Kırkmerdiven Underground City of Doganli Village, Kayseri (Southeast Turkey)

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Abstract
Although the region known as "Cappadocia" is located in the Nevsehir-Urgup-Goreme triangle of Anatolia (Turkey), the capital of that region in ancient times was the antique Caesarea city which is known as Kayseri today. Kayseri, located 75 km east of the present Cappadocia, has also been affected by the intensive volcanic activities which began 10 million years ago. Some were only small vents, but a total number of 68 volcanoes around Kayseri had been erupting in Pliocene-Pleistocene times. That eruption phase, which continued even until historical times, piled up more than 100 m of thick ignimbrite around Kayseri. As same in Nevsehir-Urgup-Goreme, in antique Caesarea this volcanic tuff was dug by the local people, and houses, churches, and underground cities were built into the rocks.
Different from the known touristic places of Cappadocia, the rock dwellings and underground cities of Kayseri have not been investigated. Nevertheless, underground structures of that region have such an architectural quality to compete with the dwellings in other parts of Cappadocia. Underground cities of the region are rather different than the ones around Goreme. Apart from the architectural differences, at least some of them were not used again after the first construction period. When appreciated in this context, the underground cities of Kayseri have features to shed light on the beginning of this type of architecture, which is different from Goreme, where most examples were continuously enlarged and new passages added during the history. There is an underground city known as Kırkmerdiven (Forty Steps), 2 km southwest of Doganli Village in Kayseri Province, in a flat and empty prairie. While it is strange that this large underground city, with its three different surface connection and most of its galleries blocked is located so far from Doganli village, in the middle of a forsaken plain, it is certain that an ancient settlement was located in this plain, despite almost none of its ruins surviving today. Unlike most of the other examples that can be found around the area, Kırkmerdiven Underground City must have not seen any use after the period it was first built. This defense mechanism, which is considerably different in architectural sense from its counterparts has been examined and measured by us. This study will be explained in detailed in this poster.

Keywords: Doganli Village, underground city, Kayseri

1. INTRODUCTION

As OBRUK Cave Research Group, we are conducting the "Kayseri Underground Settlements Inventory" project in the city of Kayseri since two years. During these studies, we have identified, investigated and mapped a total of 23 underground cities and cave settlements that were not previously mentioned in any sources. We are planning to organize these studies, which were previously announced in two different preliminary reports, in a book at the end of the project. Only short notes were found in two sources about the Doganli Underground City that was investigated as a part of this project. Apart from these notes, the first comprehensive investigation was conducted by our group, and the location was surveyed and mapped for the first time.
Doganli Village is located to the south of the city of Kayseri, in front of a rocky cliff. There are countless cave dwellings and graves on the rocky walls near the village. On the other hand, no comprehensive studies were conducted concerning the history of the village.



Figure 1: Location map showing the area of exploration

The underground city known as Doganli (or 'Forty Steps', due to the stairs carved into the rock at the village entrance), is above the rocky plateau that houses the Doganlı Village on its cliff, and about 2 km to the southeast of the village. Two of the three different depressions on the level plateau, on which the underground city is located and that is used for agriculture today, are the rooms of the underground city that are closest to the surface, and the third and largest depression is the original entry door to the Doganli Underground City. This original entrance starts with wide stairs carved into the rock with a 38-degree slope. Farther down the corridor, there is a narrow tunnel protected by a millstone door. The main gallery beyond this tunnel is very impressive. This hall supported by 15 gigantic pillars is much larger than similar underground halls with its area of almost 500 m^2. In addition to its size, some architectural details of the gallery are also fairly interesting. There are 11 divisions carved on the north and east walls of the hall. The reason we call these structures 'divisions' is because they have the characteristics of sections separated from each other by thin walls. The fact that we have found clean water with a depth of 2 meters in a 3x2 m cistern at the wall of the hall during our survey is a mark of the high architectural quality of this centuries-old structure.

One of the two tunnels located at two different parts of this hall is blocked by debris after a short distance. The other tunnel branches out and continues for 74 m, and then it too, is blocked. A shunt from this main gallery reaches the upper level, and reaches the surface with a fairly large room. All the tunnel connections to the surface are protected by millstone doors. Although some of the stone doors are not in place today, the door shafts on the gallery walls demonstrate the presence of these doors.

The third shunt reaching the surface is at the beginning of the main entrance stairs, and a part of the gallery turning south. This gallery also houses four rooms that are carved in fairly large dimensions, different than the small chambers on the hall. A cross carved into the rock, and the remainders of wall paintings in one of the rooms, suggest that it was a small chapel. The northern connection of this shunt consists of the collapsed roof of a room. Although this last accessible room has a second door, it was not possible to investigate this part because of the collapse.

Although the fact that this large underground structure that has three different connections to the surface, and many galleries of which are blocked is located on a desolate flatland 2 km away from the Doganli Village, it may be thought that an ancient dwelling that left no trace of its existence was located on this flatland.

In contrast to many other samples in the cities of Kayseri and Nevşehir, Doganli Underground City is probably not used after its original construction period.



Figure 2: General view of Doganli Village



Figure 3: Doganli Underground City



Figure 4: Main hall of Doganli Underground City. With a total area of 500 m² its one of the largest in Cappadocia



Figure 5: The cistern in the main hall of underground city

2.CONCLUSION

Today, the Doganli Underground City is vulnerable against all kinds of natural and illegal digger damages. On the other hand, although it has a very impressive and original architecture, it is not certain how such an important building, which is far from any touristic settlements, and even its own village, may be protected.

3.REFERENCES

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