## **Hazar Lake Sunken City**

Çiğdem Özkan-Aygün

## **Abstract**

In October 2005, an underwater survey was undertaken at Lake Hazar, where a sunken walled settlement was discovered which might confirm reports by travelers of a church and/or monastery<sup>1</sup> in the area named Surp Nişan, Cowk, Dzowak, or "Castle of the Lake", a religious center of the region in the 11<sup>th</sup> and 12<sup>th</sup> centuries.<sup>2</sup> While initial investigations revealed twelfth through 13<sup>th</sup> centuries ceramics, the unique construction of the brick architecture suggested the city might date to an earlier period

The first expedition to Lake Hazar began on 3rd June 2005, and the focus was the island of Kilise Adası (or "Church Island") that is located on the southwestern section of the lake. The closest modern settlement is Sivrice, which is three kilometers away. Lake Hazar is a volcanic lake at the foot of Mount Hazarbaba that is 30 km from Elazığ in Eastern Anatolia. The lake is 7 kilometers wide and 22 kilometers long and its deepest point is 250 meters. The Eastern Anatolian fault line passes under the Hazar Lake and is still active. Its activity has caused many changes in the water level of the lake during the years. The "sunken city" under the lake is the focus of the underwater survey and is located at the western end of the lake between the Kilise Island and the southern shore. In modern times, the water level has decreased, and the roof-line of the two towers in the gate of the city walls is exposed. By October 2005, an additional seventy centimeters of water had receded, thus exposing additional surface of the towers.

The investigation of the site was begun at the two towers (Fig. 1) and the result of the dive provided evidence of fortification walls with small rooms on the interior as well as the main gate of the city. The two towers were the gate-houses which flanked the city gate and were built 20 m apart on an east-west axis with the eastern gate house on an L-shaped floor-plan. The brick towers, or gate-houses, are constructed of bricks that are 40 centimeters long by 40 centimeters wide by 4 centimeters thick and are joined by mortar that is 4 centimeters thick. They seem to have been roofed with low vaults as there is evidence of a *pennaculum*. The gate-houses, at initial inspection, seem to have been three storied buildings, with the upper two levels containing arched windows. The lower level walls had embrasured loopholes instead of arched windows. The floor between the two upper stories is quite distinct on the interior where the joist holes for the floor are visible. The lower levels are accessed by a circular stairway. Three table amphora of different dimensions were found at the very bottom of the stairway (Fig. 2) and were similar to the Byzantine table amphora found on the 11<sup>th</sup> century Serçe Limani shipwreck.<sup>3</sup>

The protective circuit wall, which is currently underwater, was 5 m in height and constructed of brick and mortar (Fig. 3) with ashlar masonry in the lower course of the wall (Fig.4). The ashlar blocks were hardly visible as they were partially

 <sup>&</sup>lt;sup>1</sup> J. Saint-Martin, Mémoire Historique et Géographique sur l'Arménie, 1819, Vol. I, pp. 64, 196 and 442. N. Ardıçoğlu, Harput Tarihi, 1964, pp. 49-50. H. D. Andreasyan, Polonyalı Simeon'un Seyahatnamesi 1608-1619, Istanbul Üniversitesi Edebiyat Fakültesi Yayınları No. 1073, 1964, p. 97.
<sup>2</sup> L. Inciciyan, Geography (in Armenian), 1804, Vol. I, p. 240.

<sup>&</sup>lt;sup>3</sup> F. M. Hocker, A Ninth-Century Shipwreck near Bozburun, Turkey, The INA Quarterly, Vol. 22, No. 1, Spring 1995, pp.12-14.

covered with mud. The main wall is interrupted by seven vaulted rectangular rooms each of which are closed with convex walls with an embrasured loophole on each convex wall. The wall extends to the island, turns to the east and runs parallel to the southern shore of the island.

Among the underwater discoveries was a very well preserved building inside the walls. It was a long and narrow brick building that was constructed in the same method as the city walls that have a base of ashlar masonry with upper levels of brick and mortar. The wall ran 24 m in length and was 4 m wide and was angled to the southwest by 70°. The building used barrel vault construction that included loopholes on the barrel vault and eight windows on two sides (Fig. 5). The apsidal wall is partly destroyed and it was possible that the building might have been utilized by priests if there was a neighboring monastery. It is worth noting that it is only the gate-house towers and the fortified wall that provide defensive features as the area's geography provides natural defenses, such as the Hazarbaba Mountain and the lake. Because the island was originally a peninsula and was connected to the mainland on the southern side, the inhabitants built the defensive features on the southern side of the site and the lake protected the remainder of the site.

A road, with a width of 1.5 m, leading from the city gate to the main land was found during survey of the region. On the western side of the island, there are many crudely worked stones, which suggest a man-made construction but because of the nature of scatter, it is not possible to understand the plan. Ceramic sherds have been found on the island found, and on the northern side, pieces of medieval green-glazed graffito plates were discovered that are now housed at the Elazığ Museum.

Additional archaeological sites in vicinity were reviewed with the aim of researching construction techniques, such as the monastery of Kulvenk, an 11<sup>th</sup> century church of Venk in Tadım, the fortress of Harput and the church of St Mary. A similarity between the brick-work of the 6<sup>th</sup> century Byzantine tower fortress of Harput was found with the towers on the island, which, upon initial review, seems to be influenced by architecture from Constantinople.

Future research will be focused on the geological and geophysical properties of the area through a multidisciplinary study. The results will illuminate the seismic characterisits of the region and will determine how the water level rose and eventually covered the settlement. In addition, the continuing education for the local population regarding the history and preservation of the archaeological site, the reintroduction of pottery production in the village of Uslu, and possible future projects for the preparation of the site for tourism, including diving, are being coordinated with the local branch of Sivrice and with the help of CEKUL (The Foundation for Preservation for the Environment and Culture)

Photographs by Engin Aygün



Fig. 1



Fig. 2



Fig. 3



Fig.4



Fig. 5