

A cave settlement in Ardahan (Turkey): Harosman

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Abstract

The Kura (Kura) River is closely related to the region's economic, political, and security dynamics and hydropolitics. The Aras-Kür (Kura) river system is the largest river basin in the Southern Caucasus. The Kura (Kura) River flows 185 km in Turkey, then passes into Georgia and Azerbaijan, and empties into the Caspian Sea, collecting all surface waters throughout its basin. Located in the Eastern Anatolian Region of Turkey, Ardahan borders Georgia. Harosman Caves is the place that caused us to survey "Settlements, Caves and Rock Settlements in the Ardahan-Kür River Basin (2019-2022)". Harosman Caves, in the Kür (Kura) River basin within the borders of the Hanak District of Ardahan Province, where we made the first documentation studies in 2018, are located approximately 22 km northeast of Ardahan. The pyroclastic rock commonly observed south of Hanak and around the Harosman Caves is ignimbrite. This rock type is much more challenging to excavate than the soft tuff found in Cappadocia. While some places in the Harosman caves range, shaped by human hands, were chosen as living areas and places of residence, some of them are places of worship. Some of these places of worship are arranged as rock churches. These caves, which attract attention with their strategic location as well as being on the edge of Çot Suyu, a branch of the Kür (Kura) River, have been the scene of more intense use since prehistoric times, but especially in the pre-Christian and post-Christian periods. The Harosman caves are part of similar cave and rock settlements in the Kür (Kura) River basin, which continues to flow in Turkey and beyond.

Keywords: Harosman, Ortakent, cave, rock-cut church.

Introduction

The documentation work that we started in the Harosman Caves in 2018, with the permission of the General Directorate of Cultural Heritage and Museums of the Ministry of Culture and Tourism, turned into a survey project the following year. Since 2019, with the permission of the Ministry of Culture and Tourism, General Directorate of Cultural Heritage and Museums, we have continued our survey on "Settlements, Caves, Rock Settlements in the Ardahan-Kür River Basin".

The Aras-Kür (Kura) river system is the largest river basin in the Southern Caucasus. The Kür (Kura) River flows through Turkey for about 190 km, then passes into Georgia and then Azerbaijan, and flows to the Caspian Sea, collects all surface waters throughout its basin and is the largest river in the region. The Kura River, which takes its source from the mountains in the south of Ardahan Göle District, continues to flow in an east-west direction from Ardahan to Kaşlıkaya Village after flowing in a large semi-circle from its source to the west. From this point, it changes direction towards the north. As in most of the basin, the river flows in deep canyons in Ardahan. In this region, where the age of volcanism is relatively young (approximately 3.8 - 1.8 Ma), the fact that the river bed developed in volcanic rocks is so deep can only be explained by the continuous uplift of the region. It is thought that the formation of these deep canyons, whose wall heights vary between 150 and 300 m in places, is caused by tectonic movements formed by two critical faults in the northeast-southwest and

northwest-southeast directions in the north and east of the river and as a result, the region rises regionally from east to west. The fact that the canyons to the west of the Kür (Kura) River are deeper than the canyons to the east is probably another result of this rifting. Depending on this regional elevation, plateaus were formed on the northern and southern sides of the Kura River at an altitude of 1750 -1850 m.

Almost all of the rock formations observed in the region are very young volcanic. All the rocks outcropping in a vast region starting from the west of Ardahan to the Georgian border are the product of the volcanic activity observed in the Upper Miocene - Lower Pleistocene (approximately 3.8 - 1.8 my) range in this region (Duru & Keskin, 2014). Two different rock formations are observed in the research area and its surroundings.

The first of these is about 10 km east of Ardahan, starting from the level of Altaş Village and outcropping on both slopes of the Kura River up to the Georgian border, from the valley floor to the uppermost parts, and following the river with a bandwidth of 4-5 km on the upper plateau. The Kura Volcanites cover a large part of the study area (Aktimur *et al.*, 1991). As a result of the analysis, the age of the unit was determined as Upper Miocene-Lower Pliocene (3.8 – 3.6 my), and it is the oldest rock formation detected so far in the region (Innocenti *et al.*, 1982). On top of the Kura Volcanites, which are the first phase of volcanism in the Kura Valley, comes the Pliocene aged (3.6 – 2.6 my) Öncül Volcanite, which represents the second phase of volcanism in the region (Duru & Keskin, 2014).

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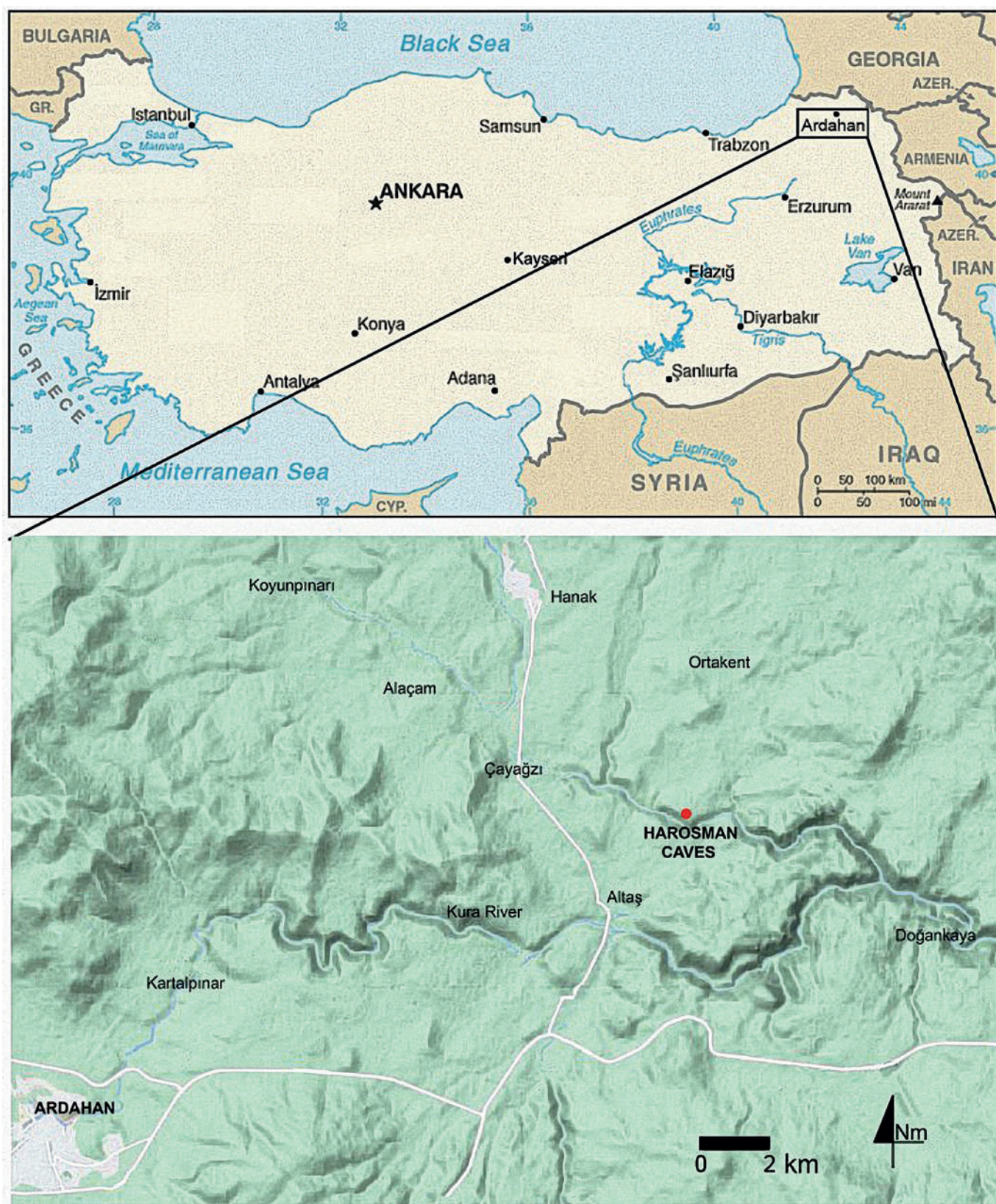


Fig. 1 – Location map showing Harosman Caves (after Google Maps - elaboration A. Yamaç).

Harosman Caves

Harosman Caves in the Kür (Kura) River basin within the borders of the Hanak District of Ardahan Province are located in the Çot Stream locality, approximate-

ly 22 km northeast of Ardahan Province (fig. 1). Çot Stream is one of the water sources feeding the Kür (Kura) River. The pyroclastic rock commonly observed south of Hanak and around the Harosman Caves is ignimbrite. This rock type is much more difficult to



Fig. 2 – Harosman Caves (photo A. O. Turan).



Fig. 3 – Harosman Caves (photo A. O. Turan).

excavate than the soft tuff found in Cappadocia. Harosman Caves is the place that caused us to conduct a survey on “Settlements, Caves and Rock Settlements in the Ardahan-Kür River Basin (2019-2022)”. Harosman Caves, located in the northwest-southeast direction and their facades in the southwest direction, are not natural but were carved into a steeply inclined tuff rock formation by humans. The northwest end of the chain of caves is at an altitude of 1805m, and the southeast end is at an altitude of 1763 m. The rock

on which these caves are located is approximately 236 meters long, 25 meters high and has an average slope of 14% (figs. 2-4).

The interior spaces of the caves grow towards the middle parts of the range from the southwest direction and become smaller-sized cave settlements towards the northwest. It can be thought that the caves in the southwest direction were mainly used for worship, and the cave settlements in the northwest side were arranged in smaller spaces so that they might have

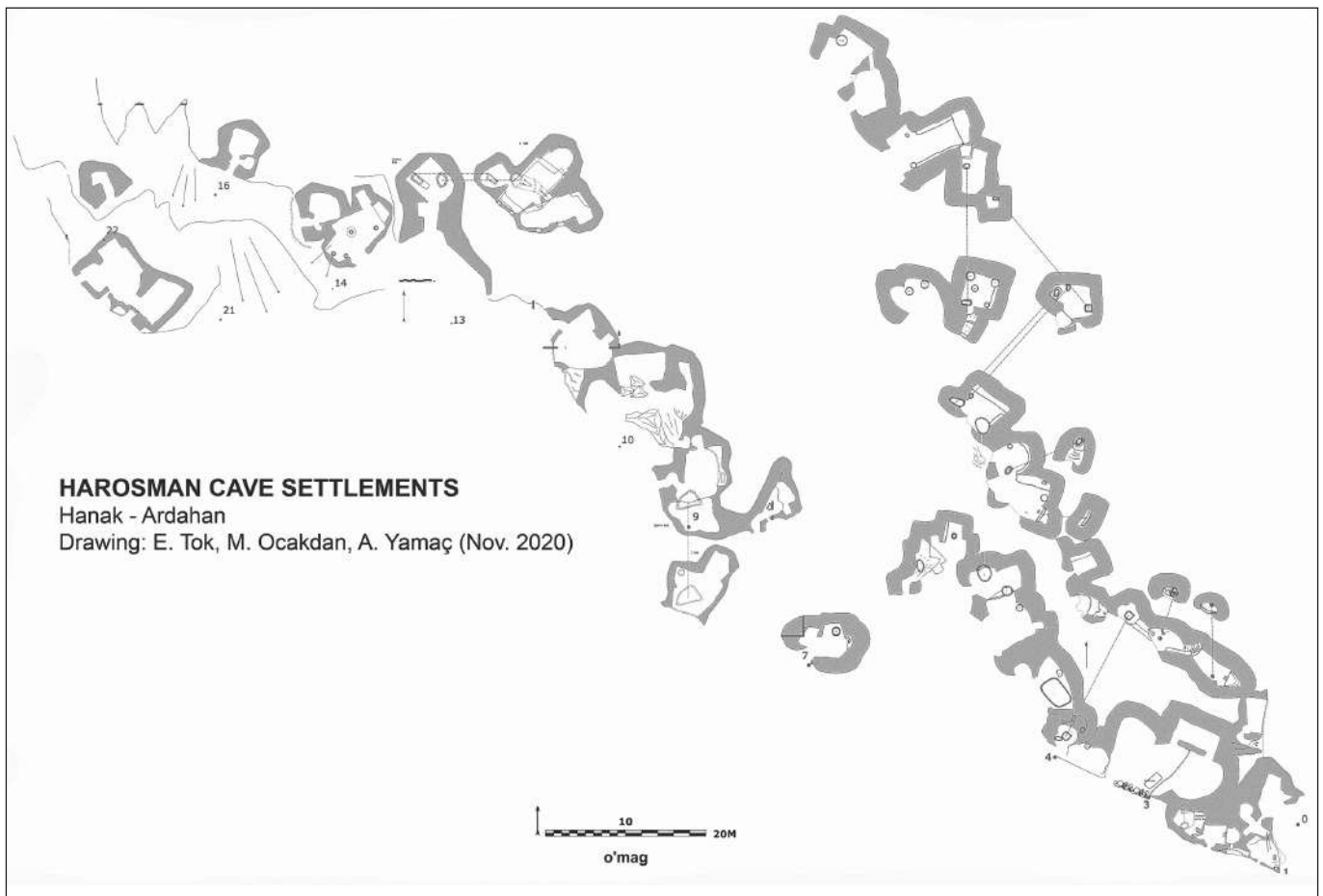


Fig. 4 – Map of Harosman Caves (drawing E. Tok, M. Ocakdan, A. Yamaç)

been used for shelter or residence. It is observed that almost all of the caves, which were also used as animal shelters until a few years ago, were covered with a dense layer of soot caused by the fire lit for heating and lighting in the period from the first period to the present day. One of the most essential parts of the cave complex is the place arranged as a rock church (fig. 5). It has been used as an animal shelter until recently. The part of this cave, that we think is the only entrance gate, has been partially destroyed for natural reasons. In this section, an unoriginal entrance is seen between a wall and a rock built with coarse stones similar to the limestone type collected from the environment during the recent cave use. Although traces of a thick layer of white plaster were found on the surfaces of some walls of the cave, it was impossible to get an idea whether the other walls were plastered due to the thick oily soot and soot layer on the other walls of the building. The naos is in the west, and the apse is in the east. To the south of the apse, there are sections belonging to *Pastohorion*. It is understood from the grooves opened in channels on the floor, side-upper walls and ceiling that these parts of the rock church were closed and separated from the *naos* part by piers/plates. Except for the apse part, culverts were opened along the northern wall of the cave. There is also a *martyrion* part in this rock church. Unfortunately, it

has been understood from the illegal excavations made here that there are graves under the place of worship. It was determined that more than one individual was buried in the grave, both inside the illicit excavation pit and on the church floor, from the pieces of human bone that were thrown together with the illegal excavation soil and building stones that may belong to the graves. One or more burial chambers carved into the rock structure under the ground were destroyed. In addition, an incised cross (*Khatchk'ar*) motif was found on the outer surface of one of the upper floor caves on the upper side of this rock church.

The spatial arrangement of another cave within the cave complex is particularly noteworthy. The entrance to this cave is through a carefully opened doorway. The cave has two rooms; The first is the section where the entrance is located, and there is an altar in the middle of the opposite wall, a niche on the side wall and a window opening on the riverside in a small area in the form of an apse, which is reached by two steps on the east side. The second room is accessed through a rectangular-shaped door. The sacrificial/votive/offering pits and some of the associated channels opened on the floor of this place were, especially from the facade of the cave facing the river. We interpret this situation as a ritual held in the cave in question and its relationship with a river cult.



Fig. 5 – Harosman Caves, inside the rock-cut church (photo G. Arda).

The second floor of these caves, carved into the rocks, is reached by tunnel passages opened through another cave, which first continue vertically and then horizontally. This cave is arranged in three spaces and looks like a minor example of the large church below. Among the Harosman Caves, one detail that we encounter only in this cave is remarkable: The arrangement made by carving the rock into the northwest wall of one of the places resembles a mihrab form, and the part with a step next to it resembles a pulpit structure. However, the direction of both structures does not support this.

Some of the table-like rock arrangements that may have been used as altars/altars in some caves are intact; on the other hand, a large part was destroyed, or only the lower parts resting on the ground remained intact. In addition, arrangements made as places for offerings in the caves were also identified (fig. 6).

While some of the caves are carved into the rock mass consisting of a single space, it has been determined that most have 2-3 rooms, and the number of these places is more than 3 in some caves. The transitions between the spaces are provided through doors and stairs opened properly into the rock. It was understood that some of the caves were the spaces of a single cave, which looks like two or three separate cave entrances on the façade but is connected from the in-



Fig. 6 – Harosman Caves, votive place (photo G. Arda).



Fig. 7 – Harosman Caves, entrance (photo G. Arda).

side. Channel-shaped cavities and stepped formations on the sills of some cave entrances are traces of mechanisms used in door closing (fig. 7). There are culverts or lighting holes in the northern part of the caves and on the facades facing the river, and almost all of them have shafts. Seating benches, small and large niches on the walls and hollows used as shelves can be seen in almost all the spaces built into the rock. In addition to the single-storey ones, caves and places with two and three floors were also identified. Also noteworthy is a cave that has begun to be worked on but has not been completed. The side walls of the room after the cave entrance were partially worked out; unfinished chipped work can be seen on one wall and traces of an incomplete shaft creation can be seen on another wall. In our study in the area where the Harosman Caves are located, the remains of structures related to these were found in the southeast of this rock mass, in front of the caves, just at the foot of them and just southwest. Rows of worked stones were identified in the southeast, but the integrity of a building could not be fully understood due to seasonal conditions and the high grass cover of the land. At the foot of the caves, the wall made of processed stones that we found on the side of the road leading to the caves has survived to the present day, partially preserved. We also determined that a road formed by shaping a natural rock in the form of a ladder was used to reach the caves in the front level to the ones on the upper level. A few pottery fragments among the heaps of soil belonging to illegal excavators show Chalcolithic and medieval characteristics and provide evidence for using caves in pre-Christian times.

Conclusion

During our work in the field, some local people informed us that these caves were used as residences and animal shelters until recently and that many people have made and continue to do illegal excavations in these caves for a long time. This cave complex has experienced more destruction by human elements than by nature. There are intense illegal excavations on the floors and walls at every point the caves can reach. This heavy destruction, made by human hands, continues even today in the caves, causing the loss of culture to be experienced very quickly.

Since prehistoric times, the Harosman Caves have been chosen and arranged as sacred places because they have both a place of residence and places of worship. These places were used primarily for religious purposes in the pre-Christian and early Christian periods. These structures, shaped by carving into the rock, especially the rock churches, are one of the most suitable places as hermitages and worship places for the small religious communities, monks and priests living in the region, and are suitable for protection and concealment due to their location. After Christianity was recognized as a free religion at the beginning of the 4th century, separate buildings of worship were built in the immediate vicinity of these rock churches. However, some of the Christian population continued to use these secluded rock churches and associated spaces just to be tested. The Harosman Caves are part of the similar cave and rock settlements of the Kür (Kura) River basin, such as Vardzia in Georgia.

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