UNDERGROUND SHELTERS AND CLIFF DWELLINGS OF SAHMELIK VALLEY (KAYSERI – TURKEY)

Ali Yamaç
OBRUK Cave Research Group; Acikhava Apt. 16/7, Nisantasi, Istanbul, Turkey, ayamac@gmail.com

Abstract
Although the region known as "Cappadocia" is believed to be in Nevsehir Province of Anatolia (Turkey), the capital of Cappadocia in ancient times was the neighboring antique Caesarea which is known as Kayseri today. As the same in Nevşehir, in antique Caesarea the volcanic tuff which was piled up by the active volcanoes around was dug by the local people. Houses, churches, and protective underground settlements were built into those rocks and a troglodyte civilization had been established. One of the most interesting structures that were constructed by digging into rocks are 'underground shelters' which were used for defense and can widely observed across the region. The most significant features of those structures are living spaces and storage rooms interconnected by tunnels excavated underground and the millstone doors used to protect villagers from raiders. Since we started our project to explore and inventory underground settlements of Kayseri Province in January 2014 as OBRUK Cave Research Group, more than thirty previously unknown underground shelters have been explored and surveyed. Following our studies of which some has been presented in different articles and congress presentations, we began our survey in Develi District of this province by this year. This article describes the underground shelters and cliff dwellings located in Sahmelik Valley of Develi.

Keywords: Kayseri, Develi, Sahmelik Valley, cliff dwelling, underground shelter

Introduction
Kayseri is one of the largest provinces of Turkey with a surface area of 17.170 km^2; for example Slovenia is 20.273 km^2, and Lebanon is 10.452 km^2 to compare with Kayseri. As OBRUK Cave Research Group, we have performed our activities in five different districts of Kayseri as part of "Kayseri Underground Structures Inventory Project" which we have carried out for four years. When we completed our surveys in Tomarza District and began to survey and explore Develi District this year, we forecasted that this district with 1.187 km^2 surface area would at least as efficient as the others and apparently we are not wrong (Fig 1).The first location we began our survey in Develi was Sahmelik Valley. This valley starts 2 km north to Sahmelik Village which is located 66 km south of Kayseri city and extends to the north by 6 km (Fig 2). The valley is formed by ignimbrite rocks that are largely and deeply worn away by surface waters. In general, the whole area looks like a mesa due to upper flat sections of valley. Similar formation is very common in the region. There are mesas in Fırakdin Valley located 9 km south and in Ayşepınar Valley located 12 km east of this valley; and the walls of all those valleys have cliff dwellings as in Sahmelik Valley. The number of cliff dwellings on the steep walls of Sahmelik is not as high as the number of cliff dwellings in other valleys of Kayseri, such as Akbin Valley (GILLI 2017; YAMAC, 2017), Değirmendere Valley (YAMAC &TOK, 2015a) or Ötedere Valley (YAMAC & TOK, 2015b) and the cliff dwellings are only observed in two different parts of Sahmelik Valley. This article describes one cliff dwelling located to the north of valley, and two different underground shelters to the south of that structure, in the main cliff settlements.



Fig. 1 Location map showing Sahmelik Village

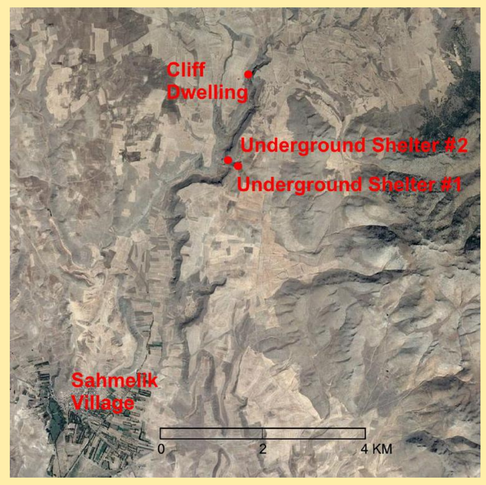


Fig. 2 Google Earth view of Sahmelik Village and the valley towards north.



Fig. 3 General view of the West Cliff Dwelling at the north of Sahmelik Valley. The entrance to the main structure is on the right side of the photo (Photo B. Toker).



Fig. 4 Stairway to the main entrance of Sahmelik West Cliff Dwelling (Photo M. Boyraz).



Fig. 5 Plan of Sahmelik West Cliff Dwelling (drawing by A. Yamaç).



Fig. 6 General view of the East Cliff Dwellings of Sahmelik Valley (Photo B. Toker).

Sahmelik West Cliff Dwelling
The most interesting cave dwelling of whole Sahmelik Valley is located on the northwest wall of valley (Fig. 3). The entrance is 7 m above the valley plain and the hand/foot holes still exist that were dug into the main rock to climb up the entrance. Currently accessible by iron stairs, this main entrance (Fig. 4) opens to a chamber of four sections with total area of 65 m^2. From this point on, the dwellingextends along with six interconnect ed different chambers to the southwest, and one of its chambers has a straight and a narrow tunnel of 18.5 m long that leads to the northwest (Fig. 5). The beginning or the end of tunnel has no millstone doors, traps or any other closing / protection devices. There is a chamber of almost 12 m^2 at the end of the tunnel that was smoothly dug. This last chamber has a storage place and another structure of which function is not clear. Although the function of this section which was dug into the main rock in the northwest corner of chamber is not quite apparent, it is obvious that it could not be a cooking place as the chamber has no windows or ventilation. Vigilantly, we could say that this small section can be a toilet that was carved into the main rock and completely full of debris. In general, this cliff dwelling basically appears to be a settlement, but can also be a military post mainly because it was dug so high from the ground, has many chambers with windows facing the entire valley and there is a prison cell-like room at the end of a long tunnel. Also, as it is located alone 2 km north of main settlement of the valley, its location can also support this military post theory.

Sahmelik East Cliff Dwellings
The 'East Cliff Dwellings' are located to the south of abovementioned 'West Cliff Dwelling' and on the east wall of valley (Fig. 6). Differently from 'West Cliff Dwelling' that is accessed by only one entrance and has seven chambers, this cliff has a formation of interconnected tens of structures and this place should be the main settlement of valley. The entire rock wall w as carved out and numerous connected cliff settlements were dug to the cliff. It is obvious that almost all of those structures were ho uses and barns, which decreasingly continue along the south curve of the main cliff wall. Some houses on the north wall were later turned into dovecotes. This 'Main Settlement Area' has two underground shelters.

Sahmelik Underground Shelter No 1
With a measured total length of 468 m, this underground shelter is accessed from a cliff dwelled house on the north wall of 'East Cliff Dwellings' and the main entrance tunnel is almost impossible to find. This structure - one of the longest and most complicated underground shelters that is surveyed in Kayseri so far - has 12 chambers spread over two different levels (Fig. 7). The length of the main entrance tunnel, which is protected by a millstone, is 82 m. The chambers after this main tunnel are mostly directly connected to each other. Besides the main tunnel, this shelter can be accessed by another entrance through a 'house' in the east. Interestingly, the room that is immediately after that second entrance and the tunnel that comes after this room and leads to other chambers of shelter have no protective doors. On contrary, the shorter tunnel accessed by an upper shaft in the northwest corner of the first room leads to a chamber located an upper level and the entrance of this chamber is protected by a millstone. This second chamber is entirely full of debris. The third entrance located to the west of main entrance starts with another debris-filled settlement and a blocked tunnel extending to the west. This chamber at the upper level is also connected to the main chambers of shelter through tunnels. The large millstone door (Fig. 8) of north chamber should probably have been moved from the operation room in the south chamber to there. The shelter extends to the north with three different rooms after the main chambers in the center. In this section, the tunnel excavated after the last room and ends after 43 m. Interesting point is, excavation was stopped at some point of this tunnel and a shaft of 2 m deep was dug down 5 m before and another tunnel was excavated below the first one to the southwest. This 'undergoing' tunnel makes a loop and also ends 19 m after the shaft.

Sahmelik Underground Shelter No 2
This is the smallest underground shelter we have surveyed so far in Kayseri, which is located in the small valley in the East Cliff Dwellings and accessed by the rear wall of a totally collapsed 'house'. The double chambers parallel to each other come after a tunnel of 11 m long and a millstone door. The chambers neither contain silos on their floor, nor have the walls any niches. The millstone of 1.15 m diameter is from the same rock as the underground shelter (Fig. 9 and 10).

Conclusion
Although it does not have as many cliff dwellings as in other valleys located to the east of Kayseri, we believe that cliff dwellings and underground shelters of Sahmelik Valley deserve more than this preliminary exploration. In the future, we recommend to carry out a more comprehensive archaeological research than one cliff dwelling and two underground shelters that we have explored and surveyed in Sahmelik Valley. On the other hand, we believe that this place is a candidate to become a touristic attraction point when it is considered as a whole with its landscape, historical places and geological formations.

Acknowledgements
As the members of OBRUK Cave Research Group, we express our gratitude again to Prof. Osman Ozsoy, Kayseri Coordinator of CEKUL Foundation. For the last four years he was a guide, teacher and mentor for us and this project could not be realized without his dedicated attitude and extraordinary efforts.

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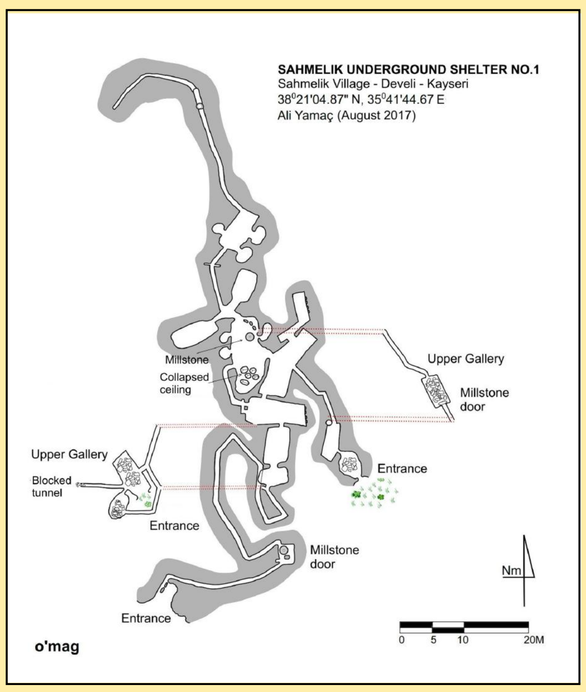


Fig. 7 Plan of Sahmelik Underground Shelter No 1

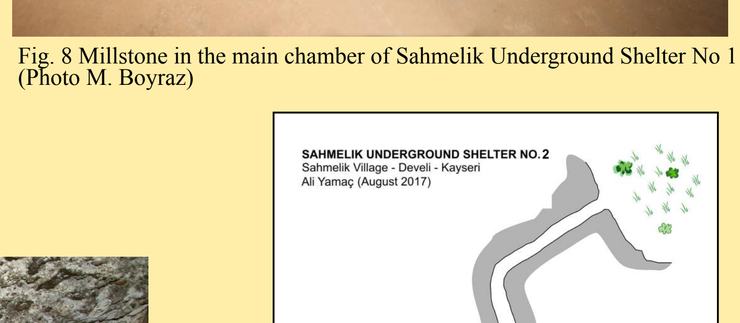


Fig. 8 Millstone in the main chamber of Sahmelik Underground Shelter No 1 (Photo M. Boyraz)

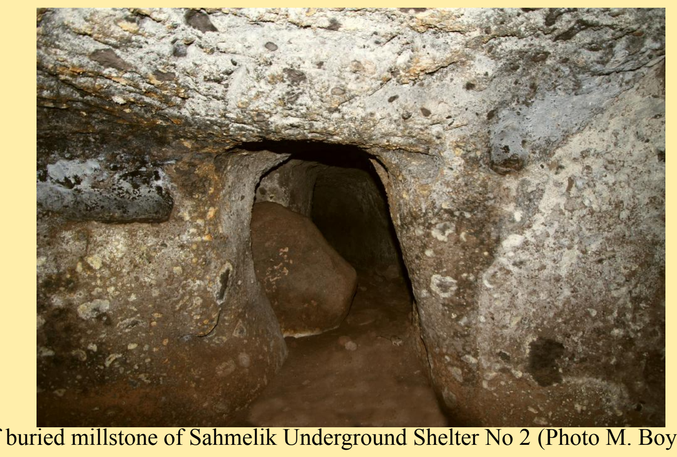


Fig. 10 Half buried millstone of Sahmelik Underground Shelter No 2 (Photo M. Boyraz).

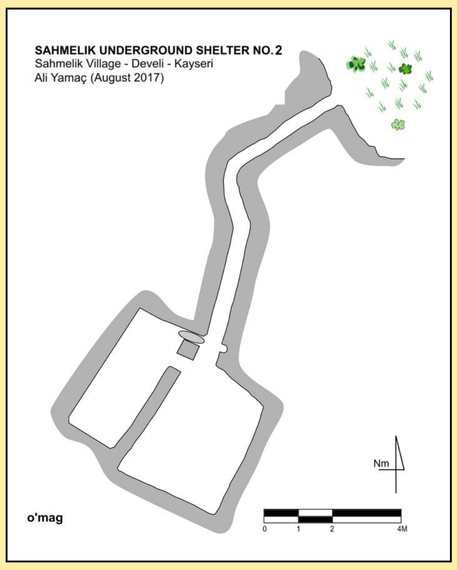


Fig. 9 Plan of Sahmelik Underground Shelter No 2