

Aksaz Thermal Complex: An Evaluation in Terms of Glass Finds and Settlement Archaeology

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Introduction

Since the settlement of mankind, the culture of bathing has made progress by developing itself spatially for thousands of years with the understanding of both cleansing and purification. As a result of this progress, architectural structures suitable for the use of water in closed spaces, which can be called water spaces, have emerged.¹ Among the earliest known indoors is a hall in a pharaonic palace dating to 2800 BC with a rectangular bathtub and a drain for dirty water.² Anatolian examples dating to the early 2nd millennium BC also show the use of a bathtub.³ Yegül states that the influence of the Greek Gymnasiums was very important in the shaping of the Roman Baths. In gymnasiums established for military purposes before the Archaic Age, it was sufficient to have a water source for bathing after sports activities.⁴ Although we do not know how the gymnasiums were heated, we know from an inscription that they were heated from around the middle of the 3rd century BC at the latest.⁵ Some examples of Greek public baths (balaneion) were built using the natural forms of rocks and caves. These include the Early Hellenistic Kyrene and Athena-Pire baths and the Oeniadae baths dating to the early 2nd century BC.⁶ Vitruvius also states in his book that the ritual of bathing was an indispensable part of daily life in the Hellenistic Period.⁷

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¹ Avşar – Avşar 2016, 628.

² Abbasoğlu 1982, 5.

³ Karahöyük Sarayı 1950-1750 BC. (Alp 1972, 12-13); Deposits at Beycesultan dated to 1850 BC. (Naumann 1985, 212-213).

⁴ Yegül 1992, 7.

⁵ See in Laum, *Stiftungen* II 71-73, no. 62; Yegül 1992, 23.

⁶ Yegül 1992, 25.

⁷ When Arkhimedes was taking a bath, he accidentally saw the water overflowing when he entered the water in the bathing trough, allowing him to calculate the masses of substances. Afterwards, he came out

The bath culture in the ancient world goes far beyond the cleansing that is realized only by washing. These structures became a part of people's daily lives and turned into a cultural habit. Sociologically, especially in the Roman period, large baths were not only for certain classes but also as architectural elements open to everyone.⁸ As Martial states: "My tastes in simple life demand humble things; good wine and food, a barber and a bathhouse, a chess and its pieces..."⁹, bathing was a small but indispensable necessity for a common man in Roman times.

In the Roman Imperial Period, in addition to the bath culture, thermal springs where people went to find healing were very important structures. Allen states that while different terms were used for thermal springs in the Roman period, the words "aquae" and "fons" refer to the same terminology.¹⁰ This usage is not very different from the words kaplıca or ılıca, which are used in Turkish today to refer to thermal springs.¹¹ The Roman state and the leading figures of society would have understood the social functions of the baths so well that they would not have failed to lend a helping hand as part of their social responsibility.¹² Even at a time when the Roman Empire was beginning to weaken, bathing culture was very important: In the 4th century AD, 800 small baths and 11 thermae in Rome alone were accessible to anyone who paid a small fee.¹³ The way a civilization incorporates bathing into its daily life and the type of bathing it prefers are very important in terms of showing the reflections of the nature of that period.¹⁴ It is no coincidence that the use of glass, especially during the Roman period, became widespread in architectural structures preferred by people for bathing, purification or healing. Through an inscription, we learn that glass was used in baths and thermal baths as an architectural (window glass), lighting, daily use vessel, as well as a game tool. The inscription states that Ursus was the first Roman citizen to play properly with a glass ball in the baths of Trojan, Agrippa, Titus and especially Nero. The game of trigon, one of the most popular games in the Roman Baths, was probably played with a glass ball.¹⁵

In the thermal baths at Hammat Tiberias and Hammat-Gader in Israel, glass artifacts were uncovered in a rare assemblage and various interpretations were made about their function, including that they contained medicines for healing. With regard to glass, no glass furnaces have been discovered in the bath complexes at Hammat-Gader, but several glass production workshops at the nearby neighboring settlement of Hammat-Tiberias or the city of Gadara provide information about the function of glass vessels in thermal baths. The existence of this glass workshop is very important in terms of showing the industrial place of glass workshops in the

naked and shouted "I found it, I found it". The place where he bathes here could be a public bath or a bathtub in a domestic area (Vitr. V, 179).

⁸ Like Pliny the Younger's contribution to the public baths in Como (Tali 2023, 33-40).

⁹ Mart. 2.48.1, translation is from Pott – Wright 1926, 60; see also Yegül 1992, 32 and note 12 (p. 437).

¹⁰ Allen 1998, 18.

¹¹ Başoğlu 2010, 11.

¹² Tali 2023, 33-40.

¹³ Giedion 1971, 238-252.

¹⁴ Giedion 1971 238, 252.

¹⁵ McClellan 1985, 41-43; Champlin 1985, 159-163; In a woman's grave in Uşak, a sphere-shaped glass ball fragment is among the grave finds (Çakmaklı – Taştemür 2017, 119-120).

Thermal-Spa culture.¹⁶ A quantitative comparison of the Hammet-Gader excavations with all other therapeutic sites reveals that the frequent finds of closed glass (amphoriskos, unguentarium types, jars, pitchers, etc.) were found over a period from the 3rd-4th century AD to the 7th-8th century AD. In addition to therapeutic vessels, lighting, drinking vessels, cups, glasses, goblets, bowls and plates were also unearthed. This shows that as well as therapeutic materials, various perfume containers, oils and creams were also used in closed vessels in thermal baths. Glass bottles with thermal medicines must have been produced and marketed from the Gulf of Naples to Baiae and neighboring Puteoli, North Africa and other countries.¹⁷ Among the finds from Anatolia; the glass finds from the excavation of Metropolis, Lower Bath-Palaestra date between the 1st century BC and the 6th century AD and consist of glass vases in various forms, window glass fragments and waste materials reflecting glass production.¹⁸ In Allianoi, one of the ancient thermal complexes of the Aegean Region, excavators have identified an area that may have been a glass furnace, but no detailed publications have yet been made about these glasses.¹⁹

Aksaz Rescue Excavations

In 1994, many illegal excavations were discovered and a team formed by Uşak Museum Directorate started excavations on July 19, 1994 and ended on October 28, 1994.²⁰ Apart from this excavation, on 6.8.1996 and 11.08.98, the Museum Directorate carried out excavations in front of and around the arched structure for a short period of time together with cleaning works²¹ (Fig. 1). Drawings of the excavated areas were also made²² (Fig. 2). Glass fragments and embossed bowls were recovered during the excavations inside the arched structure. Aksaz stream is located immediately on the northern border of the bath, where rescue excavations were carried out, and it was determined that there were many hot water springs around the bath.²³ Approximately 60 meters west of the hot spring, the foundations of the architecture can be seen at the bottom of a 2x2 meter excavation pit dug by illegal digger. These foundations are bossed walls, characteristic of the Hellenistic period. In addition, among the ceramics formed in the soil of the excavated area, finds belonging to the Lykos Sykphos fragment²⁴ and the Laodicea red slip ce-

¹⁶ Dvorjetski 2007, 256.

¹⁷ Painter 1975, 54-67; Jackson 1990, 7.

¹⁸ Akkuş-Koçak 2021, 53-148.

¹⁹ Yaraş 2010, 111-112; Taştēmür 2018, 209.

²⁰ Şeftalioğlu 1996, 109.

²¹ 8.9.1996 Report to Uşak Archaeology Museum.

²² Şeftalioğlu 1996, 114-115, Figs. 2-3.

²³ Şeftalioğlu 1996, 107-112.

²⁴ These embossed bowls, called Lykos Skyphos, were used in the Late Hellenistic-Early Roman imperial periods, and the molds found at Laodikia and Hierapolis confirm the production data. (Duman 2010, 138-150, Similar bowls have been found in various cities and dated by researchers. The bowls found in Sardes were dated by Rotroff to 50 BC-50 AD. (Rotroff – Oliver 2003, 171.) The bowl found at Perge dates from the last quarter of the 1st century BC to the first half of the 1st century AD. (Atik 1995, 52. Abb. 22, 58, Taf. 10, 58), The bowls found at Hierapolis are dated from the middle of the 1st century BC to the Julius-Cladius period. (Semeraro 2003, 87.)

ramic fragment²⁵ were unearthened²⁶ (Fig. 3). Apart from this illegal excavation pit, the remains of a wall with its foundations are observed approximately 30 meter west of it.²⁷ It is also stated that there is a small settlement on the flat area above the valley and early finds in the cave on the slope, but no details are given.²⁸ Some of the glass artifacts that constitute the subject of this study were buried²⁹ together with animal bones in the area in front of the arched structure, while other finds were recovered from the fills inside the buildings. 15 of Byzantine coins were unearthened from the fill inside the structure. Three of these coins have been identified. These are coins from the period of Anastasius (491-518 AD), Justin II (565-578 AD), Phocas (602-610 AD).³⁰

Glass Works of Aksaz

Cups (Fig. 4 - Cat. No. 1-4)

Among the finds recovered from Aksaz, four examples of cups with outward-facing, rounded rims are represented. The glass in this group is of very high quality and transparent in very light greenish tones. Cup forms with outward-facing, rounded rims were found in Late Roman-Early Byzantine deposits in areas such as Claros-Propylon³¹, Metropolis - Lower Bath-Palaestra³², Palantino Hill³³.

Bowls (Fig. 4, 5, 6 - Cat. No. 5-31)

Among the finds recovered from Aksaz, the bowls are divided into various forms: bowls with inward-facing rounded rims, bowls with upright bodies and rounded rims, bowls with outward-facing bodies and rounded rims, bowls with semi-spherical bodies and rounded rims, bowls with conical bodies and rounded rims, and bowls with folded rims.

²⁵ The analogue of the other datable find from Aksaz is identified as LTİP40a among the red slipped ceramics from Laodicea. The similar find from the east portico of the stadium street, shop no. 1 in Laodikeia is dated to the second half of the 6th century AD and the first quarter of the 7th century AD. (Bilgin 2017, 434, 751-752, Pl. 145, Cat. No. 904). The Aksaz pottery, like the red slipped pottery from Laodicea, has a fine sandy reddish yellow paste tempered with silver mica and lime. The Munsell is quite similar; the paste color is 7.5 YR 7/6 and the slip color is 10R 5/6.

²⁶ The upper part of the drawing is a fragment of Lykos Skyphos and the lower part is a sherd of Laodicean red slipped pottery.

²⁷ This information was obtained through our visit to the region on 27.09.2021 for the preparation of an expert report in accordance with the instruction file numbered 2021/146 of the 3rd Criminal Court of First Instance of Uşak and a survey conducted at Aksaz Bath located in Aksaz Village, Ulubey District, Uşak Province, within the scope of Law No. 2863.

²⁸ 7.2.1995 Report to Uşak Archaeology Museum.

²⁹ This was the interpretation of the excavators.

³⁰ Şeftalioğlu 1996, 107-112.

³¹ Taştemür 2007, 137, Cat. No. 45, Fig. 45; The form described by Isings as Form 41b, which is similar in terms of body but differs in that the rim is overhanging, was recovered from Pompeii in the 1st century AD.

³² Akkuş-Koçak 2021, 122, Cat. No. 551.

³³ Sternini 2001, Fig. 10-94.

With Inward-Facing Rounded Rims (Fig. 4 - Cat. No. 5, 6)

The earliest examples of spherical bowls with inward-facing rounded rims unearthed at Aksaz date from the late 1st and early 2nd centuries. While classifying these vessels, Isings added that those with similar features had a ring base.³⁴ The similar of these bowls church of St. Nicholas in Demre³⁵ is dated to the 3rd-4th century AD, and the Metropolis-Lower Bath - Palaestra to the late 3rd and early 4th century AD. In Sagalassos, similar bowls are encountered in smaller diameter, and Lightfoot notes that similar ones were found in the area where the sacred objects of the church of el-Lejjun were kept, dated to 502-551 AD.³⁶ Semi-spherical bowl fragments found at Aksaz can also be included in this date range.

With Upright Bodies and Rounded Rims (Fig. 4 - Cat. No. 7-11)

It was stated that a bowl rim fragment with an upright body and a rounded rim, dating back to the 3rd century AD, was unearthed in the deposit dated with ceramic finds during the Magnesia Theatron excavations.³⁷ In the library building of Arykanda, bowl with upright body and body fragments were unearthed in an area where coins from the 4th-5th century AD were found.³⁸ During the excavations in the lower bath-palaestra of Metropolis, fragments of deep bowls with upright bodies made of transparent glass in green and yellowish-green colors were found. When compared with other similar groups of finds, the finds were dated to the 3rd and early 4th century AD. The bowls with upright-bodied recovered from Aksaz can probably be dated between the 3rd and 5th centuries AD due to their analogies.

With Outward-Facing Bodies and Rounded Rims (Fig. 5 - Cat. No. 12, 13)

The closest analogies of the rounded-mouthed containers with outward-facing bodies are found in the excavations of the Metropolis Lower Bath-Palaestra structure³⁹, dating back to 5th-7th AD, this glass bowl form comes from deposits dated to the 6th and early 7th centuries in the Sardis excavations.⁴⁰ Similar examples are also found in Sagalassos excavations.⁴¹ In the light of parallel examples, we can date the Aksaz finds to the 5th-7th centuries AD.

With Semi-Spherical Bodies and Rounded Rims (Fig. 5 - Cat. No. 14, 15, 16)

The bowls with small diameter, hemispherical bodies and rounded rims are identified by Isings as form 85b.⁴² Examples with the same form were also found in the Propylon of Claros.⁴³ This

³⁴ Isings 1957, 101, Form 85a.

³⁵ Ötügen 2009, 166, Fig. 5.

³⁶ Lightfoot 1993, 174, Fig. 121.7,8.

³⁷ Gençler-Güray 2013, 173, Fig. 2-1.

³⁸ Bilgiç 2005, 174-176, Pl. 28, Cat.- Fig. No. 17.

³⁹ Akkuş-Koçak 2021, 328-329, Cat. No. 530.

⁴⁰ von Saldern 1980, 79, No. 575.

⁴¹ Lightfoot 1993, 175, Fig. 121-19.

⁴² Isings 1957, Form 85b.

⁴³ Taştemür 2007, 142-143, No. 42.

type of bowl is dated to the late 2nd and early 3rd century AD on the basis of datable examples.⁴⁴ The Aksaz finds can also be dated to this date range.

With Conical Bodies and Rounded Rims (Fig. 5 - Cat. No. 17-20)

The bowls have a conical body, rounded rim and a diameter of 10-15 cm.⁴⁵ It was recovered from the 4th-5th century AD deposits of the Doric Temple of Sagalassos.⁴⁶ In addition, fragments of bowls in this form are found in the early Byzantine Period deposits at Sardis⁴⁷ and in the 3rd and 4th century AD deposits from the excavations at the Propylon of Claros.⁴⁸ It is possible to date the finds of a similar form at Aksaz between the 3rd and 5th centuries AD.

Bowls with Folded Tube Shaped Ring Rims. (Fig. 6 - Cat. No. 23-31)

a) With Conical Body and Folded. (Fig. 6 - Cat. No. 23, 25, 26, 28, 29)

Mouth During the excavations of the Lower Bath-Palaestra of Metropolis, containers with folded rims were found in the Late Antiquity deposits.⁴⁹ Forms of this type were found in the Late Roman Imperial Period in Zeugma⁵⁰, in the 3rd-5th centuries AD in the Arykanda Library excavations⁵¹, and in the Early Byzantine Period in the Hierapolis Baths excavations.⁵²

b) With Semi-Spherical and Folded Rims (Fig. 6 - Cat. No. 21, 22, 24, 27, 30, 31)

The forms in this group are in the form of spherical-bodied bowls with a tubular rim folded inwards and then outwards. Similar examples from the Metropolis Palaestra are dated to the 5th-7th centuries AD⁵³, also recovered from the early Byzantine period deposits at Sardis⁵⁴ and deposits⁵⁵ from the Hadrianopolis Villa dating to the 6th-7th centuries AD. According to their analogies, the Aksaz semi-spherical bodied folded rim glass finds can be dated between the 5th and 7th centuries AD.

Jars (Fig. 6 - Cat. No. 32, 33)

Although they are made in different forms and techniques, they are distinguished from other forms by their narrow rim and wide body.⁵⁶ Although the body and base parts are not preserved among the Aksaz finds, it differs from the other forms by the difference in the rim parts. Similar examples of Cat. No. 33 are found at Sardes House of Bronzes, Lydia, Trench S dating to the

⁴⁴ Vessberg – Westholm 1956, Fig. 44-53; Isings 1971, Fig. 3, 44; Oliver 1983, Fig. 4, 57.

⁴⁵ Isings 1957, 63, Form. 49; Barag 1978, Fig. 7, No. 21.

⁴⁶ Lightfoot 1993, 175, Cat. No. 19, Fig. 121-19.

⁴⁷ von Saldern 1980, 79, No. 584.

⁴⁸ Taştemür 2007, 83-162, No. 127.

⁴⁹ Akkuş-Koçak 2021, 122, Cat. No. 556.

⁵⁰ Grossmann 2013, 241, Fig. 65, G. 66.

⁵¹ Bilgiç 2005, 172, Cat. No. 184, Fig. 184.

⁵² Caldarola 2016, 725, Cat. No. 38, Fig. 9, 38.

⁵³ Akkuş-Koçak 2021, 122, Cat. No. 557, 63.

⁵⁴ von Saldern 1980, 79, No. 584.

⁵⁵ Fünfschilling – Lafli 2013, 16-61, Cat. No. VR1/64, Taf. No. 2.

⁵⁶ Taştemür 2007, 96-102.

Early Byzantine Period⁵⁷, Labraunda East Church dating to the 4th-5th century AD⁵⁸, and Claros⁵⁹. Cat. No. 32 is dated to the 4th-7th century AD from Patara Tepecik Necropolis⁶⁰, 4th-5th century AD from Labraunda East Church⁶¹, and 3rd-5th century AD from Metropolis North mosaic hall.⁶²

Bottles/Pitchers (Fig. 7, 8 - Cat. No. 34-52)

Among the Aksaz finds, the bottle/pitcher forms are the most remarkable in terms of density. They are divided into three sub-groups according to their distinctive form characteristics.

Bottles Decorated with Threads Glass (Fig. 7 - Cat. No. 34, 35, 36)

The conical-necked, spherical-bodied bottles were usually made of greenish-toned glass. It begins to be seen in the second half of the 3rd century AD, becomes a very popular form in the 4th century AD and continues to be seen until the 5th century AD.⁶³ Although vessels of conical-necked bottles decorated with glass threads are found in the 4th and 5th centuries AD, examples of the same form with carved decoration on the body are dated to the late 2nd century AD.⁶⁴ In the inventory of the Tekirdag Museum, there are also early forms of glass thread decorated bottles with conical necks.⁶⁵ Cat. No. 34⁶⁶ and 35⁶⁷ are dated to the Late Roman Period according to their analogies.

Conical-Necked Bottles (Fig. 7 - Cat. No. 37, 38, 39, 40, 43, 44, 45, 46, 47, 48)

Among the Aksaz finds, bottles/jugs with conical-necked are more common than other forms. This form, which we have seen similar ones in the 3rd and 4th centuries AD⁶⁸, is particularly representative of the Late Roman conical-necked glass repertoire. From the excavations at Claros, we can see deposits dating to the 3rd-4th century AD.⁶⁹ Another fragment recovered from the necropolis of Akmonia is a bottle fragment with a conical-necked and probably a spherical body.⁷⁰ It is a bottle rim fragment recovered from Late Roman - Early Byzantine Period grave finds. Similar examples are in the inventory of Afyon Museum⁷¹, Corning Museum⁷² and

⁵⁷ von Saldern 1980, 81, Cat. No. 591, Fig. 27.

⁵⁸ Blid 2009, 141, Cat. No. 15, Fig. 10, 15.

⁵⁹ Taştemür 2007, 99-100, No. 185.

⁶⁰ Baybo 2003, 170, Cat. No. 301.

⁶¹ Blid 2009, 140, Cat. No. 11, Fig. 10. 11.

⁶² Akkuş-Koçak 2021, Pl. 24/228.

⁶³ Isings 1957, 124, Form 104b.

⁶⁴ Isings 1957, 110, Form 92.

⁶⁵ Taştemür 2019, 97, Cat. No. 28-29.

⁶⁶ Akkuş-Koçak 2021, 262-262, Pl. 32, 308.

⁶⁷ Gençler-Güray 2009, XXV/315-242; Akkuş-Koçak 2021, Pl. 29/272.

⁶⁸ Weinberg 1967, Pl. 27, No. 9; Gürler 2000, No. 112; Sternini 2001, Fig. 15, No. 147; Whitehouse 2003, 166, No. 189.

⁶⁹ Taştemür 2007, 155, Cat. No. 102.

⁷⁰ Taştemür 2019, 159-160, 168, Cat. No. 35.

⁷¹ Lightfoot 1989, 100, Fig. 8-1.

Princeton University Art Museum.⁷³ It would be correct to date the Aksaz finds to the Late Roman Period with the help of analogies.

Cylinder-Necked Bottles (Fig. 8 - Cat. No. 41, 42)

A fragment of bottle with a cylindrical body and outward-facing rim was found during the excavations of Via Tecta at the Asclepion in 1968, registered to the Bergama Museum. This bottle is similar to the one in the Edirne Museum in terms of its dimensions.⁷⁴ Isings emphasizes that the earliest examples of cylindrical containers have been dated to around 200 AD in Murlenbach, Germany. Isings states that late examples dating to the 4th century AD were found in the Blanche cemetery in Strasbourg, France.⁷⁵ In the light of similar examples, the Aksaz cylindrical-necked bottle fragments can be dated between the 3rd and 4th century AD.⁷⁶

Bottle/Pitcher Bases (Fig. 8 - Cat. No. 49, 50, 51, 52)

Among the bases belonging to bottle or pitcher shaped containers, only the base fragment from Cat. No. 52, which belongs to a cylindrical bottle, has a recognizable form compared to the others. There are two types of the form, short and long. The short ones start from the Flavian period and continue until the Antonine period. The long ones are common in the Flavian period, but rare examples from the 3rd century AD come from tombs in Cologne.⁷⁷ The Aksaz find can be dated to the 1st-2nd centuries AD due to similar analogies.⁷⁸

Lamps (Fig. 8, 9 - Cat. No. 53-60)

The most concentrated group among the Aksaz glass finds are the lamps. Among these lamps, there are 4 types: openwork lamps, which could not be balanced on a flat surface but could have been used by hanging in an openwork or on a floor; stemmed lamps, which were placed in polykandilions; handled lamps, which were used by hanging or placed on a flat surface; and chalice-shaped lamps.

Openwork Lamps (Fig. 8 - Cat. No. 53)

Among the Aksaz finds, only one glass container has been evaluated under this form. Since these lighting containers have rounded bottoms, they could not have stood flat on the ground, they could only have been used in an envelope or suspended from a chain. Among the lamp envelopes seen from the early period, some of the envelopes with rings for hanging are footed, among the examples from the Sion treasury near Kumluca, dated to the 6th century AD.⁷⁹

⁷² Whitehouse 2003, 178, No. 312.

⁷³ Antonaras 2012, 225, No. 159.

⁷⁴ Atilla – Gürler 2012, 158, No. 236.

⁷⁵ Isings 1957, 121, Form. 102b.

⁷⁶ Isings 1957, 121, Form. 102b; Atilla – Gürler 2012, 158, No. 236.

⁷⁷ Taştemür 2007, 70-71.

⁷⁸ Isings 1957, 67-68, Form 51a-51b; Canav 1985, 67, No. 96, 97; Akat – Fıratlı 1984, 36, No. 278, Fig. 127; Lightfoot – Arslan 1992, 49-51, No. 16-18.

⁷⁹ Çömezoğlu 2007, 141.

Among the finds from St. Nikholas, seven fragments are classified as lamps in envelopes, and these are further divided into four subclasses in terms of form. For the Aksaz find, an analogy can be constituted with the forms dating to the 10th-11th centuries AD, which fall into the second type in this classification.⁸⁰

Stemmed Lamps (Fig. 8 - Cat. No. 54, 55)

These lamps were used by placing on polykandilions from their stemmed parts. Formally, they are divided into two types: solid and hollow. Only one example of each type was found at Aksaz.

Hollow Stemmed Lamps (Fig. 8 - Cat. No. 55)

It is represented by a single form among the Aksaz finds. This greenish colored transparent fragment has a knotted-shape bulge at the end. It is known that the lamps were used by placing on polykandilions. During the excavations in the Agora, terracotta wick carriers were also found along with the fragments of lamps.⁸¹ The conical looking discs with a hole in the center are about 3 - 4 cm in diameter. In some examples, the second holes on the body would have served the ventilation function seen on the discus of terracotta lamps. Such terracotta wick carriers, which are probably cheaper, must have been produced as an alternative to metal examples. Besides Elaiussa Sebaste, similar examples were found at Caesarea Maritima, Beth Shean⁸² and Olba.⁸³

Solid Stemmed Lamps (Fig. 8 - Cat. No. 54)

Apart from their formal differences, they were used by placing on polykandilions like hollow lamps. They were usually made with an “s” profile at the transition from the body to the rod part. This “s” profile was probably created so that the lamp would fit snugly into the cavity of the polykandilion. In the excavations at Kadikalesi/Anaia; it was divided into three subclasses; filled even rod, gnarled end, and drop-shaped end.⁸⁴ The Aksaz find can be included in the “drop-shaped end” group. The lamps with filled rods⁸⁵ seen from the Early Byzantine Period until the 12th century AD are among the lighting tools that were encountered in many centers with the influence of Christianity. The Aksaz find can be dated to the 11th-12th centuries AD in line with the analogies of the filled rod lamp.⁸⁶

Handled Lamps (Fig. 9 - Cat. No. 56-60)

They are conical-bodied forms called handled lamps and used by hanging them with chains by means of vertical handles on the rim or on the body. The earliest examples of lamps with handles, which we see in the 4th century AD, continued to be used until the Middle Ages.⁸⁷ Different

⁸⁰ Çömezoğlu 2007, 141-142, Cat. No. 64.

⁸¹ Gençler 2009, 120-122.

⁸² Gençler 2009, 120-122, Fig. 78, 79.

⁸³ Erten – Akkuş-Koçak, 2017, 89-112, Pl. No. 5, 14.

⁸⁴ Hazinadar-Çoşkun 2021, 30/2, 1030.

⁸⁵ Elaiussa Sebaste mid-7th century or 2nd half. (Gençler 2009, 124); Afyon Museum 6th-7th century? (Ligthfoot 1989, 103 / Cat. No. 80 / Pl. 8/4); Church of St. Nicholas of Demre, 11th-12th 10century. (Olçay 1997, Lev. VI/ Cat. No. 24 Mun-2,5 G 6/8); Saraçhane, mid-11th century. (Hayes 1992, 408/ F.152/50).

⁸⁶ Çömezoğlu 2007, 68-70, 74, 83; Oral-Çakmakçı 2008, 106, Cat. No. 12.

⁸⁷ Isings 1957, 162, Form. 134.

forms of lamps with handles, which became widespread after the Late Roman Period, emerged later.⁸⁸ Anatolian examples of handled lamps are dated to the 11th-12th century AD from the church of St. Nicholas in Demre⁸⁹, 11th century AD from the Saraçhane Excavations in Istanbul⁹⁰, 8th-12th century AD from Hierapolis⁹¹ and 11th-12th century AD from Amorium, while examples from Sardeis⁹², Cyprus 7th century AD⁹³, Palestine 5th-7th century AD⁹⁴ and Jordan 4th-5th century AD⁹⁵ are dated to the Early Byzantine Period. Two types of lamps with handles are observed at Aksaz.⁹⁶ The first group (Cat. No. 57, 60) has a folded rim and semi-spherical body. The second group (Cat. No. 56, 58, 59) has a folded or flattened rim and conical body. The first group includes examples with semi-spherical bodies shaped by pulling over the rim, as in Cat. No. 57, and handles pulled parallel to the rim, as in Cat. No. 60. Similar artifacts in the second group (Cat. No. 56, 59) are found in the Church of St. Nicholas 5th-6th century AD, Sebaste Early Byzantine⁹⁷, Sardeis 5th-7th century AD⁹⁸, Olympos⁹⁹ 5th-6th century AD.¹⁰⁰ In the second group, the conical-bodied oil lamp with a handle, identified with Cat. No. 58, has similar examples from Akmonia¹⁰¹ and Kadı Kalesi dating to the 11th-12th century AD¹⁰², and from Hierapolis to the 8th-12th century AD.¹⁰³

Goblet/Lamp (Fig. 10, 11, 12, 13 - Cat. No. 61-97)

In ancient times, glass chalices were used not only as drinking vessels but also for lighting due to their transparency. The lamps we started to see in the Late Roman Imperial Period underwent formal changes over time. It is not easy to tell whether the goblet were used for lighting or as drinking vessels. The discovery of metal clamps for wick holders next to the goblet in situ in the Anamur church excavations is important in terms of showing that they were used not only as drinking containers but also for lighting.¹⁰⁴ The transparency of the glass goblet made them stand out, as the reflections of the flame filters in them are better than other materials. The “light” carried in front of people to honor them in Greek and Roman societies has gained litur-

⁸⁸ Temür 2018, 227-267.

⁸⁹ Çömezoglu 2007, 117, Cat. No. 48.

⁹⁰ Hayes 1992, 408, F.152, 65 Blue-green.

⁹¹ Gençler 2000, 254, Fig. 7, 95-98.

⁹² von Saldern 1980, 45-46.

⁹³ Young 1993, 43, Fig. 6, Cat. No. 7.

⁹⁴ Harden 1962, Pl. XX, Fig. 47.

⁹⁵ Baur 1938, 529, Fig. 22, 380.

⁹⁶ Since the bases of this form were not recovered, it is classified according to the preserved parts.

⁹⁷ Taştemür – Dinç 2018, 72, Photograph 4, No. 36.

⁹⁸ von Saldern 1980, 45-48.

⁹⁹ Olcay Uçkan – Demirkaya 2017, 16, Pl. 1/m-n.

¹⁰⁰ Acara – Olcay 1998, 254, Fig. 2, c-d.

¹⁰¹ Taştemür 2019, 159, Fig. 5 Cat. No. 31; Taştemür – Dinç 2021, 421, Fig. 2, No. 31.

¹⁰² Oral-Çakmakçı 2008, 126-129, 415, Fig. 7-8, Cat. No. 32-35.

¹⁰³ Gençler 2000, 254, Fig. 7, 95-98.

¹⁰⁴ Stern 1985, 44.

gical and spiritual significance in Christianity.¹⁰⁵ Described in church records as “candelai, photogoi, kaniskia, thryallides, crateres”, they were made of glass for everyday use, silver for special uses and rarely gilded. The polycandillion could be both circular and cruciform, and they contained many glass lamps (ladikina).¹⁰⁶ In ancient times, chalices were generally shaped with two techniques. The first is the folded tube ring base, and the second is the flat base with an added flat base.¹⁰⁷ In addition, in some examples, the foot was also decorated with or without a gnarled. The Aksaz finds are classified as having gnarled, ungnarled footed and footed resting on a plane. Apart from these, those whose forms cannot be understood are classified under the heading others. A total of thirty-seven fragments of goblet bases were found at Aksaz, eight with gnarled, ten solids footed, nine with flattened foot, and ten with undefined forms.

With Knotty Footed (Fig. 10 - Cat. No. 61-68)

Bottom diameters vary between 4 cm and 5.6 cm. It has a transparent color scale in light green, bluish-green, green, purple, honey-colored tones.

Solid Footed (Fig. 11 - Cat. No. 69-78)

Bottom diameters vary between 3,2 cm and 6 cm. It has a transparent color scale in shades of light green, greenish-yellow, bluish-green.

With Flattened Foot (Fig. 12 - Cat. No. 79-87)

Bottom diameters vary between 4 cm and 6,8 cm. It has a transparent color scale in light green, bluish-green, greenish-yellow, green, honey-colored tones.

The Others (Fig. 13 - Cat. No. 88-97)

Bottom diameters vary between 4 cm and 6,8 cm. It has a transparent color scale in light green, greenish-yellow, blue tones.

Although there are formal differences, in general, this type of lamps are dated between the 5th-7th centuries AD by their analogy.¹⁰⁸ The tube ring-base forms with curved feet were recovered from the Athenian Agora in contexts dating from the second half of the 5th century AD to the 6th century AD¹⁰⁹, while the types with flat footed were found in reliable deposits dating from the 5th century AD to the 7th century AD.¹¹⁰

The fragments found at Aksaz, Cat. Nos. 79, 80, 82, 84, 85, 86, 87, show intense iridescence and spiral marks. There are also examples from Uşak - Selçikler and Hacim Köy, Örtülü Location with distinct blown spirals, sloppy quality glass, and sloppy workmanship, and they have been

¹⁰⁵ Olcay 1997, 97.

¹⁰⁶ Olcay 1997, 100-102.

¹⁰⁷ Stern 2001, 263, 270-271.

¹⁰⁸ Isings 1957, Form. 111; von Saldern 1962, Pl. 9, No. 10d; von Saldern 1980, Pl. 24, No. 351; Olcay 2000, Fig. 2f.

¹⁰⁹ Hayes 1992, 406, Fig. 150, 20; Jennings 1998, Fig. 14, 137, No. 5-9; Gill 2002, 65, Fig. 1-5, 56; Czurda-Ruth 2007, 303, T.19, 687; Weinberg – Stern 2009, 150, No. 346.

¹¹⁰ Hayes 1992, 407, Fig. 151, 40; Jennings 1998, Fig. 14, 137, No. 5-9; Gill 2002, 170, Fig. 2-4, 64; Czurda-Ruth 2007, 303, T. 19, 687; Weinberg – Stern 2009, 150, Fig. 20, No. 346.

labeled as local or regional.¹¹¹ Apart from these, during the Sebaste surveys conducted in Uşak, chalices/lamps were found around Kiliseler, Selçikler-Ören Location, Pınarbaşı-Eşşekini Ağaçbeyli-Hendek Castle, Sivashlı-Uzunoluk Location, but in order to obtain concrete data on their use, they should be found in archaeological deposits or in an architectural remains. Therefore, although we cannot make a complete evaluation in terms of the area of use, we can date the forms analogically to the 5th-7th century AD, which is a wider date range.¹¹²

Window Pane (Fig. 13 - Cat. No. 98)

The presence of transparent glass that surrounds us may seem commonplace today, but when it was discovered, it was probably considered an awe-inspiring material. Before the discovery of window glass, called “fenestra” in Latin, people tried to light their rooms by making terracotta or wooden grids with wooden inserts in shutter-like wall gaps. The earliest data on the use of window glass can be found in the Late Roman Republican Period, as Seneca states that window glass was used in Roman baths in this period, so glass was used as an architectural element for the first time during the Julio-Claudian period.¹¹³ Pliny the Elder mentions that a temporary theater was built in Rome by Marcus Scaurus in 58 BC for the Aedilician plays; he states that the lower floor of this stage building was made of marble and the middle floor was made of glass.¹¹⁴ Pliny the Younger, in a letter to his friend Gallus, mentions the glass frames and doors in his villa.¹¹⁵ Although there are various evaluations on window glass making techniques in the Ancient Period, it is understood that blowing and moulding techniques were used in general terms. The first technique is classified as crown technique and cylinder blowing. The crown technique is formed by blowing the glass frit onto a flat surface after inflating it. In this technique, the center of the glass is thicker and thinner towards the edges.¹¹⁶ In the cylinder blowing technique, the glass was blown into a cylinder shape and then cut vertically and flattened with a tool.¹¹⁷ Among the Aksaz glass finds, window glass is represented by only one fragment. Although it is understood that the window glass was made in the free blowing technique, it is difficult to say which of the cylinder or crown techniques was used. This glass fragment was also found together with ceramic sherds from a pit dug by illegal diggers. Despite the fact that it is a single fragment, it is very important in terms of showing the use of window glass in buildings.

General Assessment of the Glass Finds

When we look at the general characteristics of the forms recovered during the Aksaz Rescue Excavations; it is noteworthy that the vessels in Cat. No. 79-87, which have a base resting on a plane, have prominent blowing spirals, noble traces, and unsymmetrical goblet bases with poor quality workmanship. These are probably of local or regional production. Apart from this, finds with high quality glass structure, such as the examples in Cat. No. 25 and 26, which were consid-

¹¹¹ Taştemür 2021, 302-304.

¹¹² Taştemür 2021, 302-304.

¹¹³ Sen. Ep. 86.6; see also Grose 1989, 356-357.

¹¹⁴ Plin. Nat. His. 36, 114.

¹¹⁵ Plin. Ep. 47-50.

¹¹⁶ Brisac 1986, 181.

¹¹⁷ Brisac 1986, 180.

ered to be imported, were also unearthed. In addition to these, a base fragment of an oil lamp in an openwork lamps in Cat. No. 53, which is one of the rare examples of glass, was also unearthed during these rescue excavations. Furthermore, in terms of lighting tools lamps in various forms such as stemmed, handled and goblet lamps were also used in the thermal structure. Apart from these, closed and open vessels were probably used as service vessels.

Although there have been a few excavations of baths or thermal baths in Anatolia, very few of the glass finds from these structures have been published.¹¹⁸ A large number of glass vessel fragments from the Hammat Tiberias and Hammat-Gader thermal baths in Israel, as well as the furnaces associated with their production, can be found in the international literature.¹¹⁹ It is thought that some of the glass vessels found here contained medicines and that medication supplements were stored in these glass vessels in addition the healing waters. Besides therapeutic vessels, lighting, drinking vessels, glasses, goblets, bowls and plates were also unearthed. This suggests that as well as to therapeutic materials, various perfume containers, oils and creams were also used in closed vessels in thermal baths. Glass vessels containing thermal medicines must have been produced and marketed to many centers from the Gulf of Naples.¹²⁰ The glass forms recovered from Aksaz, dating from the 1st to the 12th century AD, may also contain vessels used for this purpose. However, in order to distinguish them, their contents should be preserved and analyzed immediately after the excavation. In the dating of the bath, it was stated that the latest use of the bath was the 7th century AD¹²¹ in the light of the coins recovered in the rescue excavations and this information was included in many sources with the same references. Unfortunately, since not all of the excavated sections of the baths were excavated, no dating could be made according to the architectural structure¹²². However, with the help of the typological analogies of the glass finds, it is understood that the bath structure continued to be used until the 12th century AD.

Assessment in terms of Settlement Archaeology

In Anatolia, people have been worshipping the hot water and steam coming out of the earth's cracks since the 4th and 3rd millennia BC.¹²³ In the Roman period, the sanctity and healing of thermal waters were accepted by the people. The Romans preferred hot water sources for economic reasons as well as their healing properties and built baths in places where there were thermal springs.¹²⁴ Besides bathing, the thermal baths of Uşak-Aksaz were probably a complex used as a health center. The biggest proof of this is the illicit digging pits and foundations of architectural structures in a large area around the hot spring. In addition to this during the rescue excavations, it was found that there were structures belonging to a small settlement on the

¹¹⁸ The excavators at Alliano have identified an area that may have been a glass furnace, but no detailed publication has yet been made on this glass.; Yaraş 2010, 111, 112; Taştemür 2017.

¹¹⁹ Dvorjetski 2007, 256.

¹²⁰ Painter 1975, 54-67; Jackson 1990, 7.

¹²¹ Şeftalioğlu 1996, 107-120.

¹²² Koçyiğit 2023, 232.

¹²³ Sevimli 2005, 136.

¹²⁴ Sevimli 2005, 136.

flat area above the valley and that the cave on the slope also contained finds from the early periods, but no details were mentioned.¹²⁵

Since ancient times, areas with thermal waters have been one of the favorite places for people because of their hot waters and healing properties. It is still thought today that the naturally boiling hot waters from this region, which contain sulfur, are good for dermatological and rheumatic diseases.¹²⁶ Vitruvius also mentioned that thermal waters are healing beyond personal hygiene.¹²⁷ The Aksaz thermal complex, with its bath structures and hot springs, was a place where people sought healing and purification for thousands of years (and continues to be used for this purpose by people in the surrounding area today).¹²⁸ Furthermore, in the Hüdavendigar (Bursa) salname, it was stated that this place was used in the Ottoman period and that the sulphurous water of the hot spring is a healing water that is good for various pains and skin diseases.¹²⁹

Apart from the section where rescue excavations were carried out, there are many illicit digging pits in the area and the remains of a wall whose foundations remain about 30 m. west of this structure.¹³⁰

In 1994, during the rescue excavations carried out in Aksaz, the sounding drilled at the foundation of the bath structure yielded walls with bossed walls characteristic for the Hellenistic period. In the excavation pit made by illicit diggers in the west of the bath structure in the following years, it was found that there were amorphous ceramic fragments and a fragment of Lycian sykphos¹³¹ and a sherd of Laodicean red slipped pottery.¹³² Although belonging to a small-scale find group, these ceramic sherds are important in terms of showing that the Aksaz thermal complex was also preferred by the nearby cities for a long period of time.

The fact that Blaundos is the closest city to Aksaz in line with our current knowledge reveals the main city to which this thermal spring was probably connected in the historical process (Fig. 14). Of course, this assessment will be based on more solid foundations as archaeological data increases. In addition, the analogies of the glass finds allow us to make interpretations about the periods between which the thermal complex existed, the vessels used and where they may have come from, and they also provide very important data in terms of settlement archaeology. Among these, the necessity of making new additions to the Roman road routes mentioned by D. French has been understood once again with this study.¹³³ According to the surveys conducted in Aksaz Baths in various years and the expert field surveys, the pathway in the north-south

¹²⁵ See above fn. 29.

¹²⁶ Şeftalioğlu 1996, 107-112.

¹²⁷ Vitr. V, 179.

¹²⁸ Today, people from the surrounding villages who believe in the healing of this place enter the water where the thermal water source is located.

¹²⁹ Semerci 2013, 24-25; Yıldırım 2016, 128-135.

¹³⁰ See above fn. 28.

¹³¹ See above fn. 25.

¹³² See above fn. 26.

¹³³ Filges, 2006, 16, Abb.13.

direction, which is also used by the locals today, was probably used in ancient times.¹³⁴ A route following the road, which is now called Ulubey-Güney Road, must have been preferred in the Hellenistic and Roman Periods. The shortest way to reach Aksaz from Laodicea is to head north via Hierapolis-Tripolis or Tripolis. Likewise, no one would prefer to take the long way from Blaundos to Tripolis via Philadelphia. For these reasons, there must have been an intermediate road between Blaundos and Tripolis to reach Aksaz (Fig. 15, 16). This road route is probably the “S” curved pathway used by the locals today, which is also parallel to the canyon running north-east-southwest. Since this road is also visible on the Google Earth application, attention was paid to this while drawing the road on the map (Fig. 14). In addition, this road covers an 80 km long road, starting from Temenouthyrai in the north (located in the center of Uşak as it is known today) and extending towards Blaundos, Aksaz thermal and Tripolis towards the south. Presumably, the fact that it is located on this road route would have provided a resting opportunity for those using the road, and perhaps there may have been resting areas such as mansions near the road? In addition, although there are not as many large thermal springs as Hierapolis among the surrounding settlements, there is a small thermal spring in Yenicekent that was used during the Roman Imperial Period, such as the Kamara thermal springs.¹³⁵ It is presumably that the hot springs in the vicinity attracted the attention of the people living in ancient times and they built small or large structures (depending on the size of the thermal spring) in these areas and met their needs for cleaning, purification and healing.

This study aims to interpret the thermal complex, which has survived for hundreds of years in a rural area in the light of glass finds, in terms of settlement archaeology and to evaluate the glass forms used in this structure from the Hellenistic Period to the Byzantine Period in terms of chronological and usage. In this sense, it has been understood that the area, which has been investigated in detail in this context, probably hosted the cult structures of Asclepius¹³⁶ and was preferred by other cities besides the nearby cities, and that a new one should be added to the ancient road routes due to the area where this thermal complex is located. In order to support the evaluations made above and to reach new data, scientific excavations should be initiated and evaluated as a whole.

¹³⁴ During the intensified survey titled “Archaeological Survey of Uşak Province and Districts with the permission of the Republic of Turkey Ministry of Culture and Tourism General Directorate of Cultural Assets and Museums dated 18.07.2014 and numbered 94949537-161.01-141681, conducted under the coordination of Münteha Dinç; Ancient Greek and Roman (Archaic, Classical, Hellenistic and Roman Period) Settlements”, and with the 2021/146 instruction file of Uşak 3rd Criminal Court of First Instance, investigations were carried out in and around Aksaz within the scope of Law No. 2863.

¹³⁵ Eskikurt – Kapluhan 2006, 615-624, fn. 622-623.

¹³⁶ This suggestion was also put forward by the German team led by A. Filges, who had previously conducted research in Blaundos and its territory, but it was emphasized that this was surprising since no coins depicting Asclepius were found. (See Filges, 2006, 16) However, the existence of Hellenistic Period Blaundos coins depicting Asclepius in various museums and private collections provides information regarding the existence of this cult (Imhoof-Blumer 1883, 384-403; Kurth 2020, 86-88, No. 39-43). In addition, in the excavation report given to the Uşak Museum Directorate on 7.2.1995 by the excavators, it was reported that “there are many remains of buildings belonging to the bath complex in the vicinity” and even the remains of buildings belonging to settlements were found on the plain just above the valley where the bath was located.

Catalogue

Cat. No. 1: Aksaz (Aks.94. BN.1) Free blowing technique and tool shaping, fragments of the rim and body of the glass, made of light blue colored transparent glass. The surface of the glass shows large and small bubbles and blowing spirals. Measurement: Rim D. 6.8 cm, presv. H.3.4 cm.

Cat. No. 2: Aksaz (Aks.94. BN.4) Free blowing technique and tool shaping, fragments of the rim and body, made of transparent glass in light yellowish green tones. The surface of the glass shows large and small bubbles and blowing spirals. Measurement: Rim D. 7.6 cm, presv. H.2.8 cm.

Cat. No. 3: Aksaz (Aks.94. BN.10) Free blowing technique and tool shaping, fragment of the rim and body, made of transparent glass in light green tones. A few small bubbles are visible on the surface of the glass. Measurement: Rim D. 7 cm, presv. H.2.5 cm.

Cat. No. 4: Aksaz (Aks.94. BN.15) Free blowing technique and tool shaping, fragment of the rim and body, made of transparent glass in light yellowish green tones. The surface of the glass shows large and small dense bubbles and the beginning of iridescence with the blowing spiral. Measurement: Rim D. 6.8 cm, presv. H.2.4 cm.

Cat. No. 5: Aksaz (Aks.94. BN.11) Free blowing technique and tool shaping, fragments of the bowl rim and body, transparent glass in very light greenish-yellow tones, found and assembled in three pieces. Numerous small bubbles are visible on the surface of the glass. Measurement: Rim D. 7.6 cm, presv. H.4.9 cm.

Cat. No. 6: Aksaz (Aks.94. BN.26) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. Numerous small bubbles are visible on the surface of the glass. Measurement: Rim D. 9 cm, presv. H.2.2 cm.

Cat. No. 7: Aksaz (Aks.94. BN.16) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light blue tones. Large and small bubbles and iridization shows on the surface of the glass. Measurement: Rim D. 10 cm, presv. H.2.9 cm.

Cat. No. 8: Aksaz (Aks.94. BN.43) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in honey-colored shades. The surface of the glass shows large and small in flat shapes dense bubbles and abrasion. Measurement: Rim D. 6 cm, presv. H.2.1 cm.

Cat. No. 9: Aksaz (Aks.94. BN.59) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in honey-colored shades. Iririsation is visible on the surface of the glass. Measurement: Rim D. 8.4 cm, presv. H.1.8 cm.

Cat. No. 10: Aksaz (Aks.94. BN.89) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. The surface of the glass shows very few small bubbles, burnishing marks and the beginning of iridescence. Measurement: Rim D. 7 cm, presv. H.1.8 cm.

Cat. No. 11: Aksaz (Aks.94. BN.105) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of the glass shows numerous small bubbles, fire polishing. Measurements: Rim D. 6.6 cm, presv. H.1.7 cm.

Cat. No. 12: Aksaz (Aks.94. BN.33) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. Numerous small bubbles, the

blowing spiral and iridescence shows on the surface of the glass. Measurements: Rim D. 7.6 cm, presv. H.1.6 cm.

Cat. No. 13: Aksaz (Aks.94. BN.45) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of the glass shows large and small dense bubbles. Measurements: Rim D. 6.8 cm, presv. H.2.7 cm.

Cat. No. 14: Aksaz (Aks.94. BN.5) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of the glass shows large and small dense bubbles, blowing spirals and the beginning of iridescence Measurements: Rim D. 6.8 cm, presv. H.2.4 cm.

Cat. No. 15: Aksaz (Aks.94. BN.88) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. Very few small bubbles are visible on the surface of the glass. Measurements: Rim D. 9.4 cm, presv. H.3.4 cm.

Cat. No. 16: Aksaz (Aks.94. BN.106) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of glass shows very few small bubbles, blowing spirals and fire polishing. Measurements: Rim D. 7.6 cm, presv. H.2.2 cm.

Cat. No. 17: Aksaz (Aks.94. BN.14) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of the glass shows a few small bubbles and traces of fire polishing and burnishing. Measurements: Rim D. 13.8 cm, presv. H.1.8 cm.

Cat. No. 18: Aksaz (Aks.94. BN.42) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. The surface of the glass shows a few small bubbles and traces of burnishing. Measurements: Rim D. 7,6 cm, presv. H.1.5 cm.

Cat. No. 19: Aksaz (Aks.94. BN.46) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The fire polishing, blowing spirals and numerous small bubbles are visible on the surface of the glass. Measurements: Rim D. 9.4 cm, presv. H.1.9 cm.

Cat. No. 20: Aksaz (Aks.94. BN.104) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light green tones. The surface of the glass shows very few small bubbles, burnishing marks and abrasion. Measurements: Rim D. 12.2 cm, presv. H.2.2 cm.

Cat. No. 21: Aksaz (Aks.94. BN. 3) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light blue tones. The surface of the glass shows very few small bubbles, burnishing marks and the beginning of iridescence. Measurements: Rim D. 7.6 cm, presv. H. 3.1 cm.

Cat. No. 22: Aksaz (Aks.94. BN. 12) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. The surface of the glass shows intense deterioration. Measurements: Rim D. 7.8 cm, presv. H. 2.3 cm.

Cat. No. 23: Aksaz (Aks.94. BN. 37) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. The surface of the

glass shows very few bubbles and the beginning of iridescence. Measurements: Rim D. 10.2 cm, presv. H. 1.8 cm.

Cat. No. 24: Aksaz (Aks.94. BN. 51) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Very few small frequent bubbles are visible on the surface of the glass. Measurements: Rim D. 7.4 cm, presv. H. 1.9 cm.

Cat. No. 25: Aksaz (Aks.94. BN. 85) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Numerous large and small flattened bubbles are visible on the surface of the glass. Measurements: Rim D. 10 cm, presv. H. 1.3 cm.

Cat. No. 26: Aksaz (Aks.94. BN. 86) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light yellow tones. Numerous frequent bubbles are visible on the surface of the glass. Measurements: Rim D. 15.6 cm, presv. H. 1.4 cm.

Cat. No. 27: Aksaz (Aks.94. BN. 90) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Numerous frequent bubbles and traces of burnishing are visible on the surface of the glass. Measurements: Rim D. 6.8 cm, presv. H. 2.1 cm.

Cat. No. 28: Aksaz (Aks.94. BN. 91) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light honey-colored shades. The surface of the glass shows a few bubbles, burnishing marks and iridescence. Measurements: Rim D. 11.4 cm, presv. H. 2.7 cm.

Cat. No. 29: Aksaz (Aks.94. BN. 94) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Numerous small bubbles and traces of burnishing are visible on the surface of the glass. Measurements: Rim D. 7 cm, presv. H. 1.3 cm.

Cat. No. 30: Aksaz (Aks.94. BN. 96) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Numerous large and small bubbles, traces of burnishing and the beginning of the iridescence is visible on the surface of the glass. Measurements: Rim D. 11.2 cm, presv. H. 2.5 cm.

Cat. No. 31: Aksaz (Aks.94. BN. 97) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish yellow tones. Numerous large and small bubbles and fire polishing is visible on the surface of the glass. Measurements: Rim D. 9 cm, presv. H. 2.2 cm.

Cat. No. 32: Aksaz (Aks.94. BN. 41) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in green tones. The surface of the glass shows intense iridescence. Measurements: Rim D. 13.6 cm, presv. H. 1.7 cm.

Cat. No. 33: Aksaz (Aks.94. BN. 155) Free blowing technique and tool shaping, fragment of the bowl rim and body, made of transparent glass in light greenish blue tones. The surface of the glass is fire polished. Measurements: Rim D. 7.4 cm, presv. H. 1.6 cm.

Cat. No. 34: Aksaz (Aks.94. BN. 18) Free blowing technique and tool shaping, fragment of the conical rim and body, made of transparent glass in light greenish blue tones. The surface of the glass shows a few small bubbles and fire polishing. Measurements: Rim D. 4.8 cm, presv. H. 7.6 cm.

Cat. No. 35: Aksaz (Aks.94. BN. 19) Free blowing technique and tool shaping, fragment of the conical neck and body, made of transparent glass in light honey-colored shades. The surface of the glass shows intense iridescence. Measurements: Rim D. 2.8 cm, presv. H. 6.3 cm.

Cat. No. 36: Aksaz (Aks.94. BN. 28) Free blowing technique and tool shaping, fragments of the conical rim and body, made of transparent glass in light yellowish green tones. Blowing spirals and intense iridescence is visible on the surface of glass. Measurements: Rim D. 3.2 cm, presv. H. 3.7 cm.

Cat. No. 37: Aksaz (Aks.94. BN. 8) Free blowing technique and tool shaping, fragment of the conical rim and body, made of transparent glass in light green tones. Very dense small and frequently spaced bubbles can be seen on the surface of the glass. Measurements: Rim D. 8 cm, presv. H. 1.6 cm.

Cat. No. 38: Aksaz (Aks.94. BN. 20) Free blowing technique and tool shaping, fragment of an outwardly folded conical rim and body, made of transparent glass in light green tones. In various sizes very dense bubbles and iridescence is visible on the surface of the glass. Measurements: Rim D. 3.8 cm, presv. H. 4.2 cm.

Cat. No. 39: Aksaz (Aks.94. BN. 21) Free blowing technique and tool shaping, fragment of the conical rim and body, made of transparent glass in light greenish blue tones. Intense iridescence is visible on the surface of the glass. Measurements: Rim D. 3.5 cm, presv. H. 5.1 cm.

Cat. No. 40: Aksaz (Aks.94. BN. 29) Free blowing technique and tool shaping, first outwards and then inwards folded unsymmetrical conical rim and body fragment, made of transparent glass in light green tones. Very dense small and frequently spaced bubbles can be seen on the surface of the glass. Measurements: Rim D. 3.8 cm, presv. H. 2.2 cm.

Cat. No. 41: Aksaz (Aks.94. BN. 30) Free blowing technique and tool shaping, first outwards and then inwards folded unsymmetrical conical rim and body fragment, made of transparent glass in light greenish blue tones. Very dense small and frequently spaced bubbles can be seen on the surface of the glass. Measurements: Rim D. 3.4 cm, presv. H. 1.8 cm.

Cat. No. 42: Aksaz (Aks.94. BN. 31) Free blowing technique and tool shaping, fragment of the rounded conical rim and body, made of transparent glass in light green tones. Very dense small and frequently spaced bubbles and blowing spirals are visible on the surface of the glass. Measurements: Rim D. 3.6 cm, presv. H. 3.7 cm.

Cat. No. 43: Aksaz (Aks.94. BN. 32) Free blowing technique and tool shaping, fragments of the conical rim and body, made of transparent glass in honey-colored shades. Iridescence and blowing spirals are visible on the surface of the glass. Measurements: Rim D. 3.4 cm, presv. H. 1.9 cm.

Cat. No. 44: Aksaz (Aks.94. BN. 34) Free blowing technique and tool shaping, first outwards and then inwards folded unsymmetrical conical rim and body fragment, there is handle attachment on the lip rim, made of transparent glass in light green tones. Very dense large and small frequently spaced bubbles and soil deposits shows on the surface of the glass. Measurements: Rim D. 3.6 cm, presv. H. 2.5 cm.

Cat. No. 45: Aksaz (Aks.94. BN. 35) Free blowing technique and tool shaping, first outwards and then inwards folded unsymmetrical conical rim and body fragment, made of transparent glass in light greenish yellow tones. Very dense large and small frequently spaced bubbles, soil deposits and blowing spirals shows on the surface of the glass. Measurements: Rim D. 3.6 cm, presv. H. 1.4 cm.

Cat. No. 46: Aksaz (Aks.94. BN. 36) Free blowing technique and tool shaping, first outwards and then inwards folded unsymmetrical conical rim and body fragment, there is handle attachment on the lip rim, made of transparent glass in light green tones. A small number of very small bubbles and weathering is visible on the surface of the glass. Measurements: Rim D. 2.4 cm, presv. H. 1.6 cm.

Cat. No. 47: Aksaz (Aks.94. BN. 56) Free blowing technique and tool shaping, fragment of the rounded conical rim and body, made of transparent glass in light green tones. Very dense large and small frequently spaced bubbles and the beginning of the iridescence is visible on the surface of the glass. Measurements: Rim D. 9.8 cm, presv. H. 1.3 cm.

Cat. No. 48: Aksaz (Aks.94. BN. 82) Free blowing technique and tool shaping, rounded unsymmetrical conical rim and body fragment, made of transparent glass in light blue tones. Very dense large and small frequently spaced bubbles and the beginning of the iridescence is visible on the surface. Measurements: Rim D. 12 cm, presv. H. 2.3 cm.

Cat. No. 49: Aksaz (Aks.94. BN. 160) Free blowing technique and tool shaping, base and candlestick-shaped body fragments, mended, made of transparent glass in light green tones, very dense large and small bubbles are visible on the surface of the glass. Measurements: Base D. 4.4 cm, presv. H. 5.2 cm.

Cat. No. 50: Aksaz (Aks.94. BN. 161) Free blowing technique and tool shaping, base and candlestick-shaped body fragment, made of transparent glass in light green tones. Very dense large and small frequently spaced bubbles and blowing spirals are visible on the surface of the glass. Measurements: Base D. 2.? cm, presv. H. 3.3 cm.

Cat. No. 51: Aksaz (Aks.94. BN. 162) Free blowing technique and tool shaping, base and candlestick-shaped body fragment, made of transparent glass in light green tones. Very dense large and small frequently spaced bubbles and the beginning of the iridescence is visible on the surface. Measurements: Base D. 3.8 cm, presv. H. 1.4 cm.

Cat. No. 52: Aksaz (Aks.94. BN. 163) Free blowing technique and tool shaping, base and cylindrical body fragment, made of transparent glass in light blue tones. The surface of the glass shows deterioration. Measurements: Base D. 4.8 cm, presv. H. 2 cm.

Cat. No. 53: Aksaz (Aks.94. BN. 199) Free blowing technique and tool shaping, base and body fragment, made of transparent glass in light green tones. The surface of the glass shows very dense large and small frequently spaced bubbles and in the center of the pedestal there is a decoration of glass threads circulating in a ring. Measurements: Base D. 5 cm, presv. H. 0.9 cm.

Cat. No. 54: Aksaz (Aks.94. BN. 140) Probably free blowing and tool shaping on the body, the body and rim of the oil lamp are broken and worn. It has a massive and full gnarled rod, made of transparent glass in dark green tones. A few small bubbles are visible on the surface of the glass. Measurements: Base D. 1 cm, presv. H. 3.8 cm.

Cat. No. 55: Aksaz (Aks.94. BN. 144) Probably free blowing and tool shaping on the body, the body and rim of the oil lamp are broken and worn. It has a hollow stemmed that expands as it rises and shows the pontil mark and made of transparent glass in light green tones. Very dense large and small frequently spaced bubbles are visible on the surface of the glass. Measurements: Rim D. 1.4 cm, presv. H. 5.7 cm.

Cat. No. 56: Aksaz (Aks.94. BN. 101), Free blowing technique and tool shaping, oil lamp rim and body fragment, with flaring folded rim and vertical handle, mended, made of transparent glass in light green tones. A few small bubbles and the beginning of the iridescence is visible on the surface. Measurements: Rim D. 8.4 cm, presv. H. 1 cm.

Cat. No. 57: Aksaz (Aks.94. BN. 107) Free blowing technique and tool shaping, oil lamp rim and body fragment with flaring rounded rim, spherical body, vertical handle, mended, made of transparent glass in cobalt blue tones. Numerous large and small bubbles are visible on the surface of the glass. Measurements: Rim D. 8.8 cm, presv. H. 4.7 cm.

Cat. No. 58: Aksaz (Aks.94. BN. 108) Free blowing technique and tool shaping, oil lamp rim and body fragment with rounded rim, conical body, vertical handle, made of transparent glass in light green tones, the surface of the glass shows dense iridescence. Measurements: Rim D. 8.2 cm, presv. H. 3.3 cm.

Cat. No. 59: Aksaz (Aks.94. BN. 109) Free blowing technique and tool shaping, oil lamp rim and body fragment with rounded rim, conical body, vertical handle, made of transparent glass in light green tones, numerous large and small frequently spaced bubbles and partly iridescent weathering is visible on the surface of the glass. Measurements: Rim D. 9.2 cm, presv. H.2.8 cm.

Cat. No. 60: Aksaz (Aks.94. BN. 110) Free blowing technique and tool shaping, oil lamp rim and body fragment with flaring rounded rim, semispheric body, vertical handle, made of transparent glass in light greenish tones, numerous large and small frequently spaced bubbles are visible on the surface of the glass. Measurements: Rim D. 12.2 cm, presv. H.3 cm.

Cat. No. 61: Aksaz (Aks.94. BN. 70) Free blowing technique and tool shaping, not very distinct twist decor above the knuckle, unsymmetrical folded tube-shaped ring base, made of transparent glass in honey-colored shades. The pontil mark is visible on the surface of the glass. Measurements: Base D. 5.4 cm, presv. H.2.3 cm.

Cat. No. 62: Aksaz (Aks.94. BN. 71) Free blowing technique and tool shaping, not very distinct knuckle, symmetrical folded tube-shaped ring base, made of transparent glass in light bluish green. The pontil mark is visible on the surface of the glass. Measurements: Base D. 4 cm, presv. H.2.8 cm.

Cat. No. 63: Aksaz (Aks.94. BN. 111) Free blowing technique and tool shaping, not very distinct knuckle, symmetrical folded tube-shaped ring base, made of transparent glass in light green, the blowing spiral is visible on the surface of the glass. Measurements: Base D. 4.4 cm, presv. H.2.5 cm.

Cat. No. 64: Aksaz (Aks.94. BN. 114) Free blowing technique and tool shaping, very distinct knuckle, symmetrical folded tube-shaped ring base, made of transparent glass in light green, the pontil mark and dense iridescent weathering is visible on the surface of the glass. Measurements: Base D. 4 cm, presv. H.2.8 cm.

Cat. No. 65: Aksaz (Aks.94. BN. 116) Free blowing technique and tool shaping, distinct knuckle, unsymmetrical folded tube-shaped ring base, made of transparent glass in honey-colored shades. The surface of the glass shows very few small bubbles and a not very pronounced blowing spiral. Measurements: Base D. 5.6 cm, presv. H.3.5 cm.

Cat. No. 66: Aksaz (Aks.94. BN. 119) Free blowing technique and tool shaping, distinct knuckle, symmetrical folded tube-shaped ring base, made of transparent glass in honey-colored shades. The surface of the glass shows very few small bubbles and the pontil mark. Measurements: Base D. 4.8 cm, presv. H.3 cm.

Cat. No. 67: Aksaz (Aks.94. BN. 123) Free blowing technique and tool shaping, distinct knuckle, unsymmetrical folded tube-shaped ring base, made of transparent glass in honey-colored shades. The surface of the glass shows very few small bubbles and a not very pronounced blowing spiral. Measurements: Base D. 5 cm, presv. H.2.9 cm.

Cat. No. 68: Aksaz (Aks.94. BN. 128) Free blowing technique and tool shaping, highly distinct knuckle, folded tube-shaped ring base, made of transparent glass in purple colored shades. The surface of the glass shows the pontil mark and dense iridescent weathering. Measurements: Base D. 2.2 cm, presv. H.2.8 cm.

Cat. No. 69: Aksaz (Aks.94. BN. 112) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light green tones, the surface of the glass shows the pontil mark, blowing spiral and the beginning of iridescence. Measurements: Base D. 3.2 cm, presv. H.3.6 cm.

Cat. No. 70: Aksaz (Aks.94. BN. 113) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light greenish blue tones, the surface of the glass shows the pontil mark, numerous large and small frequently spaced bubbles, blowing spiral and the beginning of iridescence. Measurements: Base D. 3.6 cm, presv. H.2.5 cm.

Cat. No. 71: Aksaz (Aks.94. BN. 115) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light greenish blue tones, the surface of the glass shows the pontil mark, numerous large and small frequently spaced bubbles, blowing spiral and the beginning of iridescence. Measurements: Base D. 4.4 cm, presv. H.2.6 cm.

Cat. No. 72: Aksaz (Aks.94. BN. 118) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light greenish blue tones, the surface of the glass shows the pontil mark, numerous large and small frequently spaced bubbles, blowing spiral and the beginning of iridescence. Measurements: Base D. 5.2 cm, presv. H.2.9 cm.

Cat. No. 73: Aksaz (Aks.94. BN. 120) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light green tones, on the surface it shows the pontil mark, numerous frequently spaced small bubbles, traces of the blowing spiral and the beginning of iridescence. Measurements: Base D. 4.6 cm, presv. H. 3.1 cm.

Cat. No. 74: Aksaz (Aks.94. BN. 121) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light green tones, on the

surface it shows numerous frequently spaced small bubbles and dense iridescence. Measurements: Base D. 4.6 cm, presv. H. 1.9 cm.

Cat. No. 75: Aksaz (Aks.94. BN. 122) Free blowing technique and tool shaping, symmetrical folded ring base, leg and body fragment, made of transparent glass in light greenish yellow tones, on the surface it shows the pontil mark, numerous frequently spaced small bubbles and polishing with fire. Measurements: Base D. 4.4 cm, presv. H. 2 cm.

Cat. No. 76: Aksaz (Aks.94. BN. 124) Free blowing technique and tool shaping, symmetrical folded ring base and leg fragment, made of transparent glass in honey-colored shades, on the surface it shows the pontil mark, numerous small bubbles and dense iridescence. Measurements: Base D. 5.2 cm, presv. H. 1.7 cm.

Cat. No. 77: Aksaz (Aks.94. BN. 125) Free blowing technique and tool shaping, symmetrical folded ring base and leg fragment, made of transparent glass in light greenish blue tones, on the surface it shows numerous large and small frequently spaced bubbles and polishing with fire. Measurements: Base D. 5.4 cm, presv. H. 2.8 cm.

Cat. No. 78: Aksaz (Aks.94. BN. 127) Free blowing technique and tool shaping, symmetrical folded ring base and leg fragment, made of transparent glass in light green tones, on the surface it shows numerous large and small bubbles, traces of the blowing spiral and the beginning of iridescence. Measurements: Base D. 6 cm, presv. H. 2.1 cm.

Cat. No. 79: Aksaz (Aks.94. BN. 72) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in light green tones, on the surface it shows very distinct traces of the blowing spiral, the pontil mark and the beginning of iridescence. Measurements: Base D. 4 cm, presv. H. 1.8 cm.

Cat. No. 80: Aksaz (Aks.94. BN. 73) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in honey-colored shades, on the surface it shows very distinct traces of the blowing spiral, the pontil mark and the beginning of iridescence. Measurements: Base D. 4.4 cm, presv. H. 1.4 cm.

Cat. No. 81: Aksaz (Aks.94. BN. 75) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in green tones, on the surface it shows distinct traces of the blowing spiral, the pontil mark and the beginning of iridescence. Measurements: Base D. 5.4 cm, presv. H. 2 cm.

Cat. No. 82: Aksaz (Aks.94. BN. 76) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in green tones, on the surface it shows very distinct traces of the blowing spiral, the pontil mark and the beginning of iridescence. Measurements: Base D. 4 cm, presv. H. 1 cm.

Cat. No. 83: Aksaz (Aks.94. BN. 77) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in green tones, on the surface it shows numerous large and small frequently spaced bubbles and the beginning of iridescence. Measurements: Base D. 5.4 cm, presv. H. 1 cm.

Cat. No. 84: Aksaz (Aks.94. BN. 79) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in greenish yellow tones, on the surface it shows distinct

traces of the blowing spiral, numerous large and small frequently spaced bubbles and the beginning of iridescence. Measurements: Base D. 4.4 cm, presv. H. 0.8 cm.

Cat. No. 85: Aksaz (Aks.94. BN. 80) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in green tones, on the surface it shows distinct traces of the blowing spiral and the beginning of iridescence. Measurements: Base D. 4.4 cm, presv. H. 0.7 cm.

Cat. No. 86: Aksaz (Aks.94. BN. 81) Free blowing technique and tool shaping, unsymmetrical ring base, made of transparent glass in green tones, on the surface it shows the beginning of iridescence. Measurements: Base D. 6 cm, presv. H. 0.5 cm.

Cat. No. 87: Aksaz (Aks.94. BN. 126) Free blowing technique and tool shaping, unsymmetrical ring base and body fragment, made of transparent glass in green tones, on the surface it shows distinct traces of the blowing spiral and the beginning of iridescence. Measurements: Base D. 6.8 cm, presv. H. 3.1 cm.

Cat. No. 88: Aksaz (Aks.94. BN. 129) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light greenish yellow tones, on the surface it shows a few large and small bubbles and the beginning of iridescence. Measurements: Base D. 5.2 cm, presv. H. 1.6 cm.

Cat. No. 89: Aksaz (Aks.94. BN. 130) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows the beginning of iridescence. Measurements: Base D. 5.2 cm, presv. H. 1 cm.

Cat. No. 90: Aksaz (Aks.94. BN. 131) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light greenish yellow tones, on the surface it shows a few large and small bubbles and the polishing with fire. Measurements: Base D. 3.6 cm, presv. H. 1.1 cm.

Cat. No. 91: Aksaz (Aks.94. BN. 132) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows a few large and small bubbles and the beginning of iridescence. Measurements: Base D. 3.8 cm, presv. H. 1.1 cm.

Cat. No. 92: Aksaz (Aks.94. BN. 133) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows a few large and small bubbles and the beginning of iridescence. Measurements: Base D. 4 cm, presv. H. 0.9 cm.

Cat. No. 93: Aksaz (Aks.94. BN. 134) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows a few large and small bubbles and the beginning of iridescence. Measurements: Base D. 4.4 cm, presv. H. 1.3 cm.

Cat. No. 94: Aksaz (Aks.94. BN. 135) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows numerous large and small bubbles and the polishing with fire. Measurements: Base D. 4.6 cm, presv. H. 1 cm.

Cat. No. 95: Aksaz (Aks.94. BN. 136) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows numerous frequently spaced small bubbles and the beginning of iridescence. Measurements: Base D. 4.8 cm, presv. H. 1 cm.

Cat. No. 96: Aksaz (Aks.94. BN. 137) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows a few large bubbles and the beginning of iridescence. Measurements: Base D. 4.8 cm, presv. H. 1.7 cm.

Cat. No. 97: Aksaz (Aks.94. BN. 138) Free blowing technique and tool shaping, tube-shaped ring base, made of transparent glass in light green tones, on the surface it shows numerous small bubbles and dulling. Measurements: Base D. 5 cm, presv. H. 1.1 cm.

Cat. No. 98: Aksaz (Aks.94. BN. 138) Piece of window glass, transparent glass in light green tones, on the surface it shows numerous small bubbles and dulling. Measurements: Base D. 4.8 cm, presv. L. 4.8 cm, W. 3.9 cm, H. 0.2 cm.

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Aksaz Termal Kompleksi:

Cam Buluntuları ve Yerleşim Arkeolojisi Açısından Bir Değerlendirme

Özet

Aksaz Kaplıca Kompleksi Uşak İl merkezinin 48 km., Ulubey İlçesi'nin 18 km. güneybatısında Aksaz Köyü'nün ise 4.3 km güneydoğusunda yer almaktadır. Kaplıcanın 10 km kuzeydoğusunda Blaundos (Sülümenli), 24 km doğusunda Motello (Bekilli), 33 km güneybatısında Tripolis (Buldan) antik kentleri bulunmaktadır. Aynı zamanda Temenouthyrai'dan (Uşak-Merkez) Tripolis'e kadar uzanan kuzeydoğu-güneybatı yolu üzerinde yer almaktadır. 1994 yılında alanda birçok kaçak kazı tespit edildiğinden Uşak Müze Müdürlüğü tarafından oluşturulan bir ekiple kurtarma kazıları yapılmıştır. Kurtarma kazısı yapılan hamamın hemen kuzey sınırında Aksaz deresi yer almaktadır ve hamamın çevresinde çok sayıda sıcak su kaynağı olduğu tespit edilmiştir. Hellenistik Dönem'den Bizans Dönemi'ne kadar kullanım gördüğü anlaşılan bu kaplıca kompleksi ne yazık ki kurtarma kazısı yapıldıktan sonra kaderine terk edilmiş ve kaçak kazılarla daha da çok tahrip edilmiştir. Farklı mekanlarda yapılan çalışmalarda kemerli alanın içinde megara kaseleleri ile birlikte yüzlerce cam kap parçası ele geçmiştir. Bu çalışmadaki amaç kırsal yerleşim alanında yüzlerce yıl ayakta kalmış bir kaplıca yapısı ve burada ele geçen camların kullanımına yönelik değerlendirmelerle, bu arkeolojik alanın varlığıyla French'in belirtmiş olduğu yol güzergahlarına yeni bir eklemenin yapılması gerektiğinin vurgulanmasıdır.

Anahtar Sözcükler: Uşak; Ulubey; Aksaz; kaplıca; cam.

**Aksaz Thermal Complex:
An Evaluation in Terms of Glass Finds and Settlement Archaeology
Abstract**

The Aksaz thermal complex is located 48 km southwest of the centre of Uşak province, 18 km southwest of Ulubey district and 4.3 km southeast of Aksaz village. Blaundos (Sülümenli) is 10 km northeast of the spa, Motello (Bekilli) 24 km east and Tripolis (Buldan) 33 km southwest. Since many illegal excavations were discovered in the area in 1994, rescue excavations were carried out by a team from the Uşak Museum Directorate. The Aksaz stream is on the northern boundary of the bath where the rescue excavations were carried out and it was found that there were many hot water springs around the bath. This bath complex, which seems to have been in use from the Hellenistic to the Byzantine periods, was unfortunately abandoned after the rescue excavations and has been further destroyed by illegal excavations. The aim of this study is to emphasise the need for new additions to the road routes indicated by D. French with the existence of this archaeological site, by evaluating a thermal structure that has survived for hundreds of years in a rural settlement area and the uses of the glass found here.

Keywords: Uşak; Ulubey; Aksaz; thermal springs; glass.



Fig. 1) Aksaz after the rescue excavations

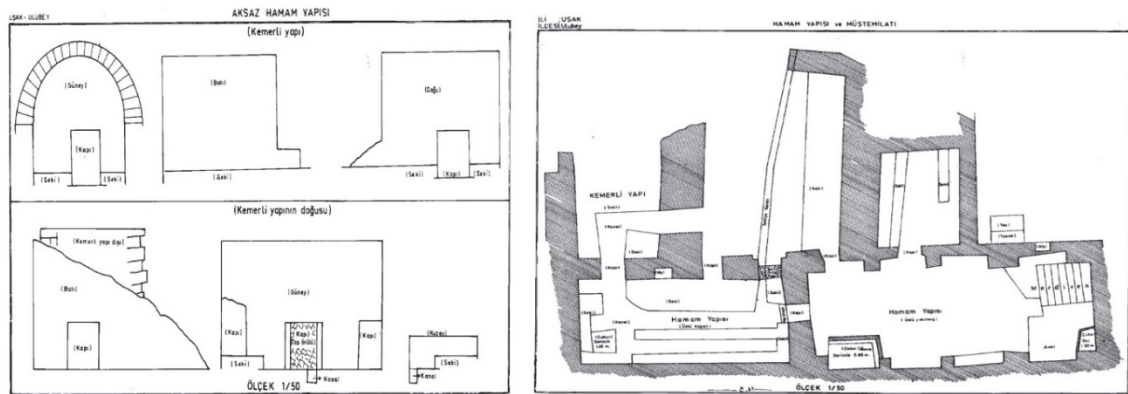


Fig. 2) The plan and section drawing of the rescue archaeological excavation area (Şeftalioğlu E. 1996; 114, 115, Draw. 2, 3)

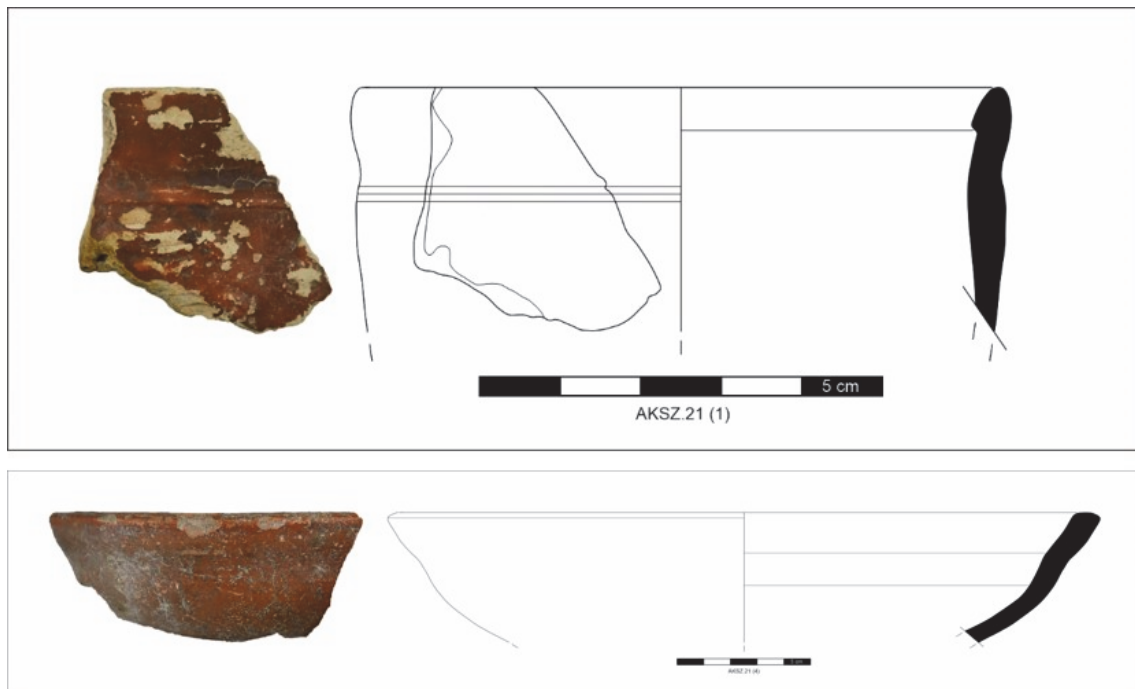


Fig. 3) Lykos Sykphos fragment and Laodiceia red slipped ceramic fragment

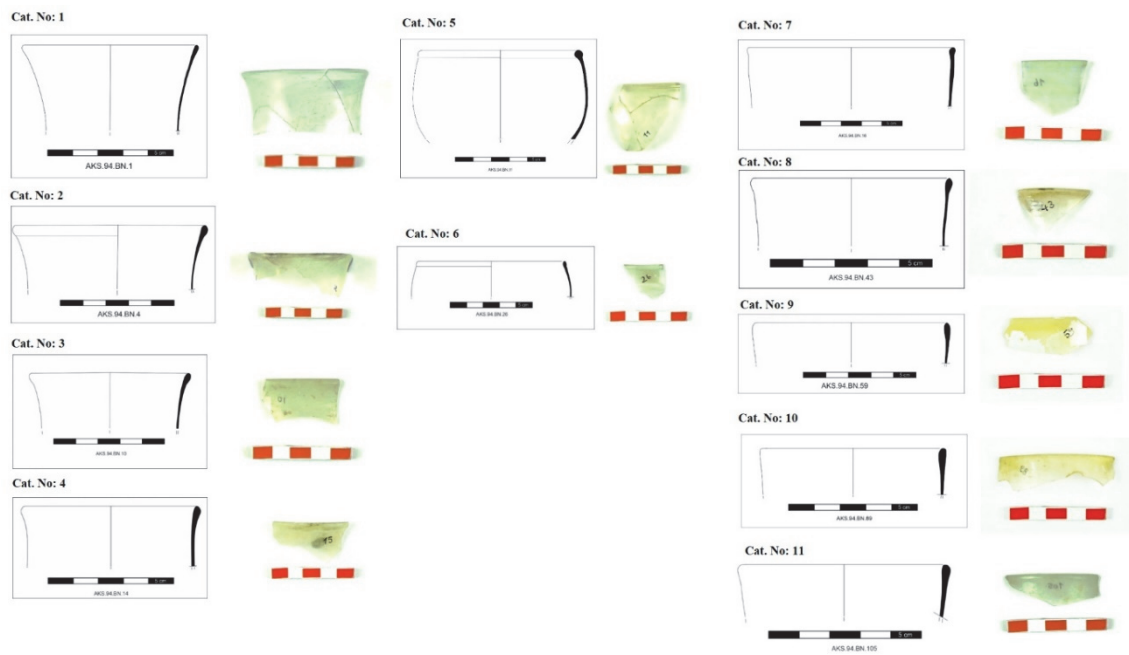


Fig. 4) Cups (Cat. No. 1-4), Bowls with inward-facing rounded rim (Cat. No. 5, 6), Bowls with upright bodies and rounded rim (Cat. No. 7-11)

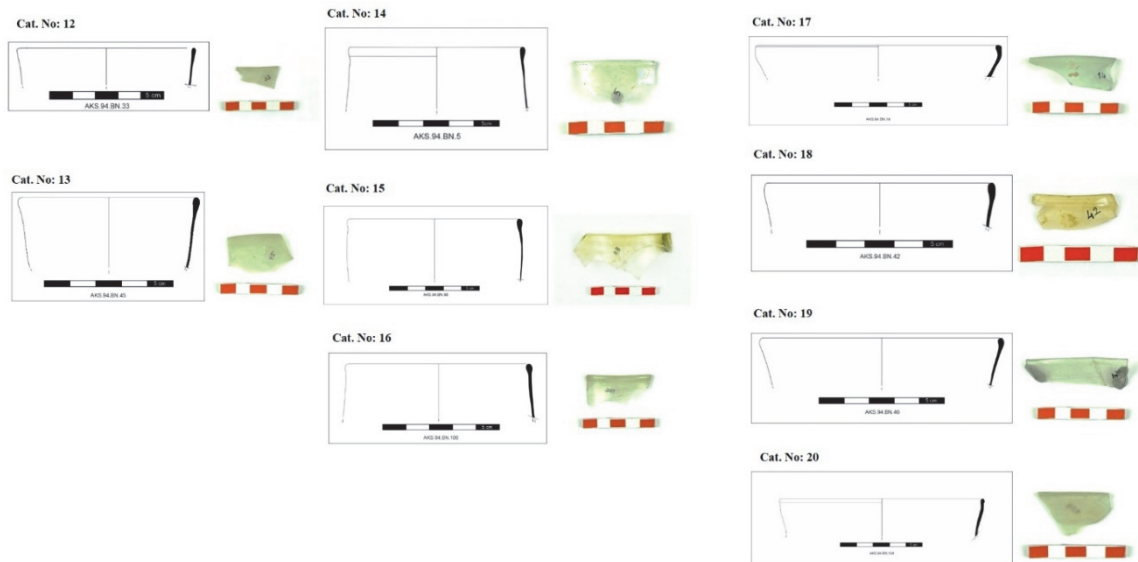


Fig. 5) Bowls with outward-facing bodies and rounded rim (Cat. No. 12, 13), Bowls with semi-spherical bodies and rounded rim (Cat. No. 14, 15, 16) and Bowls with conical bodies and rounded rim (Cat. No. 17- 20)

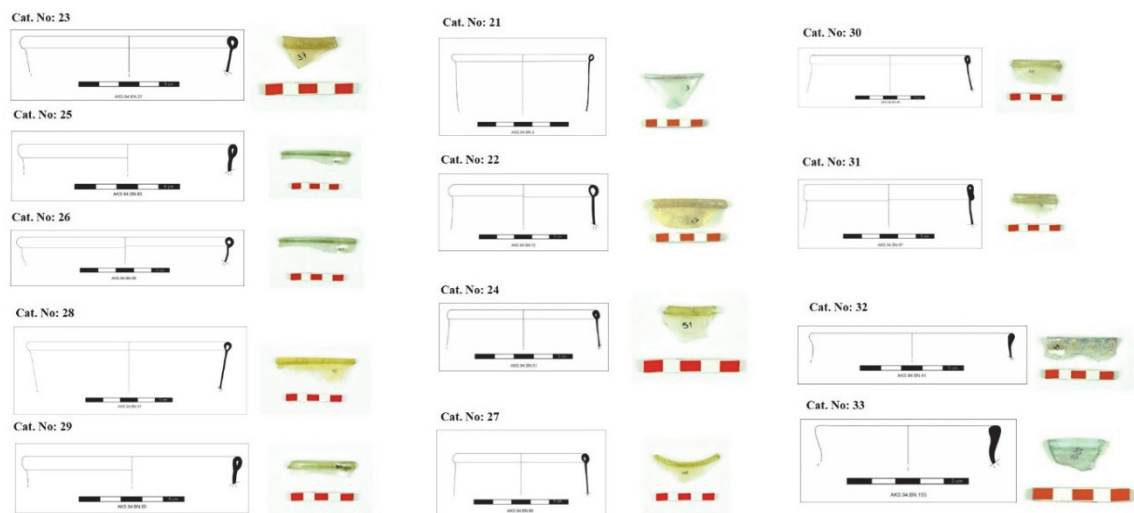


Fig. 6) Bowls with conical body and folded rim (Cat. No. 23-29), Bowls with semi-spherical and folded rim (Cat. No. 21, 22, 24, 27, 30, 31) and Jars (Cat. No. 32, 33)

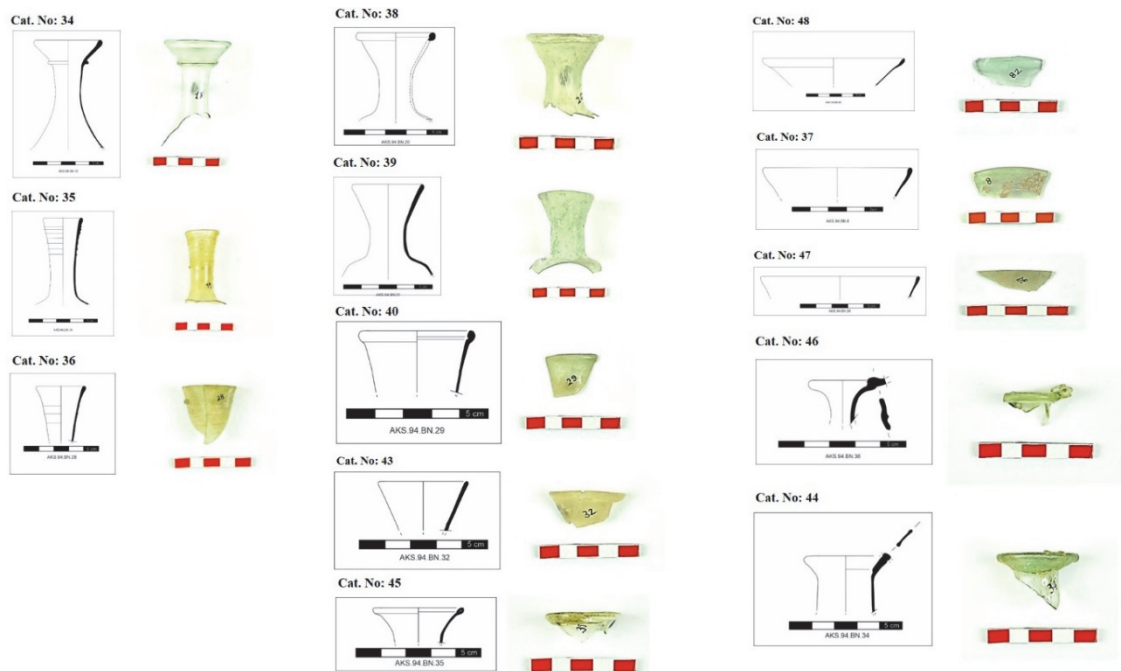


Fig. 7) Bottles decorated with threads glass (Cat. No. 34, 35, 36), Conical-necked bottles (Cat. No. 37, 38, 39, 40, 43, 44, 45, 46, 47, 48)

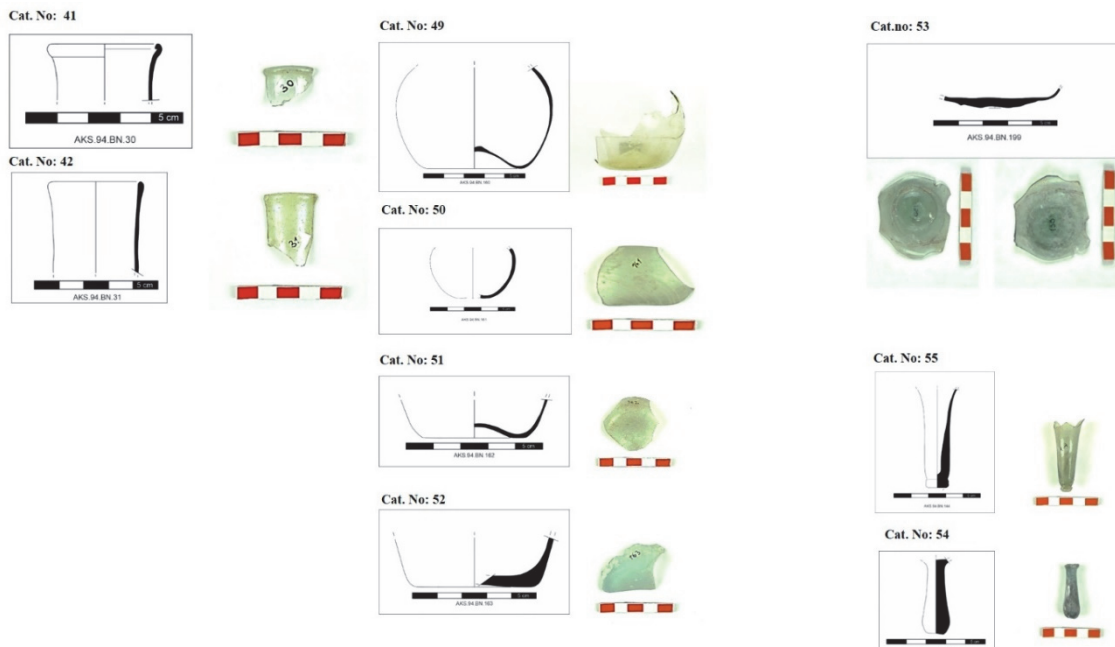


Fig. 8) Cylinder-necked bottles (Cat. No. 41, 42), Bottle/Pitcher bases (Cat. No. 49, 50, 51, 52), Openwork lamp (Cat. No. 53), Stemmed lamps (Cat. No. 54, 55)

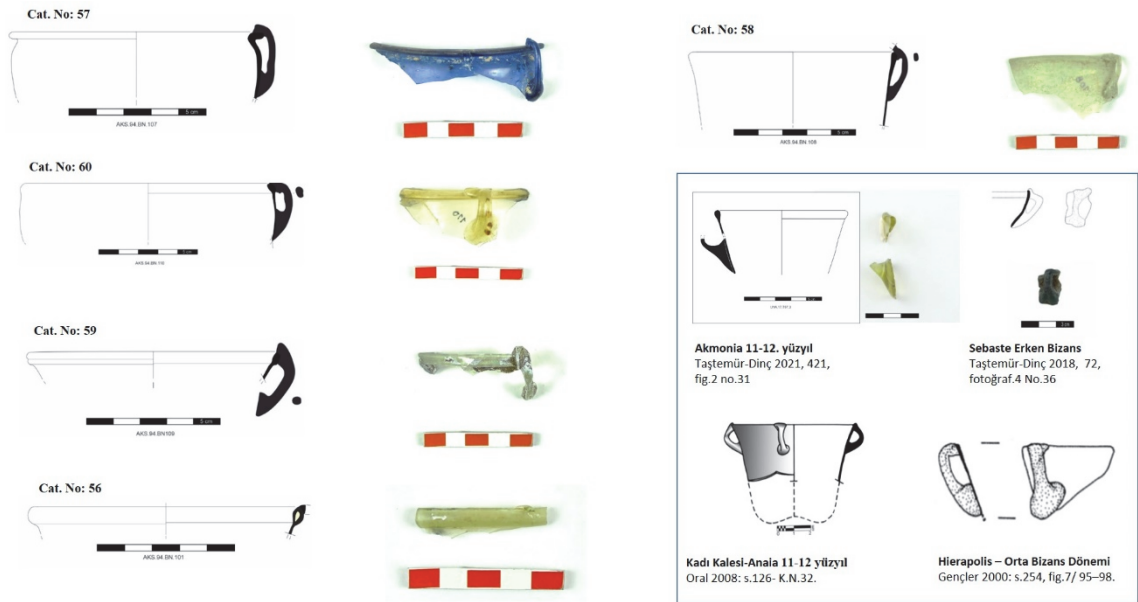


Fig. 9) Handled lamps (Cat. No. 56-60)

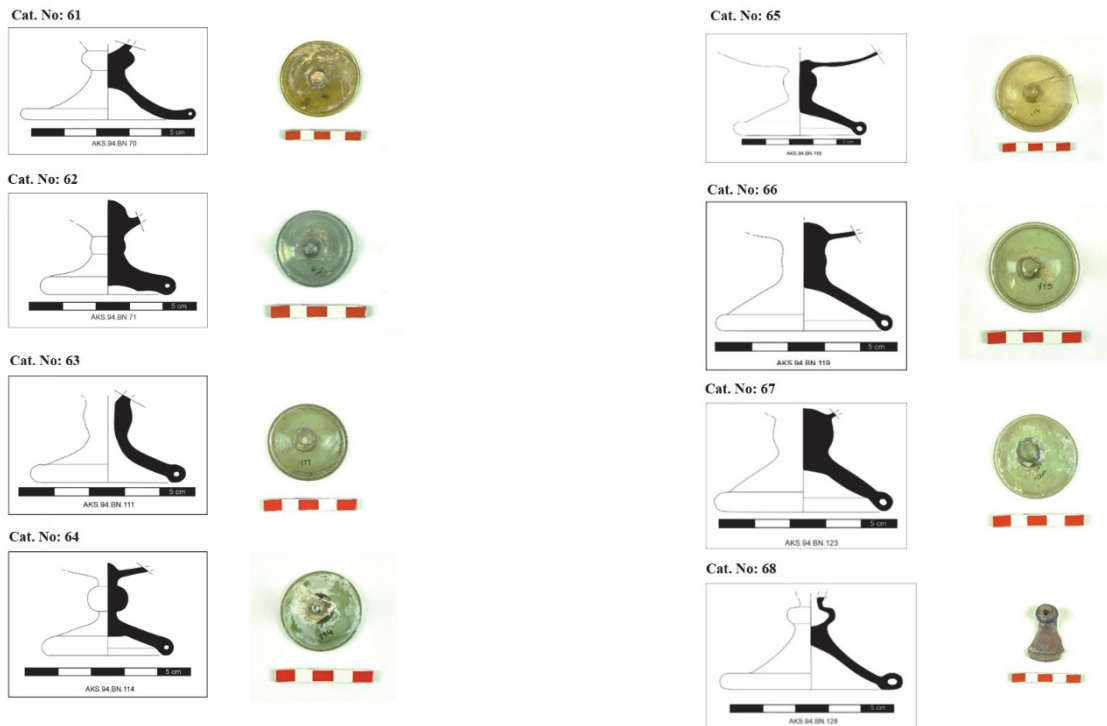


Fig. 10) Lamps with gnarled footed (Cat. No. 61-68)

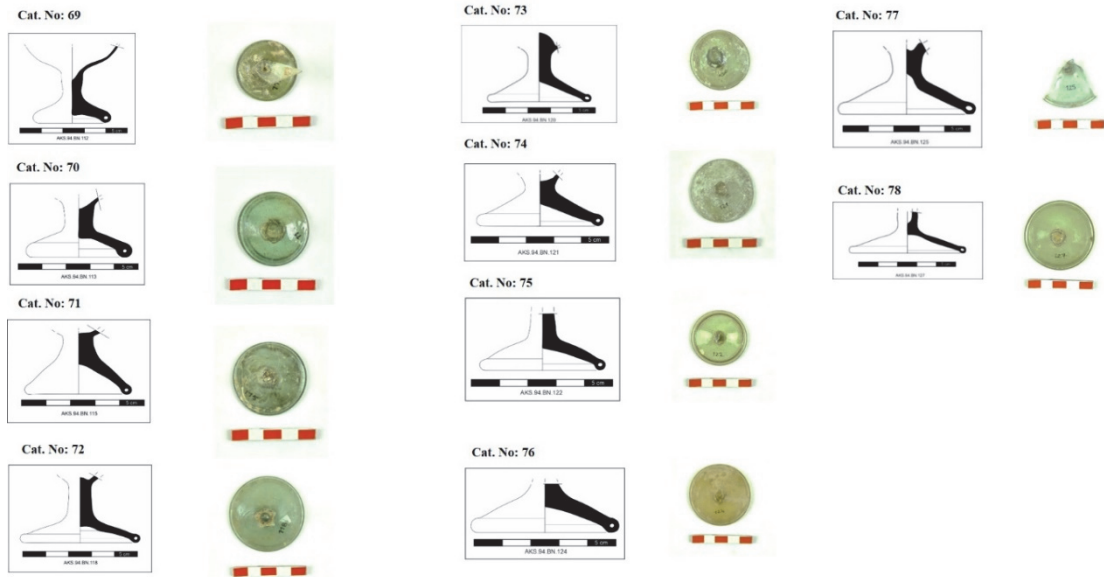


Fig. 11) Lamps with solid footed (Cat. No. 69-78)

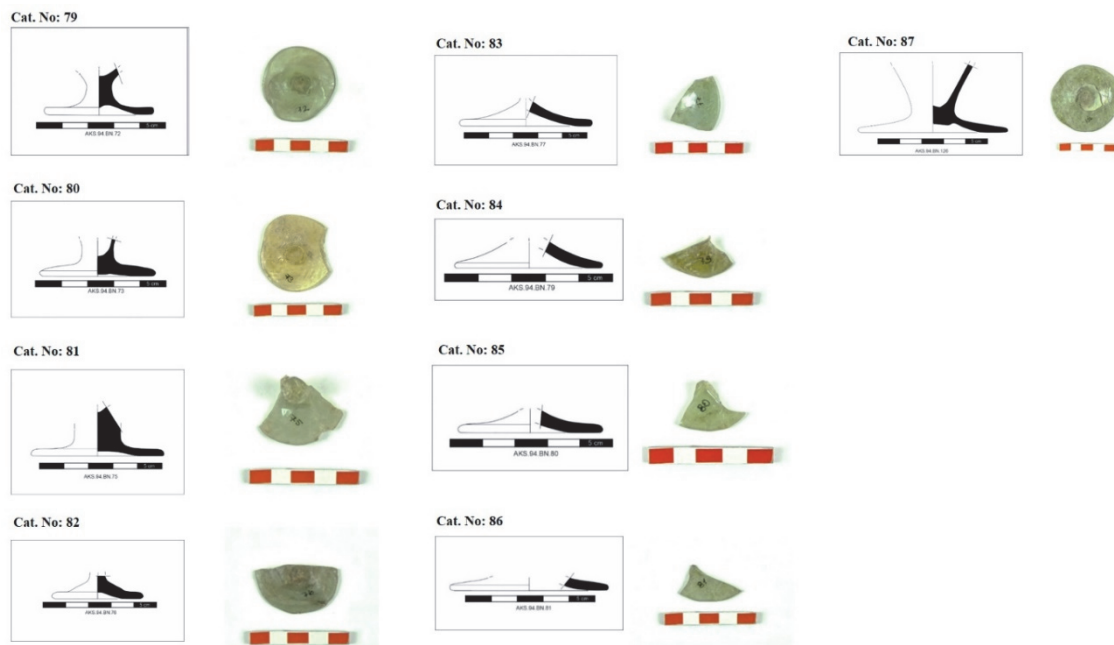


Fig. 12) Lamps with flattened foot (Cat. No. 79-87)

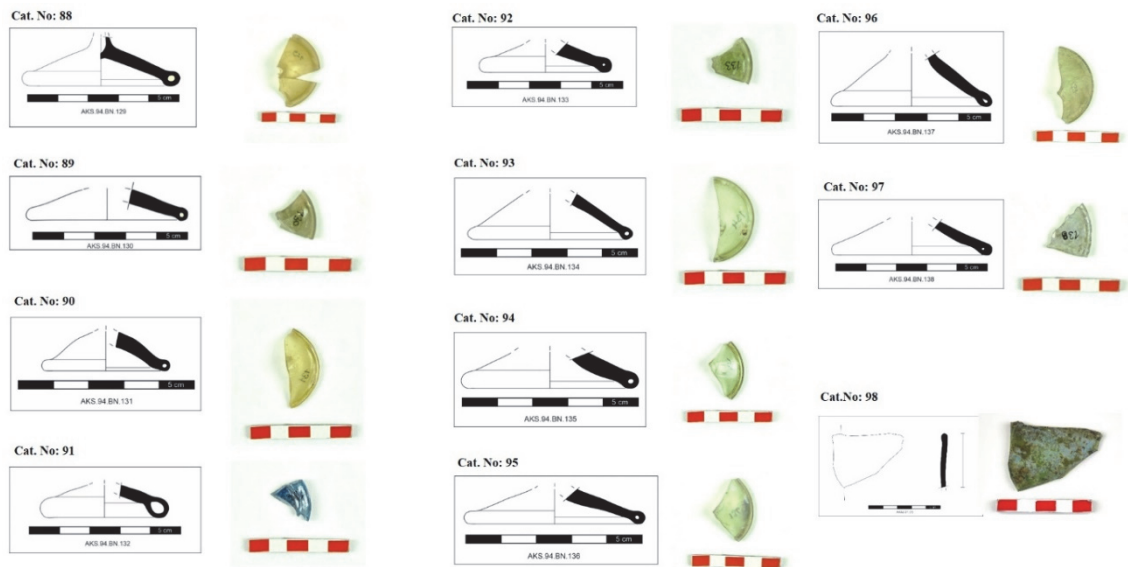


Fig. 13) The others and Window Pane (Cat. No. 88-98)

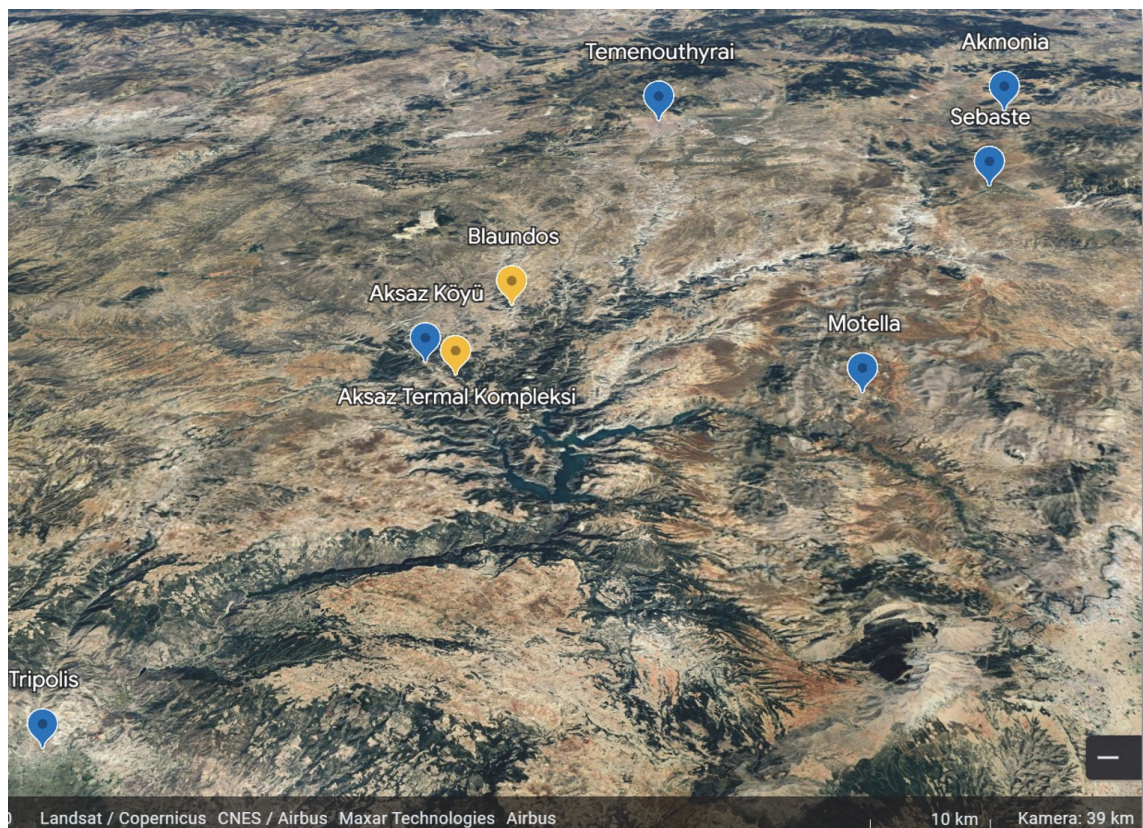


Fig. 14) Aksaz and the surrounding ancient cities

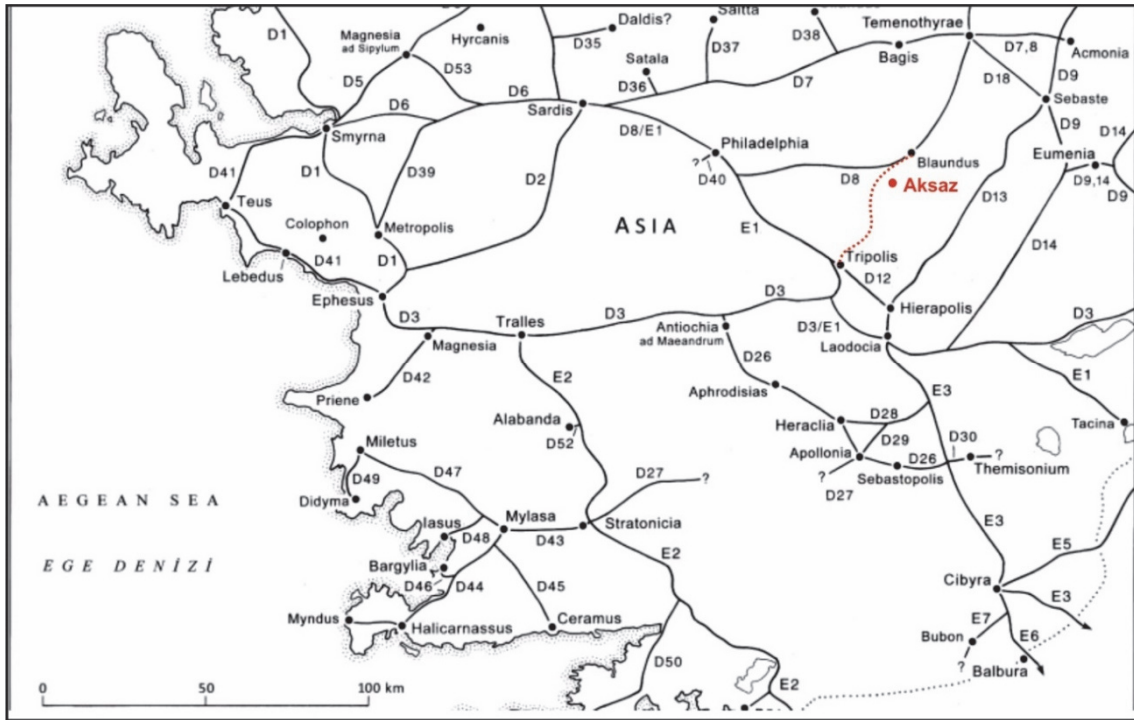


Fig. 15) D. French's map of Roman road routes and a new road proposal (French 2015: Synopsis Map, 132).



Fig. 16) Proposal for a new road route on the Digital Atlas of The Roman Empire (<https://imperium.ahlfeldt.se/>)