

NORTH *meets* EAST

Im Jahr 2016 wurde zum dritten Mal an der Universität Hamburg der internationale Workshop »North meets East. Aktuelle Forschungen zu antiken Häfen 3« ausgerichtet. Im Fokus stand erneut die besondere Bedeutung des antiken Hafens als Warenumserschlagplatz in Wassernähe. Um die Relevanz eines Hafens im regionalen und überregionalen Gefüge zu erfassen, ist ein differenziertes Klassifikationssystem zur Beschreibung von Hafenbestandteilen notwendig. Bisherige Forschungen zur Ausstattung von Häfen haben aber gezeigt, dass die Größe und die Ausstattung von Häfen sowie ihre Anbindung an das jeweilige Hinterland stark variieren können. Der Workshop beschäftigte sich vor diesem Hintergrund mit der wichtigen Frage nach den Parametern für eine terminologische Klassifizierung und Differenzierung von Hafensstrukturen. Methodische Ansätze und Fallbeispiele aus aktuellen Forschungsprojekten zur antiken Hafenforschung wurden im Rahmen der Veranstaltung diskutiert.



Ein Workshop veranstaltet von Julia Daum und
Martina Seifert an der Universität Hamburg
vom 15. bis 17. März 2016

North meets East. Aktuelle Forschungen zu antiken Häfen 3

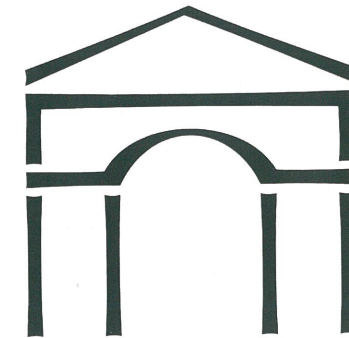
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GATEWAYS

Hamburger Beiträge zur Archäologie und Kulturgeschichte des antiken Mittelmeerraumes

6



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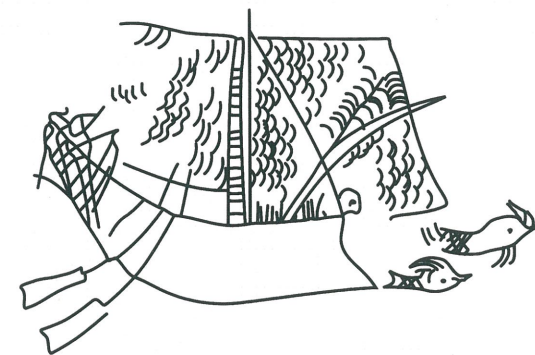
Herausgegeben von
Martina Seifert und Leon Ziemer

North Meets East 3

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Während der Treffen in den Jahren 2014 und 2015 hatte sich der Workshop North meets East vornehmlich mit den antiken und mittelalterlichen Häfen als Schnittstellen der Verkehrswege und des Handelsaustausches zu Lande und zu Wasser beschäftigt. 2016 stand die Tagung, für die zahlreiche Kolleginnen und Kollegen des DFG-Schwerpunktprogrammes 1630 »Häfen von der römischen Kaiserzeit bis zum Mittelalter« sowie einige externe Interessierte begeistert werden konnten, auf Wunsch der vorjährigen Mitdiskutanten im Fokus terminologischer Fragen.

Ausgangspunkt für die eingereichten Beiträge sollte die Frage nach der Entwicklung vergleichbarer Kriterien für eine »Klassifizierung von Häfen und Hafenanlagen in der Antike« bilden. Die fünf thematischen Sektionen sollten sich dieser Fragestellung aus verschiedenen Blickwinkeln nähern: Die erste Sektion zu Fallstudien stand hierbei ganz im Lichte von Feldforschungsprojekten und vor allem von archäologischen Arbeiten unter Wasser. Theoretische und methodische Ansätze der Hafenforschung waren dann Gegenstand der zweiten Sektion – hier sollten auf Grundlage der als Einstieg für die folgende Diskussion gedachten Fallbeispiele des ersten Abschnittes terminologische Probleme erörtert werden. Die folgenden beiden Sektionen setzten sich wiederum mit inhaltlichen Fragen, so mit dem Hafen als Wirtschaftsfaktor einerseits und den repräsentativen Funktionen von Häfen andererseits auseinander. Den Abschluss bildete die Vorstellung von vergleichenden Regionalstudien. Für den Abendvortrag konnten schließlich Ewdoksia Papuci-Władyka und Łukasz Miskiewicz mit einem Beitrag über die aktuellen Untersuchungsergebnisse der Jagiellonian University Krakow zu den Häfen von Nea Paphos gewonnen werden.

Nach jedem Vortrag bestand die Möglichkeit zu einer kurzen Aussprache. Im Plenum erfolgte eine Zusammenfassung der Beiträge und es gab genügend Zeit, um mit den Teilnehmerinnen und Teilnehmern intensiv über die eingangs gestellte Frage der Erarbeitung eines Klassifikationssystems von Häfen zu diskutieren. Insbesondere der Aspekt der gemeinsamen Terminologie zur möglichst genauen Charakterisierung von archäologischen Strukturen aus dem Hafenkontext wurde ausführlich besprochen. Es zeigte sich, dass die materiellen Hinterlassenschaften mit ihren regionalen und chronologischen Unterschieden ganz verschiedene Anforderungen an methodische Herangehensweisen und Interpretationen erfordern, um sich einem Verständnis der Befunde vor dem Hintergrund ihrer Einbettung in den historischen Kontext anzunähern.

**NEA PAPHOS AND ITS HARBOURS.
GATES TO THE MEDITERRANEAN IN THE LIGHT OF THE
JAGIELLONIAN UNIVERSITY RESEARCH**

(page 1–19)

Lukasz Misk – Ewdoksia Papuci-Władyka

Harbour cities, like Paphos, played the most important role in the history of Cyprus. There existed two Paphos cities: Old (Palaia) Paphos, famous Aphrodite's cult centre and the new, Nea Paphos founded at the end of 4th or beginning of the 3rd c. BC. The second became the capital of Cyprus for a long time. Starting from 2011 the Jagiellonian University in Kraków conducts archaeological excavations in the heart of the Nea Paphos city – the Agora, but also beyond it searching for the economic infrastructure and activity of the city in Hellenistic and Roman times. Harbours constitute one of the most important elements of this infrastructure. The results of previous studies in the main port in the south bay will be presented and the hypothesis of the second harbour (or haven) in the north-western bay will be revisited with rather positive conclusion in the light of our research.

**DIE HAFENLANDSCHAFT DER ÖSTLICHEN ADRIAKÜSTE ZWISCHEN
SPÄTANTIKE UND MITTELALTER**

(page 21–48)

Dominik Heher

The Dalmatian coast and its offshore islands have always been clearly oriented to the sea. Its maritime character was due to its relative isolation from the inner parts of the Balkan peninsula and encouraged by its strategic position that allowed not only crossings to and from Italy but most of all provided the best way to sail up and down the Adriatic Sea. The sea successively shaped the life of the ancient Liburnians, the Greek colonists and the Roman province of Dalmatia. However, the decline of urbanity that can be traced in virtually all of the Roman Empire's (former) provinces, also hit Dalmatia. The density of anchorages and small scale maritime networks decreased dramatically, caused by the disappearance of Roman villa-based economy. Similar to the Northern Adriatic, some of the ancient centres were almost completely abandoned by 600 AD. Dalmatia's orientation to the sea, however, grew yet stronger as can be seen with the rise of markedly maritime towns like Zadar, Split and Dubrovnik and the establishment of fortresses along the sea routes.

(page 49–73)

**JENSEITS VON EPHEOS:
HAFENANLAGEN AN DER KLEINASIATISCHEN WESTKÜSTE
IN SPÄTANTIKER UND BYZANTINISCHER ZEIT**

Andreas Külzer

Ephesos was one of the most important settlements in Western Anatolia during antiquity and the Middle Ages. There were considerable changes in the coastal landform due to the alluvial deposits of the river Cayster (Küçük Menderes) in this long period. Therefore, the Ephesians were forced to maintain and to repair the existing harbours, but also to create new anchorages in the urban area and its hinterland. In recent years, the scientific analysis of this situation leads to important new results, due to a combination of archaeological, geoarchaeological and historical methods. – About 110 kilometres airline distance to the north, one can find at the shore of the Çandarlı körfezi near the village of Kazıkbağları the settlement of Elaia, the former harbour of Pergamum. In the last years, a lot of scientific research was dedicated to this harbor place as well. – This paper refers to the harbor situation of both settlements. Furthermore, it presents some of the more important harbor cities situated between the two key points: in this region, one can find almost 30 percent of the early Byzantine bishoprics of the province *Asia*. Such a conspicuous concentration of outstanding *poleis* shows a well-developed communication system, both on land and on sea.

(page 75–84)

UNDERWATER SURVEY IN LAKE İZNIK – 2015

Mustafa Şahin – Ahmet Billir

An underwater archaeological survey was launched on the basilica remains that were discovered by our team in February 2014 during an aerial photographic survey of the Lake İznik and referred to as one of the top 10 discoveries in 2014 by »Archaeology«, a periodical magazine of the Archaeological Institute of America. The survey was carried out between 16.06. – 07.07.2015 and began by enclosing the area of the basilica by cork floats to make it visible from the surface of Lake İznik.

As a preliminary work for the survey, we established benchmarks based on the national geographic positioning coordinates and divided the entire working area into a grid of 10 m x 10 m squares with denoted letters in the north southern direction and numbers in the east-west direction in order to be able to document the underwater cultural heritage accurately. Among the finds are a partially buried pithos, potsherds, a fragment of an amphora and an abundant number of terra cotta roofing tiles. The most unexpected discovery of the survey was the graves inside and around the basilica. The graves extend until the remains of the temenos wall. Another important finding of the survey was the remains lying to the west of the wall that we called the temenos wall. Another interesting finding inside the lake is the exedra-shaped remains to the northeast of the basilica.

The basilica is located at the centre of the remains. Lying approximately 50 m off from the coast in the east-west direction, are the architectural remains with three naves with an overall length of 41,32 m, and width of 18,61 m. There is a sarcophagus in the section to the south of the apse, presumably a diaconicon. The northern part of the building to the north of the exedra, presumably a prothesis, measures 3,88 m in length and 4,31 m in width. To the west of the building lies the narthex and the atrium.

The plan and size of the basilica have similarities with the Church of Hagia Sophia (Murat II Mosque) in İznik. Considering the location of the structure, it appears that it was an extramural church on the shore of the lake. Therefore there might be a monastery complex in this location. The remains can be considered to have belonged to a basilica-plan church. Given the fact that it is outside the city walls and located near the lake, and there are many graves it is still likely that it may be martyrdom dedicated to St. Neophytes who became a martyr very young as we claimed earlier. In this regard more detailed information will be acquired after the archaeological excavations.

**THE UNDERWATER ARCHAEOLOGICAL RESEARCH ON THE
WESTERN BLACK SEA SHORES OF TURKEY**

Emre Okan – Cenker Atila

(page 85–95)

The Black Sea is entirely different from the other seas in terms of geology, morphology and biology. Before becoming a sea, it was initially a fresh water lake fed by rivers. Geophysical and geomorphological research which was conducted in the Black Sea, shows that the prehistoric shoreline lies at a depth of 150–155 m. The sea level of the Black Sea has changed many times until recently. The first change occurred 130,000 years ago when the salt water flooded into the fresh water lake via Bosphorus. Slowly, this changed the biological fauna of the Black Sea from fresh water to salt water. Especially, mollusc fossils that are found on the Black Sea shores are the proofs of this change. The last rising of the Black Sea had occurred after the last Glacial Period and it reached to the present condition. During this stage, many prehistoric settlements remained under the sea bottom. Recently, research conducted on the Southern Bulgarian coasts (especially on the river mouths) put forth this situation. Another event which shows the importance of the Black Sea is colonization movements occurring from about the 7th century BC. In that process, many Aegean cities, like Megara, Boiotia, Miletos etc., had established a lot of colonial cities on Black Sea shores especially in order to gain trade. But the striking point is that all founded colonial cities are on the river mouth. For this reason, all rivers, which flooded into the Black Sea, should be important both for the trade of goods and the transportation of people. In this way, trade penetrates into the Black Sea inland. Many Black Sea countries such as Bulgaria, Romania, Ukraine, Russia etc., have given importance to uncover their underwater cultural

heritages. Unfortunately, Turkey's Black Sea shores have stayed in the shade of Mediterranean and Aegean in terms of cultural research. In 2015, Duzce University, Department of Archaeology begun the archaeological survey along the coast of Western Black Sea. In these studies which are conducted on Karadeniz Ereğli (Herakleia Pontika) coasts, two important breakwaters were detected. The first one is the north breakwater of the commercial port of ancient Herakleia Pontika and only 50 meters of this breakwater have remained today. The second breakwater is located in the south of Modern Ereğli. This structure is better than the former. Its length is about 120 m. The interesting point here is that there is no trace of any settlement in this place. Although uncertain, this breakwater must have been used for protection against storms. Further studies will clarify this situation.

(page 97–120)

»UNTEN AM FLUSS«.

DER HAFEN DER COLONIA ULPRIA TRAIANA/XANTEN

Valeria Selke

The *Colonia Ulpia Traiana* and its predecessor were laid out on the bank of an ancient arm of the river Rhine, which is silted up today. Several excavations carried out between 1934 and 1993 outside the northeastern city walls brought to light well preserved remains of a wooden harbour. In front of *insula* 37 a wooden quay was built as early as 46 AD. Dendrochronological analysis of several posts has shown, that repairs or construction works took place in 76, 92 and 137 AD. A connection between some of these works and the elevation of the settlement to a *colonia* seems obvious, because a huge mass of building material had to be imported, especially for the public buildings.

During the first century we find northwest of the quay only small stabilisations of the riverbank. Later the quay is extending further north and it seems, there was an at least 200 m long wooden quayside at the beginning of the second century. The area east of the quay was artificially dried up and in 141 AD a 30 m long wooden footbridge was built. So far there has been no evidence for further construction although the *colonia* existed at least till 275/76 AD. A possible late antique harbour has not yet been found.

(page 121–145)

**DER FRÜHMITTELALTERLICHE HAFEN KÖLNS.
PRODUKTIONSSTÄTTE UND EXPORHAFEN FÜR GLÄSER**

Michael Dodt

The harbour of Cologne was an important factor in the development of the city onto one of the most important cities of Europe between late Antiquity and the Middle Ages. Between former Roman town wall and Rhine sprang up a settlement of merchants and craftsmen, who produced glass and metal and sold them via the harbour in the Early Middle Ages. Close Merovingian and Karolingian

sites of this settlement were excavated along the bank of the Rhine in the years between 1996 and 2012. The products of glass from these workshops were sold in the Merovingian period via the harbour to Krefeld-Gellep, Duisburg and other places along the Hellweg to the east or upstream the Rhine and Main, in the Karolingian period more via Dorestad to the North and the Baltic Sea, among others to Ribe and Haithabu. These harbours came to more importance as a result of relations to the Karolingian empire.

WHERE TO GO? – EIN AUSBLICK

Martina Seifert – Leon Ziemer

(page 147–157)

Working on ports and harbour structures and comparing them with other trading facilities the modern archaeology requires commonly used terms and definitions, which intend the same meaning between these different structures. To take them in a GIS-database similar used words and descriptions are needed. During the workshop the wish of a multilingual thesaurus was often expressed. The final discussion of this workshop tried to answer the question on the intention to classify port structures in different languages. The requirements seemed to vary between North and South Europe and also between Greek, Roman and Late Antique periods. The participants offered different suggestions to classify harbour structures, intended to try first with a minimal definition of requirements for a trading point with a water connection.

An underwater archaeological survey was launched on the basilica remains that were discovered by our team in February 2014 during an aerial photographic survey of the Lake İznik and referred as one of the top 10 discoveries in 2014 by »Archaeology«, a periodical magazine of the Archaeological Institute of America¹. The survey carried out between 16.06.-07.07.2015 and began by enclosing the area of basilica by cork floats to make it visible from the surface of Lake İznik as well as placing mooring buoys on the corners to determine datum points of the architectural remains (Fig. 1).

Nicaea was an ancient city in north-western Anatolia, and is primarily known as the site of the First and Second Councils of Nicaea (the first and seventh Ecumenical councils in the early history of the Christian Church), the Nicene Creed (which comes from the First Council), and as the capital city of the Empire of Nicaea following the Fourth Crusade in 1204, until the recapture of Constantinople by the Byzantines in 1261². The ancient Nicaea city is located within the modern Turkish city of İznik (whose modern name derives from Nicaea's), and is situated in a fertile basin at the eastern end of Lake Ascanius (whose modern name is Lake İznik), bounded by ranges of hills to the north and south. It is situated with its west wall rising from the lake itself, providing

1 This Project is supported by the Uludağ University Scientific Research Projects Coordination Unit, BUAP(F)- 2014/6 and titled »Hellenistik ve Roma İmparatorluk Dönemi Nikaia'sında (İznik) Arkeolojik

Yüzey Araştırması ve Tarihlendirme« (The Archaeologic Survey and Dating in Hellenistic and Roman Imperial Period Nikaia (İznik)).

2 Foss 1991, 1463–1464.

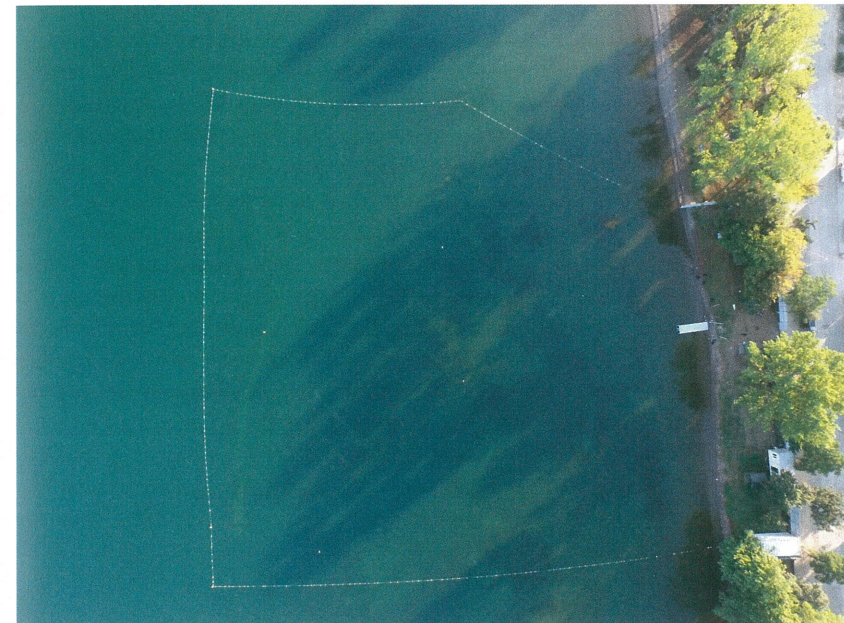


Figure 1:
Boundary of Survey
Area.



Figure 2:
Square plan of the
survey area.

both protections from siege from that direction, as well as a source of supplies which would be difficult to cut off. The lake is large enough that it couldn't be blockaded from the land easily, and the city was large enough to make any attempt to reach the harbour from shore-based siege weapons very difficult. As a preliminary work for the survey, we established benchmarks based on the national geographic positioning coordinates and divided the entire working area into a grid of 10 x 10 m squares were denoted letters in the north-southern direction and numbers in the east-west direction (Fig. 2) in order to be able to document the underwater cultural heritage accurately. Considering potential findings outside the gridding area, the coding allows for greater expansion. The cardinal reference line of the grid was drawn to cross the centre of the basilica in the east-west direction; the north of this reference line was denoted by the letter »K« and the south of the line by the letter »G«: southern part starts with »Ga« and extends southwards, while northern part starts with »Ka« and extends northwards. Another preliminary work included identification of side tracks for accuracy of the surface survey. We established 180 m long and 10 m wide side tracks, which started from shoreline towards the southwest beyond the site in order to avoid overlooking any potential areas during the survey (Fig. 3). The datum point of the track was again the centre of the basilica, with the southern line being denoted by -1G, and the northern line by +1K. The survey started with the lake basin, proceeding within the tracks from south to north. Following the placement of marker buoys on finding, they were all recorded



Figure 3:
Track lines.

onto a plan by total-station, and they were documented by *in situ* illustrations in alignment with grid lines. Among the finds are a partially buried pithos, pots-herds, fragment of an amphora and abundant number of terra cotta roofing tiles (Fig. 4, 5). The most unexpected discovery of the survey was the graves inside and around the basilica (Fig. 6)³. A total of 36 burials were identified, of which 18 were inside the basilica, including 5 in the atrium, 6 in the narthex, 6 in the central nave and one in the northern nave.

The graves lie in the east-west direction, with the heads pointing to the north and the feet pointing to the east. Covered by a gabled or saddleback roof made of either stone or terra cotta plates, they have survived intact to date.

In general, the graves were laterally delimited by roof-tiles in the form of plates, and pithoi fragments or thick walled coarse terra cotta sherds were used as head stones (Fig. 7). The graves were 2 m long on average. There were also smaller graves, probably belonging to children. The remains of a skull found in one of the graves provide evidence for the graveyard (Fig. 8).

In addition to the skull, bones lying scattered on the lake bed are also among other finds that belong to the graves (Fig. 9). So, it is certain that the basilica,

³ Building graves inside and outside a basilica is common in Christianity. e.g. see. Crete Eleutherna Basilica (Bourbou 2010, 31, Fig. 1.4.) or Zoodochos Pigi Church in Crete. <http://www.doaks.org/research/byzantine/project-grant-reports/2010-2011/bourbou#.Vdj-sZ-Vmuo.google_plusone_share> (01.06.2016).

doaks.org/research/byzantine/project-grant-reports/2010-2011/bourbou#.Vdj-sZ-Vmuo.google_plusone_share (01.06.2016).



Figure 4:
Potsherds.

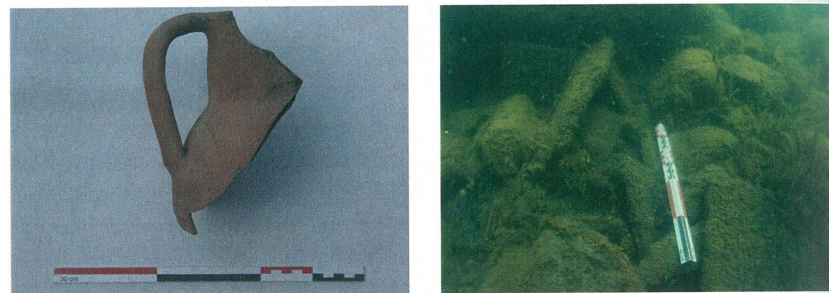


Figure 5 (left):
Fragment of an
amphora.

Figure 6 (right):
Specimen of a
grave.

both inside and outside, was used for burials. The graves extend until the remains of a temenos wall. The link between these graves and the Nicaea Necropolis will be elucidated by further studies.

Another important finding of the survey was the remains lying to the west of the wall that we called the temenos wall (Fig. 10). The walls of the structure extending in parallel to the temenos wall in the north-south direction are made of large, quadrangular cut stones almost of cyclopean size. The blocks are T-shaped. The wall is probably 14.88 meters long, and 0.8 meters wide, and 0.7 meters high. To the east of these remains, there is another structure built with rectangular rubble stones and powdered bricks between the temenos wall and the remains. The building is 11.13 m long, and 6.22 m wide with a wall thickness of 1.17 m.

For now, we suggest that the wall remains extending in the north-south direction towards the shoreline as seen during the first survey by aerial photography belong to a temenos wall.

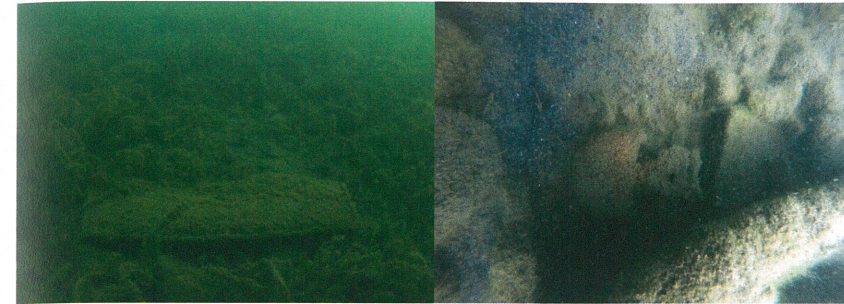


Figure 7 (left):
Terracotta sherds.

Figure 8 (right):
Remains of a skull.



Figure 9:
Specimens of bones.

The wall starts from the west wing of the basilica, continues in the north direction, and then extends in east direction on a smooth slope, finally reaches the coastline after a 9 m long interruption. Surprisingly, the wall ends up in parallel to the southern wall of the basilica in the south-west direction. That means in this section there was no barrier between the lake and the basilica. The wall remains is approximately 98 m off from the coast and 2.7 m below the lake surface.

The southern part of the wall was built with cyclopean cut stone blocks in substructure, and rubble stone masonry with powdered bricks in superstructure. This section of the wall is 48 m long, with an average width of 1.5 m, and an approximate height of 0.7 m. It appears that the bottom of the lake is approximately 2 m deeper after the wall, and it gets deeper with a steep incline at this section.

After an interruption of 9 m, the wall continues further for approximately 39 m. At this section, the wall changes in pattern as it were built of cut stones only.

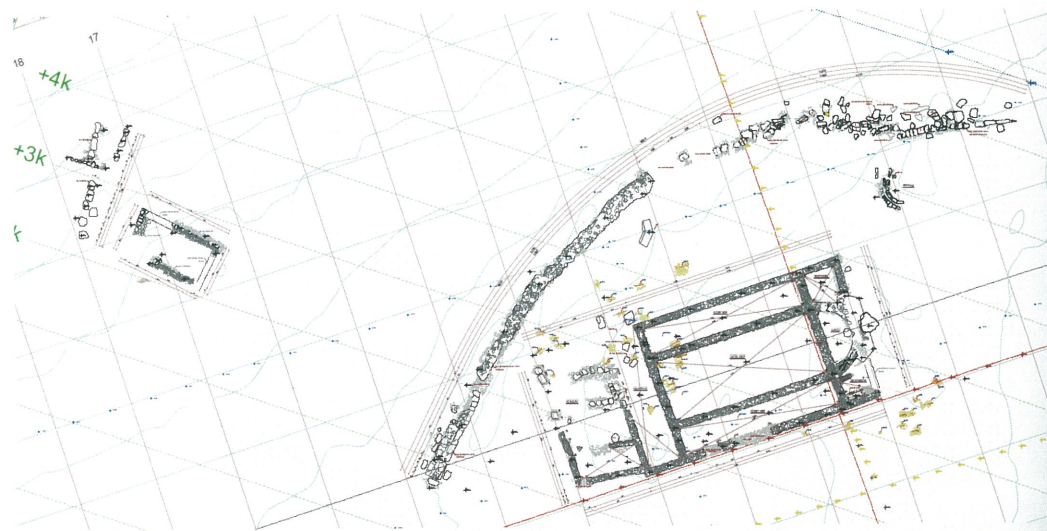


Figure 10:
Temenos Wall.

Figure 11 (right):
Exedra.

There are also some randomly scattered stone blocks in front of the course of stones that continues regularly. The regular course of stones being smaller than the scattered stones makes it less likely that they fell from the wall however it is most likely that they belonged to a breakwater built to block the hefty waves of the lake. We expect to have more information about the nature of the wall during our excavations.

Another interesting finding inside the lake is the exedra shaped remains to the northeast of the basilica. There was a 0.3 m wide space in the shape of a canal between the two blocks (Fig. 11). Its total length is approximately 6 m and its width is 1.26 m; the elevation difference between the eastern and the western parts is 0.24 m. Its function is still uncertain.

The basilica is located at the centre of the remains (Fig. 12). Lying approximately 50 m off from the coast in the east-west direction, the architectural remains with three naves have an overall length 41.32 m, and width of 80.61 m. The middle nave is 20.03 m long and 7.95 m wide. The northern nave is 3.32 m long, and the southern

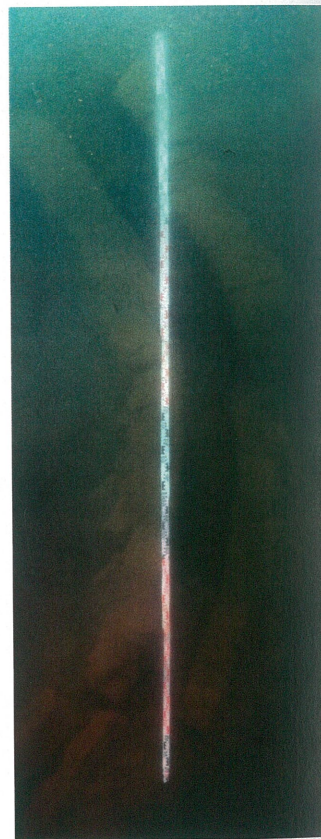


Figure 12:
Plan of the Basilica.

nave is 3.15 m long. Based on these measurements, the southern nave is a little narrower than the northern nave. The average wall thickness is 1 m. The diameter of the apse to the east of the building is 6.85 m.

There is a sarcophagus measuring 1,97 m in length and zero point seven 0,70 m in width in the section to the south of the apse, presumably a diaconicon; the measured depth is 0,30 m. The longer northern part of the sarcophagus was built by attaching parapet blocks (Fig. 13). The junctions were covered by mortar on the inside. The facts that the sarcophagus was not a monolith, but composed of separate parts suggest that it was placed inside after construction of the room. Excavations will yield evidence of any human remains.

The northern wall of the room is diagonal. The boundaries of the eastern section are not visible since it has been obscured by sedimentation. The approximate width of the room is 4,06 m. The northern part of the building to the north of the exedra, presumably a prothesis, measures 3,88 m in length and 4,31 m in width. There are no remains on the floor. Wall junctions suggest that both rooms in the pastophorium were built at the same time with the building. To the west of the building lies the narthex and the atrium (Fig. 14). The width of the narthex is 3,95 m. The opening on the narrow northern façade suggests that the entrance to the basilica was on this side.

The atrium on the westernmost part of the structure is approximately 7,87 m long, and its measurable width is 16,57 m. There is a 0,6 m deep niche on the wall at the junction of the atrium with the narthex.



Figure 13 (left): To the south of the atrium is a room, which is 2,89 m wide. At the centre, there are remains with a diameter of 3,65 m, whose function is unknown.

Figure 14 (right): General view of the Basilica.

The plan and size of the basilica have similarities with the Church of Hagia Sophia (Murat II Mosque) in İznik⁴. The wall foundations of both buildings were built with large cut stones. The only difference between them is that Hagia Sophia was built with bricks, and the walls of the basilica were made of rubble stones and filled with brick dust mortar. Similarly, there is also a sarcophagus in the diaconicon section of the Church of Hagia Sophia. The narthex of the Hagia Sophia Church had been damaged to a greater extent over time, and there is no atrium due to *cardo maximus*. Therefore, any data from the basilica during the excavations will contribute to the understanding of the plan of the Church of Hagia Sophia that was built in a similar form. The aim of the first part of the survey was to determine the construction layout of the basilica and the remains surrounding it, and these tasks were completed within the given schedule.

Considering the location of the structure, it appears that it was an extramural church on the shore of the lake. Therefore, there might be a monastery complex in this location. Based on its east/west axis, its rectangular plan, and having three naves and an apse on the eastern section, the remains should belong to a basilica-plan church.

Our observations showed there are at least 36 graves in and around the structure. Given the fact that it is outside the city walls and located near the lake, and there are many graves, it is still likely that it may be a martyrdom dedicated to St. Neophytes, who became a martyr very young as we claimed earlier⁵.

On the other hand, the First Council of Nicaea in A.D. 325 was depicted in the fresco in the Sistine Chapel in Vatican (Fig. 15). The meeting place of the First Council, which is recognized by all four major denominations in Christianity, still remains unknown.

4 For Church of Hagia Sophia, see: Möllers 1994. et al. 2014a, 8–10. 2014b, 76–84. 2014c, 42–45.

5 Şahin 2014a, 2–5. 2014b, 16–20; Şahin 6 Veth 2003, 295–306.



Figure 15: The Council of Nicaea Fresco in the Sistine Salon Vatican.

The above mentioned fresco depicts the council meeting, along with the building⁶. Although the fresco was dated to 1590, depiction of an *opus sectile* floor and landscape from a window on the left corner make the fresco interesting for our study. As the excavations continue, more information will be available on if the basilica floor was paved with mosaics or *opus sectile*.

Based on the landscape, it appears that the meeting was held in an extramural building and by the İznik Lake, which shares similarities with the building we are going to excavate. Was it the senate palace where the 1st Council took place?

It is already known that a Temple of Apollo was built in 183 outside the city walls during the Period of Roman Emperor Commodus (A.D. 180–192)⁷. According to the written sources, the leadman for the construction was Bactianus. Many large size architectural elements were found, mainly on the floor of the narthex of the basilica such as a marble column pedestal or other architectural elements of unknown functions. Can these elements suggest that the Temple of Apollo built by Commodus, are superimposed by foundations of the basilica?

While the excavations that we have recently started may provide answers to all these questions, the underwater remains of the Lake İznik still remain a mystery.

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7 Şahin 1987, 15.

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PICTURES

All figures are by the author except:

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Fig. 15: Nebbia, Cesare (1534–1614) The First Council of Nicaea Fresco. Biblioteca Apostolica Vaticana, Vatican Museum. <http://www.artic.edu/aic/resources/resource/2720>

The underwater archaeological research on the Western Black Sea shores of Turkey

INTRODUCTION

The Black Sea basin, today, hosts highly important archaeological remains. The archaeological importance of the Black Sea which is differing from other seas can be grouped under several titles as follows:

- The Prehistoric conditions of the Black Sea (Geological features and submerged settlements).
- The anoxic environment.
- The colonial movements continuing through the ages.
- The rivers and the river transportation

It is well-known that the Black sea is entirely different in terms of geology, morphology and biology from other seas, e.g. the Aegean Sea and the Mediterranean, as it was initially a fresh water lake fed by rivers (mainly the Danube, the Dnieper, the Dniester) prior to being flooded by salt water and becoming a sea¹. The recent research, conducted on geomorphological features of the Black Sea, has put forward this theory². According to this theory, the Black Sea has transformed from a fresh water lake to the salty, deep, and the largest inland water. The first step of this process occurred 130.000 to 70.000 years BP. In this stage, the Bosphorus valley was broken and the salt water of the Aegean flooded into the Black Sea basin.

This period and this event have been accepted by some scholars as »Noah's Flood«. In her publication, Apostolova said that »in the *Anonymous Roman Chronograph* from 234 AD, the sons of Sim (son of Noah) were listed and the people which take their origin from them. In a later variant of the document from 354 AD, the name of the Bulgarians has been mentioned as related to the grandson of Noah – Ziezi«³.

The sea level changes which occurred during the development process of the Black Sea are best observed on the terraces and the river mouths which are located on the coast of the Black Sea⁴. The other important point which takes attention is the transformation of the sea mollusks from fresh water to salt water. This transformation occurred in the anoxic environment in a depth of 155 m below (Fig. 1). This environment is especially important for the archaeology of the Black Sea, because the archaeological artefacts in this anoxic layer are found unharmed. The best example of this is a Byzantine ship which was found by Dr. Ballard during his deep sea research conducted of the Sinopean coast of Turkey in 2000⁵. Recent archaeological studies conducted at the shoreline of the Western Black Sea coast where rivers spill into the sea have revealed traces of settlements from the Chalcolitic and Early Bronze Age underwater. These traces suggest that the area was inhabited by neolithic communities before the

1 Okan 2015b, 65.

2 Ryan – Pitman 1999.

3 Apostolova 2008.

4 For detailed information see: Apostolova 2008, 300.

5 Ward – Ballard 2004.