaldäischen Inschriften, Archiv für Orientalische Forschung Hrsg. von Ernst Weidner I*, [Handbook of Chaldean Inscriptions, Archive for Oriental Research Edited by Ernst Weidner I]. Graz: Im Selbstverlag des Herausgebers.
- König, F.W. 1957. *Handbuch der Chaldäischen Inschriften, Archiv für Orientalische Forschung Hrsg. von Ernst Weidner II*, [Handbook of Chaldean Inscriptions, Archive for Oriental Research Edited by Ernst Weidner II]. Graz: Im Selbstverlag des Herausgebers.
- Kroll, S. 1976. *Keramik Urartäischer Festungen in Iran, ein Beitrag zur Expansion Urartus in Iranisch- Azarbaidjan*, [Pottery of Urartian Fortresses in Iran, a Contribution to the Expansion of Urartu in Iranian-Azerbaijan]. Berlin: Dietrich Reimer Verlag.
- Kroll, S. 2011. Urartian Cities in Iran, In K. Koroglu & E. Konyar, (eds.), *Transformation in The East*. Istanbul: Yapı Kredi Publications, 150-169.
- Kroll, S. 2020. The Kingdom of Urartu in North-Western Iran (Ninth–Seventh Century B.C.E). In K. A. Niknami & A. Hozhabi, (eds), *Archaeology of Iran in the Historical Period*. Cham : Springer, 11-22. https://doi.org/10.1007/978-3-030-41776-5_2
- Krupnov, F. I. 1964. The Most Archaic Culture of the Caucasus and the Caucasian Community, *Soviet Anthropology and Archaeology* 3(1): 31-42. <https://doi.org/10.2753/AAE1061-1959030331>
- Lang, D. M. 1970. *Armenia*. London: Routledge. <https://doi.org/10.4324/9781003251033>
- Lehmann-Haupt, C. F. 1928. *Corpus Inscriptionum Chaldicarum (CICH)*. Berlin and Leipzig: Walter de Gruyter and Co.
- Levine, L. D. 1974. *Geographical Studies in the Neo-Assyrian Zagros*. Toronto: Royal Ontario Museum.
- Luckenbill, D. D. 1926. *Ancient Records of Assyria and Babylonia I-II*. Chicago: Greenwood Press.
- Melikishvili, G.A. 1954. Urartian Cuneiform Inscriptions, [In Russian], *Vestnik Drevnej Istorii* 1(1): 177-260.
- Melikishvili, G. A. 1960a. *Urartian Cuneiform Inscriptions*, [In Russian]. Moscow: Academy of Sciences of USSR.
- Melikishvili, G. A. 1960b. “Eine Neue Urartäische In Schrift Aus den Iranischen Azerbaid-Schen”. [A New Urartian Inscription Iranian Azerbaijan], *Oriental Studies* 73(3): 29-37.
- Mellaart, J. 1975. *The Neolithic of the Near East*. London: Scribner.
- Mellaart, J. 1958. The End of the Early Bronze Age in Anatolia and Aegean, *American Journal of Archaeology (AJA)* 62(1): 9-33. <https://doi.org/10.2307/500459>
- Mortazavi, M. 2005. “Economy, Environment and the Beginnings of Civilisation in Southeastern Iran”. *Near Eastern Archaeology* 68(3): 106-111.
- Mortazavi, M. 2007. “Mind the Gap: Continuity and Change in Iranian Sistan Archaeology”. *Near Eastern Archaeology* 70(2): 9-10.
- Muscarella, O. W. 1965. Lion Bowls from Hasanlu, *Archaeology* 18(1): 41-46. <https://www.jstor.org/stable/41667490>
- Muscarella, O. W. 1969. The Tumuli at Sé Girdan: A preliminary Report, *Metropolitan Museum Journal (MMAJ)* 2(1): 5-25. <https://doi.org/10.2307/1512584>
- Muscarella, O. W. 1971a. Qalatgah: An Urartian Site in Northwestern Iran, *Expedition* 13(3/4): 44-50.

- Muscarella, O. W. 1971b. Hasanlu in the Ninth Century B.C. and Its Relations with Other Cultural Centers of the Near East, *American Journal of Archaeology* 75(3): 263-266. <https://doi.org/10.2307/503961>
- Olmstead, A. T. 1923. *History of Assyria*. Chicago: Charles Scribner's Sons.
- Özey, R. 2012. *Asian Geography*. Istanbul: Aktif Publishing House.
- Özgül, O. 2016. Erzurum'da Stratejik Bir Urartu Kalesi: Tepeköy Pir Ali Baba, [A Strategic Urartian Castle in Erzurum: Tepekoy Pir Ali Baba], *TÜBA-AR Journal of Archaeology of the Turkish Academy of Sciences* 19(19): 137-157. <https://doi.org/10.22520/TUBAAR.2016.0008>
- Payne, M. R. 2006. *Catalogue of Urartian Cuneiform Documents*. Istanbul: Archaeology and Art Publications.
- Pecorella, P. E & M. Salvini.1984. *I Documenti. Pecorella, Tra lo Zagros e l'Urmia: Ricerche Storiche ed Archeologiche Nell'Azerbaijano Iraniano*, [The Documents. Pecorella, Between Zagros and Urmia: Historical and Archaeological Research in Iranian Azerbaijan].Italy:Edizioni dell'Ateneo.
- Perfereç, E. 2007. *Iron Age Survey of Northwest Iran, Study of the Castles in Ardabil's Shahriar Region and Surroundings*, Unpublished Ph.D. Thesis. Tehran: Tarbiat Modares University.
- Pigott, V.C. 1980. The Iron Age in Western Iran, In T.A. Wertime & J.D. Muhly, (eds.), *The Coming of the Age of Iron*. New Haven: Yale University Press, 209-234.
- Piotrovskii, B. B. 1962. *Art of Urartu BC. VIII-VI Centuries* [In Russian].Leningrad: Publishing House of the State Hermitage.
- Salvini, M. 1977. Eine Neue Urartäische Inschrift Aus Mahmud Abad (West-Azerbaidjan), [A New Urartian Inscription from Mahmud Abad (Western Azerbaijan)], *Archäologischer Mitteilungen aus Iran (AMI NF)* 10(1): 125-136.
- Salvini, M. 1979. Die Urartäischen Schriftquellen aus Dem Arabischen Aserbaidshan I. Die Inschriften der Könige Ispuini und Menua, [The Urartian written Sources from Arabic Azerbaijan I. The Inscriptions of the kings Ispuini and Menua], In (German Archaeological Institute), *Proceedings of the XIII International Congress of Art and Archaeology*, Number: VI. Berlin: Dietrich Reimer, 170-177.
- Salvini, M. 1981. Clarifications in the Reading of Two Urartian Inscriptions in Iranian Azerbaijan, In I. M. Diakonoff, (ed.), *Ancient East and World Culture*. Moscow: Drevniy Vostok i mirovaya kultura , 69-73.
- Salvini, M. 2004. "Archaeology and Philology: Reconstructing the History of Northwest Iran in the Urartian Period (9th-7th Centuries B.C.)", In M. Azarnoush,(ed.),*Proceedings of the International Symposium on Iranian Archaeology: Northwestern Region*. Tehran: Ganj ine-ye Naqsh-e Jahan, 66-76.
- Salvini, M. 2006. *Urartu Tarihi ve Kültürü* [Urartian History and Culture]. Istanbul: Archaeology and Art Publications.
- Salvini, M. 2008. *Corpus Dei Testi Urartei Volume I le Iscrizioni Su Pietra e Roccia I Testi*, [Corpus of Urartian Texts Volume I Inscriptions on Stone and Rock The Texts]. Roma: Istituto Di Studi Sulle Civiltà Dell'egeo E Del Vicino Oriente.
- Vahdati Nasab, H; S. Hajjami & M.Mortazavi. 2010. Palaeolithic Ladiz Revisited: A Reassessment of the Ladizian lithic Industry, Baluchestan, Iran, *Antiquity* 084 (324): 1-6.
- Voigt, M. M. 1983. *Hajji Firuz Tepe in Iran: The Neolithic Settlement, University Museum Monograph 50 (Hasanlu Excavation Reports I)*, Philadelphia: The University Museum.
- Zimansky, P. E. 1985. *Ecology and Empire: The Structure of the Urartian State*. United States :The Oriental Institute Of The University Of Chicago.