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BATHONEA

A long-lost city at the crossroads of Europe and Asia

MAPELA HILL, ZIMBABWE

Discovering the origins of one of Africa's first great civilisations

TUTANKHAMUN MYSTERY

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CONTENTS

36

FEATURES

- 14** **EGYPT**
Chamber of secrets
What lies behind the walls of Tutankhamun's tomb?
- 20** **ZIMBABWE**
Mapela Hill
The early birth of southern Africa's first great civilisation
- 26** **TURKEY**
Bathonea
Discovering a lost city where Europe meets Asia
- 32** **QATAR**
The crowded desert
Finding solid remains of ephemeral societies
- 36** **SWEDEN**
Hidden killer
A modern disease in a medieval monastery

26



32



20





ABOVE Firuzköy Peninsula on Lake Küçükçekmece. The long spit running into the lake is a protrusion belonging to the great harbour.

Bathonea

DISCOVERING A LOST CITY WHERE EUROPE MEETS ASIA

Few archaeologists today expect to experience the sort of dramatic discovery that featured in antiquarian expeditions of the 19th century. But **Dr Şengül Aydingün** has done just that, when she came across an ancient, long-forgotten city with a magnificent harbour and lighthouse, right on her own doorstep.

The Firuzköy Peninsula juts into a huge freshwater lake called Küçükçekmece, on the western fringes of Istanbul. In the 19th century, a Neolithic cave site was discovered at Yarımburgaz, about 1.5km north of the lake. But our survey area, on the western shores, had been written off as being of little archaeological interest other than for a couple of Late Ottoman buildings. Yet, lurking just beneath the surface of the ground we tramped across, lay the remains of settlements spanning from the Late Ottoman era back as far as the Early Palaeolithic period.

Europe's first farmers

The landscape within our 4km by 1.5km survey area enjoys perennial water sources, forests, two different seas, and a mild climate – as ideal an environment in which to live as anyone could want, at any period in its history. Moreover, it lies at the crossing point between East and West, and between the Aegean realm and the Black Sea basin, about 20km from the Bosphorus – the channel of water that separates Europe from Asia. Without this strip of water, Istanbul would occupy a narrow land-bridge between two continents. We were conducting our survey here because we believe that

BELOW Dr Şengül Aydingün discovers ceramic sherds in spoil heaps left by locals digging wells, evidence that early Neolithic farmers settled in this region.



ALL IMAGES: Haldun Aydingün



RIGHT Part of the continuous harbour wall that runs the length of the peninsula's coastline, and which once was studded with moorings and harbour facilities.



is exactly how the landscape looked as recently as the 1st millennium BC.

The summer of 2007 was very dry, and though our survey permit did not include the right to excavate or to open deep profiles, there was no restriction on the study of wells the farmers had already opened. A huge pile of earth next to one of the wells provided us with a fine inverted sample of the layers of the tell, with the most ancient levels on top. We could immediately identify layers that incorporated coarse and poorly fired Neolithic pottery. Inside the well, the entire 4m of profile was visible, with the cultural strata in between marine sediments, showing that sometimes the sea reached this point while at other times there was evidence of human activity. And geophysical survey we carried out next to the well revealed signs of possible buildings and settlements.

Just 500m from the well was a field whose crop of sunflowers had recently been harvested and uprooted. Sunflowers have relatively deep roots, which means

that when they were pulled out, artefacts buried below ground had been dredged up with them. Within a few weeks, we held in our hands a collection of stone tools: a uniform assemblage of yellowish flints comprising mostly finished tools, mainly long narrow blades and knives, but also three distinctive naviform cores and other pointed tools that closely resemble Pre-Pottery Neolithic B (PPNB) examples from Central Anatolia. These are the very first of their kind to be found across a wide landscape, and represent the proverbial 'missing link' for the transmission of agricultural knowledge from the Middle East to Europe: proof that the world's earliest farmers had worked this land.

We also recovered scores of coins, ceramics, and architectural elements from the Hellenistic period through to

the Ottomans. But then, right at the end of the 2007 season, came our greatest discovery, one that was to prove the turning point in our investigations. Thanks to the drought brought on by the year's unusually hot, dry summer, water levels in the lake dropped significantly, revealing a massive stone sea wall that had been constructed to the highest standard.

Lost city found

We know that in ancient times this part of the peninsula, now inside the lagoon, formed a bay opening onto the Marmara Sea, with excellent potential for mooring. However, the discovery of the long, superbly built sea wall was totally unexpected. The style of construction belongs to the 4th/3rd century BC, and the wall measures about 1.5m in width. Astonishingly, it runs the entire length of the peninsula, about 4km or more.

Then our underwater team discovered a small building inside the lagoon, about 250m from the shore. Its position, at >



LEFT The harbour pier, which joins a Roman road that leads directly to the agora 100m to the west.



LEFT One of the two trial trenches, 4.3m deep, to reveal the stratigraphy of the harbour site.

what was probably the entrance to a harbour, combined with its square layout suggest we had located the remains of a lighthouse. Finding an ancient harbour is a significant feat; finding its lighthouse is even more so, for only two other Roman lighthouses are known to have existed in the eastern Mediterranean, at Alexandria and at Patara.

We were intrigued: there are no historical records for any sites in this area, so who built it, and why?

Such substantial structures would not exist in isolation. They surely belonged to a major port, possibly associated with neighbouring Constantinople, which was rising to prominence at this time in the 4th century AD as the capital of the Eastern Roman Empire. Therefore, we believed there should be more buildings in the vicinity. We were determined to find them, and applied to the Ministry of Culture and Tourism for an excavation permit. Obtaining a permit is fraught with difficulties: it must be signed by all the members of Council of Ministers, the Prime Minister, and the President – it is the highest-ranking assignment in Turkey. Fortunately, the regional municipalities of the Küçükçekmece Lake and the Istanbul Metropolitan Culture and Tourism Directorate gave us their support, so

of all the locations from which we had retrieved surface finds and obtained geophysical results, which would be the best to dig? About 2km north of the tip of Firuzköy Peninsula we had found two huge Hellenistic blocks and, 120m from them, a pier protruding into the lagoon. This, we agreed, was to be our excavation site, and work began with the digging of two trial trenches.

towards the end of the 2009 season we received our permit.

Now, we had to make some difficult decisions:

During the 2010 season, we established that the harbour was connected to a large agora with a Roman road. We also identified an apsidal building that showed evidence of having been destroyed and rebuilt at least twice, probably by earthquakes, in the 6th century AD and then again in the 11th century. The region around Istanbul is prone to earthquakes. The first to be recorded was in AD 342, and there have been many since, particularly in the 6th and 11th centuries.

BELOW Site Two proved to be a multi-layer site with Roman and Byzantine buildings, producing thousands of small finds – and even more questions.

BOTTOM The open-air cistern at the second excavation site belongs to the 4th and 5th centuries AD: some of the bricks bear the names of the emperor Constantine and his sons Constans and Constantius.



“IT IS COMMON PRACTICE IN THE REGION TO RE-USE OLD BUILDING MATERIAL.”



ABOVE A circular building dated to the Hellenistic period on Site One.

LEFT A fearless speleologist – almost certainly the first person in the past 1,000 years to venture down there – explores the cramped water channels linking an underground water system that once serviced the area.



Hidden Roman remains

In early October the same year, we received word from the Avclar Municipality's archaeologists that sizeable architectural remains had been recorded 1km north of our site in a densely forested area. The first structure was a 10m-long wall, in a poor state of preservation but showing enough construction detail to reveal it belonged to the Late Roman period, and was probably associated with water, possibly a cistern or reservoir. The second feature was located further down the gentle slope: another wall, this time 40m long, with architectural elements protruding here and there.

The overgrown vegetation that engulfed the ruins made us feel more like members of an expedition searching for Maya remains in the depths of the rainforest. Sadly, it was also obvious that the site had been targeted by treasure-hunters. Though they had caused some damage, it showed us that the site had much to offer. This, then, was to be our second excavation

site, and in 2011 we divided our team between the two locations.

The Late Roman structure associated with the water (which we nicknamed the Water Building) at Site Two, did indeed prove to be a reservoir, a huge open-air cistern capable of holding 7,000 tons of water.

Meanwhile, initial excavations at Site One were proving it to be as rich as anticipated, revealing a well-constructed Roman building on the lower part of the site and a building with apses – an early church – dating to the 5th to 6th centuries. We also uncovered colossal stone blocks that once belonged to an earlier Hellenistic monumental building, and which, we at first assumed, had been robbed for use in the construction of the

church. In fact, they had been recycled as building materials for a farm, itself recently abandoned and now also a ruin. It is common practice in the region to re-use old building material, and indeed our earlier surveys recorded Roman and Hellenistic stonework that had been incorporated into local buildings.

Helpful interventions

A pivotal moment for the excavation was the visit that year of Istanbul's Mayor, Hüseyin Avni Mutlu, with the Director of Culture and Tourism in Istanbul, Prof. Dr Ahmet Emre Bilgili. The mayor, responsible for a city of 15 million citizens, had just one hour to spare for our site – but he stayed for four! He then ensured we had adequate funding for the next two seasons of excavation, which meant we were able to build an excavation house for our 25-member team, with major research facilities and laboratories.

As so often happens during an excavation, it was in the final few days of the season that we noticed a tiny opening next to a rectangular stone block on Site One. We recorded a depth of 5m, but further investigations had to wait until the next year.

In 2012, we realised our 5m-depth reading was inaccurate. But the discovery was a fine one, for we had located the entrance to a subterranean water system. While we were still trying to decide which ▶

BELOW The Byzantine road and, lying a metre below it, the Late Roman road in the harbour area of Bathonea.





Palatial building

In 2013, thanks to the mayor's financial backing, we were able to mobilise a substantial workforce. At Site Two, we unearthed an octagonal structure with thousands of finely crafted tesserae. The building dates to the 4th century AD, pre-dating the Hagia Sophia of Istanbul. Though smaller than its famous counterpart, it was certainly covered with mosaics of a similar quality. Sadly, we will not be able to restore this bygone beauty to its former glory, but the *opus sectile* of the flooring is relatively well preserved, and hints at past splendour.

The possible church or martyrion belongs to a palatial complex, possibly a monastery, dating to the 4th-7th centuries AD. In an area of associated workshops, we recovered tools including moulds for making jewellery; slag from both glass-production and metal-working; and various sizes of mortars and apothecary spatulas. In one area, lying on top of a burned level, we found a terracotta lid, which, when we removed it, revealed a cache of 440 *unguentaria* (small vessels for perfumes or oils) lying beneath, all crammed into an area just 1m². They were probably the property of an apothecary, and is, we believe, the biggest single find of its kind in the world.

While Site Two was producing so many artefacts that even collecting and sorting them was proving a headache, we had recovered just a few small finds from Site



ABOVE The *opus sectile* floor of an octagonal structure that dates to the 4th century AD, possibly a martyrion, certainly once lavishly decorated with beautiful tesserae.
LEFT A cache of more than 440 small vessels, or *unguentaria*, used to hold oils or perfumes, probably belonged to an apothecary.

type of remote-controlled camera would best negotiate such extremely narrow passages, members of our team from the Anatolian Speleological Society (ASPEG) decided they would happily explore the canals themselves.

Now imagine you are the excavation leader, watching your friends vanish down a small hole in the ground, listening to their murmurs for a few minutes, and then hearing nothing but silence for hour upon hour. Finally, a long four hours later, the cave-explorers re-emerged, freezing cold – despite the Turkish summer – but ecstatic with success. They had investigated and then mapped a water-collection system that extended 150m into the ground.

We found a similar looking opening to subterranean water canals at Site Two, though this one was much narrower. The first 30m or so were so narrow that the speleologists were forced to crawl through the tight spaces, and when they wanted to come back, they had to crawl backwards as

there was not enough room to turn around. Geophysical survey has since revealed three more tunnel systems in the vicinity, which we hope to visit in the future.



RIGHT A tiny effigy of a Hittite goddess made of iron. This, along with remains of Hittite pottery, is the first proof that Hittite influence had reached mainland Europe.

“THE WATER CANALS... WERE SO NARROW THE SPELEOLOGISTS HAD TO CRAWL OUT BACKWARDS.”

One. But then, towards the end of the season, it produced one that was both spectacular and controversial.

As we dug deeper in the area around the apse of the 5th-/6th-century church, we discovered a layer of sea shells. Geologists confirmed that this was a sea bed, and advised us not to bother digging further. We ignored their advice, and continued our journey downwards in time. Fortunately so, for, beneath a shallow layer of sandy marine sediment, more finds began to emerge – one of which was a small, rusty metal object. Dr Aydingün immediately identified it as an iron statuette of a Hittite goddess dating to the first half of the 2nd millennium BC, and one of the most exciting finds of the entire excavation. A few days later and just 40m to the west, a similarly rusty statuette of a Hittite god was found in the same level, and, nearby, an almost complete Hittite pitcher with characteristic reddish Central Anatolian slip. These finds are hugely significant as they represent the first evidence for Hittite contact in Europe. No other examples have been found this far west, and they will undoubtedly stir up debate: we certainly do not claim to have found evidence of a Hittite presence, but, whether through direct contact or through trade, we are confident that Hittite material reached Bathonea.

Though excavations were scaled down in 2014, we did make yet another amazing discovery: a small fragment of white slip Cypriot-ware from the 17th to 15th centuries BC, proving that as early as the 2nd millennium BC, there was contact between the North Marmara region and Cyprus.

In our 2015 season, we were joined by a team of Polish archaeologists led by Dr Błażej Stanisławski. They are



LEFT An early Hittite pitcher from Central Anatolia is evidence of contact with Hittite tribes on the Asian continent.

ABOVE Amber from the Baltic Sea shows trade links with Nordic peoples.

BELOW One of the burials from the last days of the settlement, shortly before it was abandoned, probably as a result of a devastating earthquake, in the 11th century AD.

exploring Byzantine links with Nordic regions during the medieval period, and recovered artefacts associated with Viking trade here at Bathonea. Meanwhile, laboratory analysis of finds from previous seasons continues, and ongoing forensic investigation of the remains of more than 100 individuals promises to reveal much about the lives of these ancient Bathoneans who lived and died shortly before the site was abandoned in the 11th century. Evidence throughout the site and from different levels reveals Bathonea was rocked by earthquakes and rebuilt several times throughout its history. But, following a devastating

quake in the 11th century, most of the people fled, never to return. A depleted population held on until 1204, when an attack by members of the Fourth Crusade proved the final straw. The city was abandoned, and eventually forgotten for almost a millennium.

Excavation at Bathonea is still in its early phase. There is much yet to uncover, and we hope to reveal more of this great city's long-hidden secrets – and to share them with CWA readers! ■

SOURCE Associate Prof. Dr Şengül Aydingün, Kocaeli University, Turkey.

