

Observations on the Urartian Economy in Light of the Excavations at Ayanis Castle

Mehmet Işikli – Oğuz Aras

Introduction

Before the Urartian Kingdom established a political unity in Eastern Anatolia, the tribes ruled in the region provided a strong basis for the economic structure of the kingdom. Unquestionably, the main subjects of this basis were agriculture and animal husbandry. Nomadism and semi-nomadism appears to be a form of livelihood that the East Anatolian region has forced on the settlers in this region since the Bronze Ages.¹ The Urartian Kingdom gathered all overlords (beys) in the 9th century and established the first political unity in Eastern Anatolia. The Kingdom protected the economic condition of these overlords and strengthened the system with new reforms. During the most powerful period of the kingdom, the borders of the lands reached to the Euphrates River in the west, Lake Urmiye in the southeast, Erzurum-Kars plateau in the north and Lake Sevan in the northeast.² The Urartian Kingdom built magnificent castles to provide central authority in this challenging geography and built external cities for the people who will serve these castles. According to Yakar, in the Urartian Kingdom, which had “a feudal monarchy”, the ruling king was the one who directed the state policies.³ Therefore the king himself was leading the economic policies. In general, giving a framework of the Urartian economy, we can say that under the king’s hierarchy there were the members of the palace and the commanders who governed “Agriculture – Livestock, Reconstruction, Mining and Loot Taxes”.⁴

Agriculture and Animal Husbandry

When the location of the fortresses built in the Urartian Kingdom were observed, the proximity to agricultural lands, water, natural resources and the control of the transportation roads were found out to be the main factors for selecting these locations.⁵ The proximity to agricultural lands is one of the leading reasons.⁶ The plain of Van, which includes the capital of Tushpa, is one of the most productive agricultural areas in the region. It is one of the largest lowlands on the shore of the lake in the region and Hoshap River flows through it.⁷ Since the Gürpınar Plain, where the Castle of Çavuştepe is located, was a rich land in water resources for secondary agriculture, it attracted the attention of Sarduri II.⁸ Furthermore, Aznavurtepe and Körzüt Castle, which are on the Patnos and the Muradiye Plains accordingly, are examples of fortresses that controls the agricultural areas.

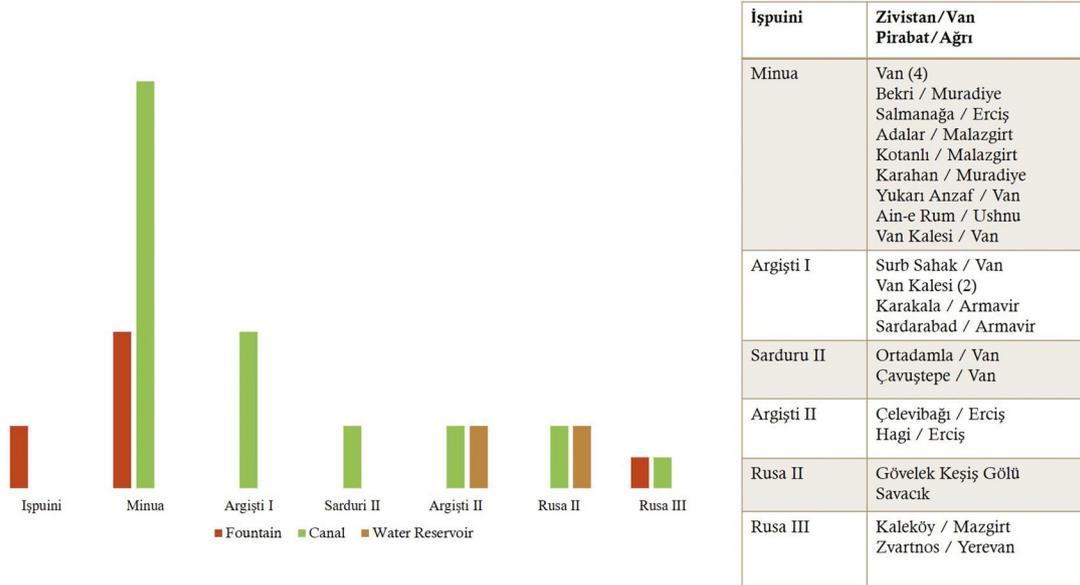


Fig. 1: Water facilities of Urartian kings.

Despite these vast plains, dryland farming was not sufficient for a growing kingdom in this area. For this reason, from the emergence of the kingdom until its fall, every ruling king gave importance to the irrigation systems such as dams, canals and ponds (fig. 1). One of the largest and most famous of these water canals is Minua's canal. King Minua's canal had a length of about 55 km.⁹ The only way to control the population, which was growing equally with the kingdom, was to give them the land they could cultivate.¹⁰ Moreover, the way to use these fertile soils productively was irrigation systems. In Rusa's (son of Argishi) Keşiş Gölü inscription,¹¹ two important saying are noted: "Everyone was given bronze tools by Biani and foreign people". Considering the written sources, we concluded that apart from fields for planting, vineyards and the orchards had been highly important.¹² Unlike the plantations, the orchards and the vineyards had been pompous and more like gardening practices.¹³ However, if we consider that most of the vineyards were used in wine production and that wine was an offering to the gods as libation, we can say that the vineyards are significant for the kingdom (fig. 2).

In the plateaus of Eastern Anatolia, the agriculture and the animal husbandry emerge as an inseparable economic model. The transhumance prevailing in the pre-kingdom region had not completely disappeared and survived with the kingdom.¹⁴ The animals that spent the winter months in the barns or in the areas where the snow had fallen less were moved to the high plateaus/pastures in order to save crops in the summer.¹⁵ If the written sources on Urartus are examined, we can see that animal husbandry holds an important place for the economy of the state. The Meher Kapı inscription, which was made in the period of Ishpuini and Minua and formed the basis of the Urartian

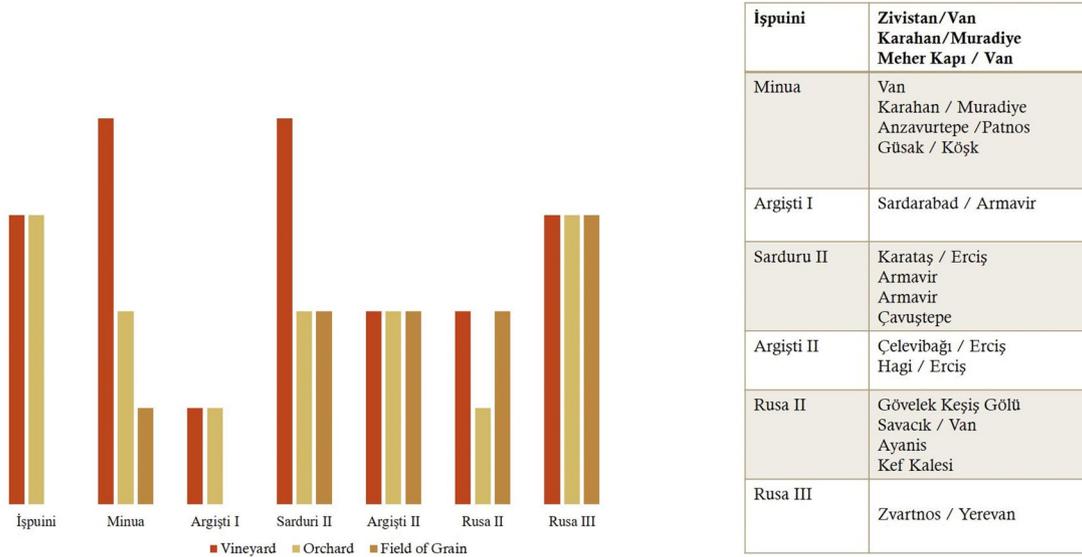


Fig. 2: Urartian kings and their agricultural projects.

religion, mentions the name of 79 god and goddess, and the number of sacrifices to be offered to these gods and goddesses in the religious ceremonies. The list begins with 17 bulls and 34 sheep in the name of Haldi, the chief god of the Urartian pantheon, and it decreases depending on the importance of gods and goddesses.¹⁶ In the inscription of Keleshin belonging to the common kingdom, it is cited that 1.112 cattles and 21,600 sheep were sacrificed.¹⁷ According to the archaeological data, approximately 500,000 animal bones and 1240 bulla have been found in a 15 ´ 4.5 metres room during Bastam Castle excavations. These bones are thought to belong to approximately 1500–2000 animals.¹⁸ About 100,000 animal bones and 7 bulla were found under the ground. This data is very important in terms of giving us the number of animals consumed in the inner castle. Similar context, which include a lot of animal bones has been found during the recent works in Ayanis Citadel and it will be mentioned below.

Buildings in the Storage Area

In the region within the boundaries of Urartu, the geographical conditions limit the crops and the crop collection periods. Most of the products gathered from the agricultural activities could only be carried out in a single season and had to be stored. A part of the grain produced in a year was allocated to the feeding of animals, while the rest was kept in the storages for human consumption.¹⁹

We know that almost all of the cities built by royal command were constructed in a planned method considering the land structure. When we look into the distribution and the space of the storage areas within the citadels, we can argue that these areas are

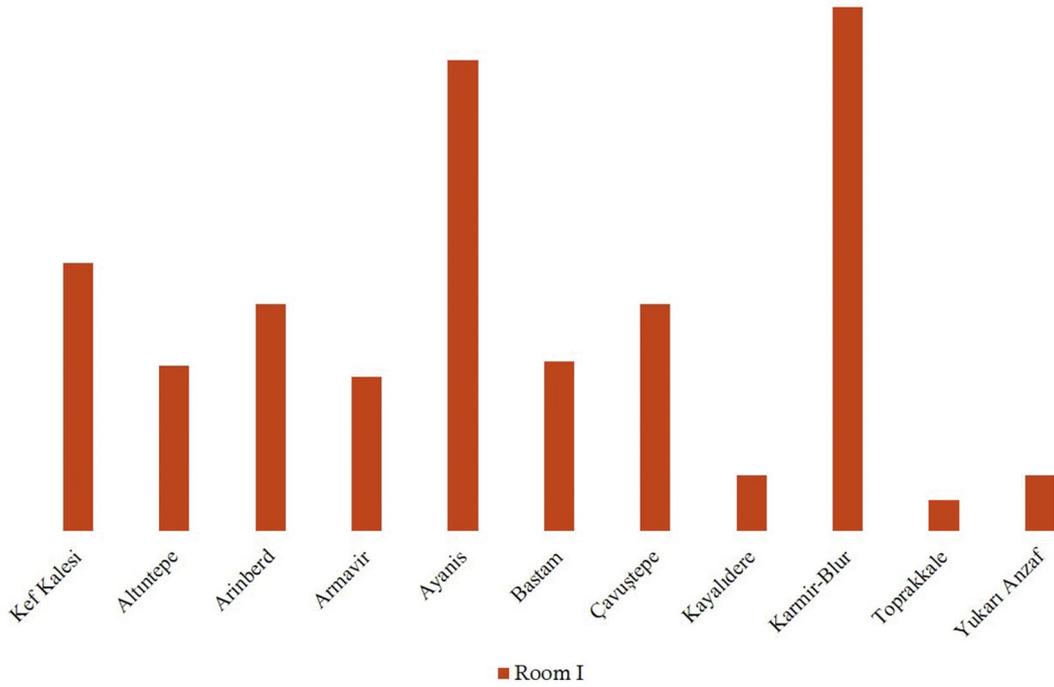


Fig. 3: Storage facilities with pithoi from Urartian sites.

clearly among the most important structures in city plans. From the gigantic dimensions of the pitos in the storage buildings, it is thought that firstly the pitos were placed in the area, and then the walls and gates of the storage structures were constructed.²⁰ (fig. 3).

Although the design of the storage rooms varies according to the structure of the land, they are basically long-narrow-planned structures built on the surface of the upper floors. By using the ground floors of the buildings, it was hoped that the crops would survive for a long time without being spoiled, and it would save space within the citadel. The pots and bowls that facilitate the transfer of goods to large pitos are among the other materials in the storage areas.²¹ The volume of these pitoi and pottery in the storage rooms and the types of crop inside them are explained with cuneiform or hieroglyphs.²² The only storage structure without pitoi has been found in Karmir Blur. On the floor of storage room 12, a heap of wheat in size of 25–45 cm has been found.²³ Driven by the Yoncatepe and Giriktepe storage structures, it is possible to say that large-sized storage structures are not only made by the king, but also by the overlords who were in charge of local governments.²⁴

Booties and Taxes

The need for raw materials and manpower increased as a result of the expansionism since the early period of the kingdom. The only way to answer these needs was to

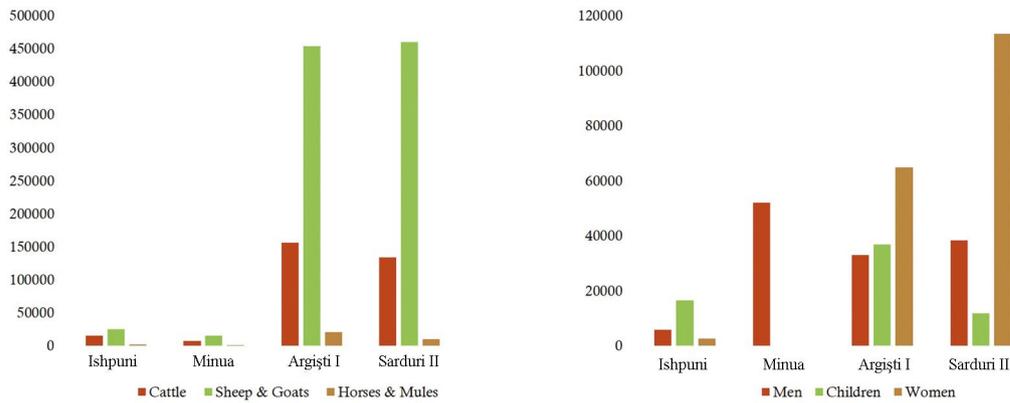


Fig. 4: The list of booty of humans and animals.

establish a colonial policy by using military force. According to the sources on Urartus, we notice that they took taxes from the local governments, which were under the control of Urartu kingdom, and campaigned against the rebellious states and held them for ransom.²⁵ Booties and the taxes were the most important source of income for the state (fig. 4). The countries such as Diauehi, Etuini and Mana, which did not hold any military threat, were always among the first countries on the list of campaigns. Although these campaigns are not very detailed in the inscriptions, the amount of booty, people, mines and animals are reported. Argišti, the son of Minua, speaks in the Horhor Inscription about the destruction of many countries / cities and how he took 52,675 people, including 19,255 young people, 10,141 alive warriors and 23,280 women as prisoners and killed some of them. Additionally, 1,104 horses, 35,015 cattle and 100 thousands of livestock were seized.²⁶ If we propose that the numbers given in the inscription are the amount of the captives and the spoils in that year, we can reach the statistical data of the income gained from the campaigns. Considering that the amount of the spoils in this and similar inscriptions goes accordingly in an order of importance, “the man” has been the most valuable booty in human history.

The campaigns organized against the great powers such as Assyria were rare. Rusa the son of Sarduri mentions in his inscription of the campaign that he attacked Assyrian cities and defeated²⁷ them with the support of the king of the city of Ardini.²⁸ However, there is not any information about the booty and captives. We can claim that this campaign was organized in order to protect the city of Ardini, which was a border city between Assyria and Urartu, by interpreting the “After this, the peace is brought to the south “ written on the northern surface of the inscription. This kind of inscriptions shows that the Urartian Kingdom did not attack more powerful kingdom/cities unless it was necessary. This wise policy helped them to survive approximately a quarter of a century in this harsh geography.

The campaigns carried out by the kingdom were not only important because of its booty but also for controlling the trading routes. Urartu, that aimed to control trade

Name of Items	Numbers of Artefacts
Copper [bronze]	3,600 talents (108 tons)
Helmets, Shields	25,212
Lances, Spearheads	1,514
Swords, Daggers, Bows, Arrows, Quivers	305,412
Cauldrons, Water Jugs, Pans	607
Other	12

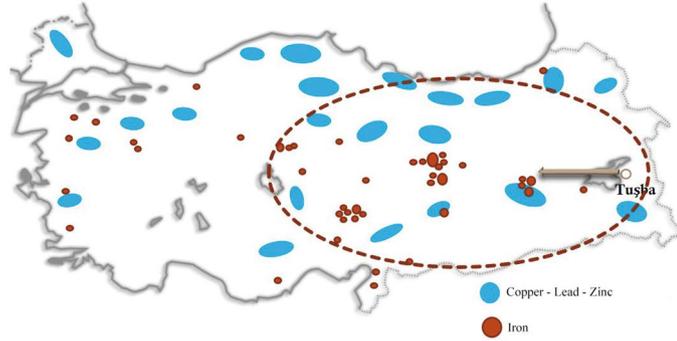


Fig. 5: Bronze artefacts taken by the Assyrian king Sargon II from Muşaşir's Temple and Mineral Deposits In Eastern Anatolia.

routes in the middle of the 8th century BC, must have used natural passages and valleys in the mountainous East Anatolia. Along with this, it is known that a systematic road was built in Bingöl region, which had rich mining potential.²⁹ The northern Syrian ports 'Tell Açıana' and 'Al Mina' were the easiest way for Urartu to maintain relations with the western world.³⁰ Therefore, they targeted to control these roads reaching the gateways to the Mediterranean and thereby the control of these roads could be gained. These political steps taken by the Urartian Kingdom during the development period greatly affected the interests of its most important rival, Assyria, and retrogressed its opponent in the region as the second great power.³¹

Besides, the inscriptions provide important information about the rich metal resources in its booty. Sarduri II mentions that he exacted 40 mina of solid (?) gold, 800 mina of silver, 2000 copper shield and 1535 of copper bowl as a tribute after the campaign against the country of Qumaha.³² The Assyrian king Sargon II plundered the monuments offered to the Mushashir Temple during his campaign to the State of Urartu. The booty collected was 25312 bronze shields – helmets – guns, 1514 bronze spears – spearheads, 305412 bronze daggers – quiver – arrows and 607 bronze bowls – pots.³³ Assuming these inscriptions are exaggerated, and provided that we consider all the booty captured is from one temple, the importance of metal objects in the economic structure of the Urartian Kingdom (fig. 5) is revealed.

Ayanis Castle and its Economic System

The Ayanis Castle is one of the most important castles of the Urartu era. The castle is located on the eastern shore of Lake Van across the Süphan mountain and includes the citadel and the outer city. The noble people and the government officials lived in the citadel, while in the outer city, the people brought from campaigns were sheltered.



Fig. 6: The Western Storage rooms of Ayanis Castle.

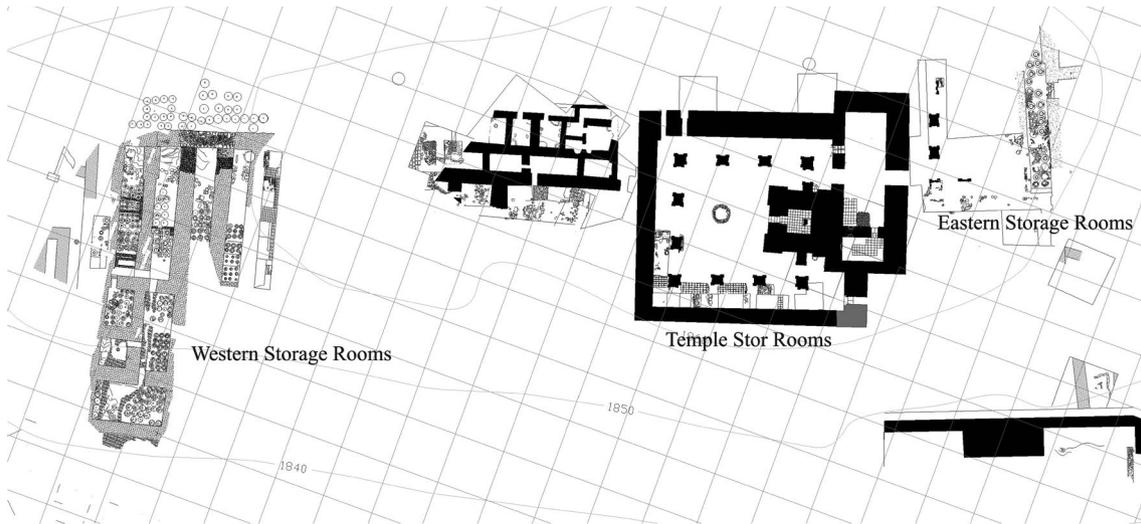


Fig. 7: Plan of Storage rooms in Ayanis Castle.

In the inscription of Ayanis Castle temple, Rusa, the son of Argishti, narrates that he used the people imprisoned from the enemy countries, among which were Assyria, for the construction of the castle.³⁴ The ethnic diversity of the population in the outer city that we know from the Ayanis Fortress and the agricultural equipment, which has been discovered during the excavations, are good examples that the written sources match with archaeological data.³⁵ This data clearly show the contribution of different ethnic groups to the state economy. Moreover, the tools distributed to the people are an indicator of an established economic policy.

The storage structures unearthed in the Ayanis fortress were spread over a large part of the castle. Basically, it is possible to mention 3 different storage structures. These are East Storage Rooms, West Storage Rooms and Temple Area Storages. The Western Storage Rooms cover an area of approximately 3,000 square meters. More than 200 large pithoi were recovered from these storage rooms (fig. 6). The size of these pithoi is 2.5 meters. In the Ayanis Castle room VI of the western storage, unlike other storage rooms, an earthenware pipe has been found. The transfer of goods to the outside might have been carried out more easily and faster through this pipe.³⁶ Many of these pithoi in the storages are covered with bullas. In these bullas information about where and how the goods are sent can be found. In addition, the signs on the pithoi indicate the capacity of the pithoi and what is inside. Based on this data, we can say that these storages are ‘State Storages’.

The storage rooms located on the eastern side of the castle and on the ground floor of the ‘Hall with Podium’ vary in comparison to the Eastern Storage Rooms. No bulla has been recovered from the pithoi in this area. Furthermore, hundreds of pottery sherds have been collected on the lower floor of the same area. In addition to the 18 large

pithoi, smaller vessels have been found. We can say that this smaller storage structure is different from the other state storages. Another storage area consists of storage rooms built beneath the temple area. In these storage rooms, bronze and iron artifacts were preserved (fig. 7).

The data on the animal husbandry of the Ayanis Castle was revealed in 2014 with the excavations. Thousands of animal bones and bullas were found under the soil just outside the north fortification walls. Very interesting and rich cultural contexts, which included animal bones, different finding, bullae and ash have been found on northern slopes of the citadel.³⁷ The animal bones from this context have been studied and results will be presented soon. Consequently, this context is very important in terms of showing the number of animals consumed in the given citadel.

Conclusion

As it is known the economic structure of Urartian Kingdom has been studied for some time. Available data about this subject presented this picture; The use of animal husbandry, agricultural activities and raw material resources in the Urartian Kingdom is the core of the economy. Since the foundation years of the state, great fortresses have been built by giving importance to the constructions and the storages of these castles that have been filled for hard seasons. As we can see from the Urartian inscriptions, the kings, who ascended to the throne during the foundation years, frequently carried out campaigns on the chiefdoms. As a result of these campaigns, they played a major role in the growth of the state by capturing people and other spoils. Finally, also in some inscriptions, it is reported that a few chiefdoms were subjected to pay a tax to the state.

The excavations at Ayanis citadel, which have been continuing for 30 years, have been enriching our knowledge about Urartu Kingdom and its economic structure. Monumental storages with large capacities and many written documents, which have been found Ayanis citadel, are vital to understanding the economic system of this kingdom. Thanks to this data we are in a position to discuss this matter. Undoubtedly, ongoing excavations at Ayanis citadel will be enlightening many unknown points related to this kingdom of the highland.

Notes

¹ Özfirat 2014, 26; Erdem 2018, 330.

² Çilingiroğlu 1997, 4–8; Salvini 2006, 24 f.; Köroğlu 2011, 12.

³ Yakar 2011, 127.

⁴ Sağlamtimur 2001, Lev. 42.

⁵ For details see: Çevik 2009.

⁶ Burney 2012, 55.

⁷ Kalelioğlu 2018, 155 f.

⁸ Çilingiroğlu 1997, 6.

⁹ With the mighty power of God Haldi, Minua, the son of Ishuiu, has opened this channel. Its name is „Canal Minua“. For details see: Payne 2006, 77.

¹⁰ Sağlamtimur 2001, 39 f.

¹¹ UKN I, 268.

¹² UKN I, 268; Payne 2006, 286. I have set up fields, orchards and vineyards in my country.’

¹³ Payne 2006, 81. ‘This vineyard belongs to Minua’s wife Tariria. His name is Tariria.’

¹⁴ Çilingiroğlu 1997, 6.

¹⁵ Sağlamtimur 2017, 4.

¹⁶ Salvini 1994, 205–210; Çilingiroğlu 2011, 192–193.

¹⁷ For details see: Salvini 2006, 55; Kuhrt 2013, 233 f.

¹⁸ Kleiss 1980, 299–304; Kroll 2011, 163–167.

¹⁹ Yakar 2011, 132.

²⁰ Çilingiroğlu 1997, 132.

²¹ Çilingiroğlu 2001, 74. 82 fig. 11.

²² For details see: Payne 2006, 331–338.

²³ Barnett – Watson 1952, 139.

²⁴ Çifçi 2017, 87 f.

²⁵ Payne 2006, 150–160. 208–240. 267–270.

²⁶ Payne 2006, 105.

²⁷ Payne 2006, 167 f.

²⁸ For details see: Işık 2015, 257 f.

²⁹ Belli 1977, 50. 102; Sevin 1989, 50 f.

³⁰ Çilingiroğlu 1984, 23.

³¹ Piotrovskii 1969, 72.

³² Çilingiroğlu 1997, 114; Payne 2006, 220; Salvini 2008, 426; Biber 2011, 234.

³³ Çilingiroğlu 1997, 114; Biber 2011, 234; Çifçi 2017, 121.

³⁴ Payne 2006, 297.

³⁵ Stone – Zimansky 2004, 213–228; Stone 2005, 187–193; Piotrovskii 1966 205 fig. 8. 9.

³⁶ Çilingiroğlu 1996, 367; Çilingiroğlu 1997, 78; Çilingiroğlu 2001, 76 fig. 1.

³⁷ Işık – Işıklı 2015, 142–152.

Image Credits

Fig. 1–2. 4: Adapted by Çifçi 2017. – Fig. 3. 5. 7: Ayanis Castle Excavation Archive. – Fig. 6: Ayanis Archive.

References

Barnett – Watson 1952

R. D. Barnett – W. Watson, Russian Excavations in Armenia, IRAQ 14, 1952, 132–147.

Belli 1977

O. Belli, Urartular çağında Van Bölgesi Yol Şebekesi. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmamış Doktora Tezi (İstanbul 1977).

Biber 2011

H. Biber, Urartu Silahları, Urartu: Doğuda Değişim, in: K. Köroğlu – E. Konyar (eds.), Yapı Kredi Yayınları (İstanbul 2011) 234–247.

Burney 2012

C. Burney, The Economy of Urartu: Probabilities and Problems, in: S. Kroll – C. Gruber – U. Hellwag – M. Roaf – P. E. Zimansky (eds.), Biainili-Urartu: the Proceedings of the Symposium Held in Munich, 12–14 October 2007, Acta Iranica 51 (Leuven 2012) 53–60.

Çevik 2009

Ö. Çevik, İskan Yeri Seçiminde Bilişsel Faktörlerin Olası Rolü: Rusa'nın Eiduru (Süphan) Dağı Önündeki Kent-Ayanis, in: H. Sağlamtimur et al. (eds.), Altan Çilingiroğlu'na Armağan. Yukarı Denizin Kıyısında Urartu Krallığı'na Adanmış Bir Hayat / Studies in Honour of Altan Çilingiroğlu. A Life Dedicated to Urartu on the Shores of the Upper Sea (İstanbul 2009) 195–202.

Çifçi 2017

A. Çifçi, The Socio-Economic Organisation of the Urartian Kingdom (Boston 2017).

Çilingiroğlu 1984

A. Çilingiroğlu, Urartu ve Kuzey Suriye, Siyasal ve Kültürel İlişkiler (İzmir 1984).

Çilingiroğlu 1996

A. Çilingiroğlu, Van Ayanis Kalesi Kazıları, 1993–1994 XVII. KST I. (Ankara 1996) 363–378.

Çilingiroğlu 1997

A. Çilingiroğlu, Urartu Krallığı Tarihi ve Sanatı (İzmir 1997).

Çilingiroğlu 2001

A. Çilingiroğlu, Storerooms. Ayanis I, Ten Years Excavations at Rusahinili Eiduru-kai 1989–1998, in: A. Çilingiroğlu – M. Salvini (eds.), Pubblicazioni dell'Istituto per gli Studi Micenei ed Egeo-Anatolici del Consiglio Nazionale delle Ricerche, Documenta Asiana 6 (Rome 2001) 67–84.

Çilingiroğlu 2011

A. Çilingiroğlu, Urartu Dini Yapısı, Urartu: Doğuda Değişim, in: K. Köroğlu – E. Konyar (eds.), Yapı Kredi Yayınları (İstanbul 2011) 188–205.

Işık 2015

K. Işık, Urartu Yazılı Kaynaklarında Geçen Yer Adları Ve Lokalizasyonları, Van Yüzüncü Yıl Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmamış Doktora Tezi (Van 2015).

Işık – Işıklı 2015

K. Işık – M. Işıklı, Inscribed Bullae and Bone Layer Discovered at the Ayanis Fortress / Van in 2014, Altorientalische Forschungen 42, 2015, 142–152.

Kalelioğlu 2018

E. Kalelioğlu, Van Ovasının İklim Özellikleri, DTCF Dergisi, 2018, 155–166.

Kleiss 1980

W. Kleiss, Bastam, an Urartian Citadel Complex of the Seventh Century B.C., AJA 84, 1980, 299–304.

Köroğlu 2011

K. Köroğlu, Urartu Krallık ve Aşiretler, Urartu: Doğuda Değişim. in: K. Köroğlu – E. Konyar, Yapı Kredi Yayınları (İstanbul 2011) 12–54.

Kroll 2011

S. Kroll, İrlandaki Urartu Şehirleri, Urartu: Doğuda Değişim, in: K. Köroğlu – E. Konyar, Yapı Kredi Yayınları (İstanbul 2011) 150–170.

Kuhr 2013

A. Kuhr, Eski Çağ'da Yakınoğu, C.2, Türkiye İş Bankası Kültür Yayınları (İstanbul 2013).

Payne 2006

M.R. Payne, Urartu Çivi Yazılı Belgeler Kataloğu, Arkeoloji ve Sanat Yayınları (İstanbul 2006).

Piotrovskii 1966

B.B. Piotrovskii, Il Regno Di Van Urartu (Rome 1966).

Piotrovskii 1969

B.B. Piotrovskii, The Ancient Civilization of Urartu (Geneva 1969).

Sağlamtimur 2001

H. Sağlamtimur, Urartu Krallığının Ekonomik Yapısı Ege Üniversitesi Sosyal Bilimler Estitüsü Yayınlanmamış Doktora Tezi (İzmir 2001).

Sağlamtimur 2017

H. Sağlamtimur, Urartu Krallığı'nda Hayvancılığın Sosyo Ekonomik Açından Önemi, Anadolu Araştırmaları 20 (İstanbul 2017) 1–16.

Salvini 1994

M. Salvini, The Historical Background of the Urartian Monument of Meher Kapısı, Anatolian Iron Ages III. Anadolu Demir Çağları 3. The Proceedings of the Third Anatolian Iron Ages Colloquium Held at Van, 6-12 August 1990/ III. Anadolu Demir Çağları Sempozyumu Bildirileri Van, 6–12 Ağustos 1990, Ankara: The British Institute of Archaeology at Ankara (Ankara 1994) 205–210.

Salvini 2006

M. Salvini, Urartu Tarihi ve Kültürü, Arkeoloji ve Sanat Yayınları (İstanbul 2006).

Salvini 2008

M. Salvini, Corpus Dei Testi Urartei. Le Iscrizioni su Pietra e Rocca, Documenta Asiana 8 (Rome 2008).

Sevin 1989

V. Sevin, Urartular'a Ait Dünyanın En Eski Karayolu, Anadolu Araştırmaları 11, 1989, 47–56.

Stone – Zimansky 2004

E. C. Stone – P. Zimansky, The Urartian Transformation in the Outer Town of Ayanis, in: A.T. Smith – K. S. Rubinson (eds.), Archaeology in the Borderlands: Investigations in Caucasia and Beyond (Los Angeles 2004) 213 – 228.

Stone 2005

E.C. Stone, The Outer Town at Ayanis 1997–2001, in: A. Çilingirođlu – G. Darbyshire (eds.), Anatolian Iron Ages 5, British İnstitute at Ankara (London 2005).

UKN I 1960

UKN I – G. A. Melikişvili, Urartsie Klinoobrazne Nadpisi 1 (Moscow 1960).

Yakar 2011

J. Yakar, Etno Arkeolojik Veriler Işığında Dođu Anadolu'nun Urartu Döneminde Sosyo-Ekonomik Yapısı, Urartu: Dođuda Deđişim. in: K. Körođlu – E. Konyar, Yapı Kredi Yayınları (İstanbul 2011) 126–148.