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EDITORS

Stefano Saj, Carla Galeazzi

Michele Betti, Francesco Faccini, Paolo Madonia

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Tunnels, Dwellings, Excavations and Earthquakes

Ali Yamaç[1]

Abstract

Gaziantep Castle is located in southeastern Anatolia, in the center of Gaziantep city, on a 35 m high hill. Most of the hill is natural, but there is a mound dating to the Early Bronze Age in the southwest corner of the castle. Artifacts dating to around 3750 BC were found during the excavations carried out between 2003 and 2005 in four different trenches. Although the first construction date of the castle is not known, it has been understood by archaeological excavations that it was built as a watchtower between the 2nd and 4th centuries AD and took its current form in the 6th century AD. On the other hand, the most interesting structures of Gaziantep Castle are not on top of this hill, but inside it. The tunnels, which start with two different entrances on the northwest outskirts of the hill, continue both downwards and upwards towards the castle, and there are two cisterns at the deepest point. These structures were explored and surveyed within the scope of the "Gaziantep Underground Structures Inventory Project", which we started as the OBRUK Cave Research Group in 2012. Apart from this, there are defensive tunnels on the southwest outskirts of the hill and many rock-cut dwellings on the eastern side of the hill. Gaziantep Castle, which has been destroyed many times over the past centuries, was seriously damaged by two consecutive earthquakes of magnitude 7.8 and 7.4 on February 6, 2023. In this presentation, the underground structures of Gaziantep Castle will be explained. Also, it will be discussed how the recent earthquake's devastation was effected by archaeological excavations, modifications made to underground structures, and inadequate castle restorations.

Keywords: Gaziantep, Gaziantep Castle, underground structure, cistern, earthquake.

Introduction

Castle of Gaziantep is located in the center of this city in southeast Turkey and it is the symbol of the city (fig. 1, fig. 2 and fig. 3). Although there is no definite information about the first construction date of Castle, it is assumed that it may have been built after the second century AD. Two altars were unearthed during the 2003 excavation of the mound, located to the southwest of the hill. On one of the limestone altars dating to the Roman Period, the Greek inscription "To the Great Zeus" can be read. The altar was found in waste material over the Early Bronze Age layer, which was largely destroyed. The presence of an altar in the castle also evokes the existence of a temple. However, it is not possible to talk about such a structure today. Also, we still don't have enough material to answer the question of whether there was only a castle in this period or if there was a city at the foot of the castle.

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

Fig. 2 – Gaziantep Castle before the February 6, 2023 earthquakes. View from the northeast (photo S. Savcılı).

[1] OBRUK Cave Research Group, Açıkhava Apt. 16/7 Nişantaşı, Istanbul, Turkey - ayamac@gmail.com

Fig. 3 – Aerial view of Gaziantep Castle (Google Earth).

In a travel book, it was stated that *"Antep was built on two hills, a stream flows between the hills, the city is three miles around, the Sacır river passes through the east of the city and there are aqueducts here, the castle was built on a round hill, and there are rock tombs around it…"* (Pococke, 1743). There are no aqueducts in the city today, and Pococke may have mistaken the dwellings on the east side of the castle for rock-cut tombs.

Although the finds we have are limited, the altars found in the excavations in the mound in the castle show the existence of a Roman period settlement in the area where the present city is located. When the existence of the castle and the existence of the city are considered as two separate issues, it can be said that the castle was a Late Hellenistic or Roman period outpost, a Byzantine period castle, the region gained its present shape after the Mamluk administration, and the city has been inhabited since the Bronze Age. However, when the information in the ancient written sources is evaluated, the city remained in the shadow of the ancient city of Dülük from the ancient period to the 10th century. According to the Chronicle of Mateos from Urfa, Dülük was a province, and its center was Antep Castle in the 10th century (Andreasyan *et al*., 2019).

The situation of the region where Gaziantep is located in the Middle Ages is quite complicated. In 636, Antep and its surroundings came under Arab rule. In the following years, Antep region, which was the scene of Byzantine-Arab conflicts for a long time, was ruled by the Abbasids (782), Byzantines, Hamdanis (951), Seljuks (1084), Ayyubids (1183), Mamluks (1277), Mongols (1281), Dulkadirs (1390), Timur (1400), Karakoyunlular, and again passed to the administration of the Dulkadir Principality. After the city was a battleground between the Mamluks and Dulkadiroğulları for a long time, after the Mercidabık War in 1516, it passed from the Mamluks to Ottoman rule (Beyazlar, 2003).

Gaziantep Castle is described as follows in a manuscript dating from the period of Nur al-Din Mahmud Zengi (1118–1174):

"Perimeter of the wall of the citadel, 540 fathoms at qastmi, six towers; enclosure perimeters (haouch), 66 (?) 1/2 fathoms, three towers; bâchoûra under the markaz, 307 fathoms at the qâsimi, and five towers; median fortress, 343 fathoms to the qâsimi; small bâchoûra, 234 fathoms at the qâsimi; large inhabited enclosure, 382 fathoms 1/2 to the qâsîmî; enclosure of the gate of the citadel, 105 fathoms at the qasimi; and 3 towers." (Cahen, 1940).

A fathom is 1.83m, therefore, according to this source, the perimeter of the wall of the citadel is 988 m with six towers, and the enclosure perimeter is 122 m with three towers. On the other hand, it is evident that the castle underwent major changes after the 12th century, when this work was written. For example, even if the outer wall of the castle is close to this size, today there are 12 towers instead of six. The inner city wall with three towers mentioned in the article is more than 300 m long. Although the word *'bâchoûra'* in the article is used in the sense of gallery, even *'small bâchoûra'* is 234 fathoms, i.e. 428 m. However, the battlemented defense gallery, which is located on the outskirts of the castle and is described in detail below, is only 150 m long. The *'bâchoura under the markaz'* ('markaz' is Arabic, meaning 'center') no longer exists.

Tunnels and Cisterns

The northwest part of Gaziantep Castle sits on rocky ground. There are two different tunnels in this part of the hill; the first of these tunnels, the entrances of which are almost close to the ground, reaches two different cisterns 11 m below the entrance level (fig. 4). Another branch of the same tunnel bends to the south 22 m after the entrance and leads up to the castle plain above with wide stairs carved into the rock (fig. 4 and fig. 5). The entrance of the second tunnel is 4 m further south than the first. There is a connection between the two tunnels just behind the entrances, but it is currently blocked. In a part of this second tunnel after the entrance, the ceiling has collapsed, and the tunnel does not have a ceiling in this part. After this section, the tunnel divides into two, and the section that turns to the north ends after 12 m. On the other hand, the other tunnel, which continues towards the east, reaches the castle by rising on neatly cut steps.

West Side Defence Galleries

The 150 m long, battlemented defence gallery, located almost on the ground on the western slope of the castle, is not original. This gallery, which was almost completely destroyed during the Independence War, was rebuilt during the restoration after 1950. Based

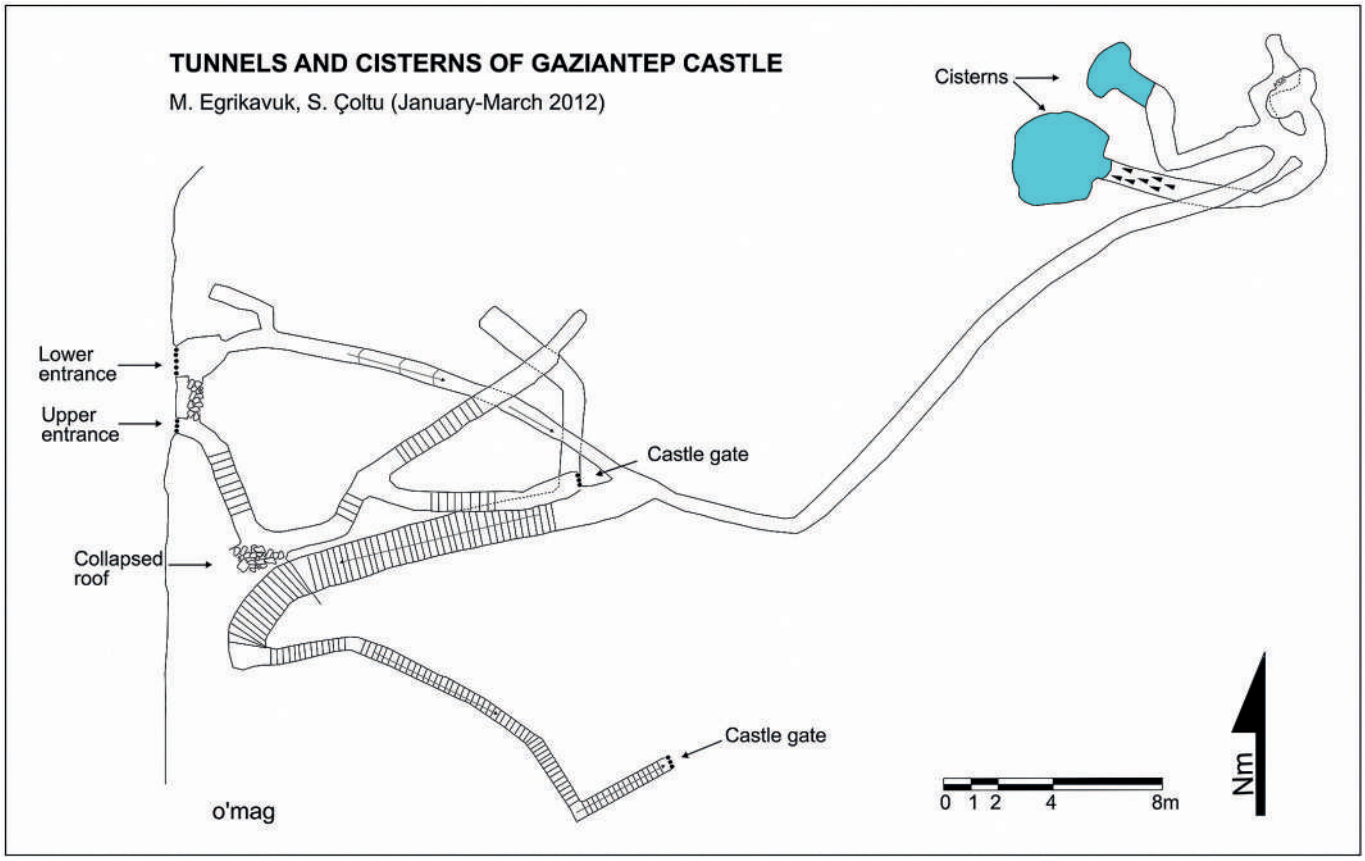

Fig. 4 – Plan of tunnels and cisterns under the northwest part of the hill (drawing M. Egrikavuk and S. Çoltu).

Fig. 5 – Large rock-cut stairway in the main tunnel climbing to the castle (photo A.E. Keskin).

on the battlement hole in the western part of the castle, it is thought that this gallery was built on the bedrock where the moat of the castle started and formed the west, south, and east parts of the castle. Due to the excessive destruction of this gallery in the depressions in the south of the castle, it collapsed during the repairs made after 1950, and a new gallery with a symbolic 1.20 cm width and a loophole was built in its place (fig. 6). On the other hand, many old tunnels that lead up to the castle from this newly built defense gallery remain intact.

East Side Dwellings

Similar to the 'West Side Defense Galleries', there are more than thirty interlocking rock-cut dwellings dug into the bedrock on the eastern slope of the castle. When we, as OBRUK, started the 'Gaziantep Underground Structures Inventory Project' in 2012, these dwellings surrounding the entire east side of the hill were completely filled with rubble and clogged. A few years later, when a project was made to clear these rock-cut dwellings and open them for tourism, we objected that such an arrangement would reduce the static resistance of the structure. Even if this part of the hill is solid rock, the top cover is all soil, and even if these dwellings did not collapse, it could lead to erosion of the top cover. Despite all our objections, these dwellings were cleared and opened to tourism, and two years later, we are very sorry to see how right we were in our objections (fig. 7).

Archaeological Excavations

Artifacts dating to around 3750 BC were found during the archaeological excavations carried out in four dif-

Fig. 6 – Defence gallery at the southwest side of the hill (photo A. E. Keskin).

ferent trenches between 2003 and 2005 in the south corner of the castle. According to these findings, the mound dates to the Early Bronze Age (Kulakoğlu *et al*., 2004; Kulakoğlu, 2006).

Although the upper layers yield finds starting in the Middle Ages, there are layers immediately below that date to the Early Chalcolithic Age and the Early Bronze Age. It is possible that the upper layers consisted of thick waste layers showing the various construction phases of the castle construction and medieval hillside settlements. Although many pottery fragments were found during the survey, settlement levels belonging to the 1st and 2nd millennia BC could not be identified during the excavations. During the excavations, it was understood that these cultural layers were cut and shaved during the first construction of the castle. Excavations carried out in 2004, starting from the level where the layers belonging to the latest phase of the Early Bronze Age are located, showed that there was a dense settlement in the mound dating to this period. The walls of a monumental building with storage jars can be seen with the naked eye along the southern slope of the mound. Various graves were found in almost every layer during the excavation. While some tombs contain few gifts, others are quite rich in finds. The excavations revealed that the earliest settlement levels in the mound belonged to the late Uruk period (BC 3400 to 3200). In some trenches, a depth of 8.50 m was reached until the bedrock was reached. Although the ground of the north and east of the hill where the castle is located is solid rock, this southern part of the mound is mostly

Fig. 7 – Destruction and erosion at the east side of the castle after the February 6, 2023 earthquakes. Some of the dwellings can be seen at the foot of the hill (photo E. Ozihtiyar).

soil and is completely open to erosion. These excavations, which were carried out on a 35-40 degree incline, probably both increased the erosion and decreased the resistance of the castle walls above the trenches.

Earthquakes

The East Anatolian Fault (EAF) is an intra-continental strike-slip fault associated with the collision of the Arabian Plate with the Anatolian Plate. The EAF, with a length of more than 800 km from the Iskenderun Bay to Karlıova in the northeast, passes 70 km west of Gaziantep. EAF, one of the three biggest faults in Anatolia, has produced countless earthquakes throughout history (Köküm, İnceöz, 2018; Duman *et al*., 2020).

In the earthquake that completely destroyed Zeitun and Elbistan in January 1544, Gaziantep also suffered great damage. Another earthquake that took place on January 21, 1626, is probably one of the biggest earthquakes that the entire Southeastern Anatolia has ever experienced. The sources of the period write that Gaziantep, Urfa and even Aleppo were completely destroyed, and thousands of deaths were recorded. Another earthquake that took place on October 13, 1760, although not as big as the previous one, was felt in the whole region from Gaziantep to Antakya, and its aftershocks continued for days (Ambraseys, Finkel, 1995).

In the earthquake that took place in Gaziantep on October 22, 1822, many buildings in the city, as well as the places belonging to the Late Ottoman Period built inside the castle were destroyed. During the archaeological excavations, it was understood that the stones of these structures had collapsed in the direction of the entrance, and this was due to the inclination of the structures towards the entrance. Also, the tunnels and galleries of the castle, which were largely derelict after this earthquake, were filled in to prevent further destruction.

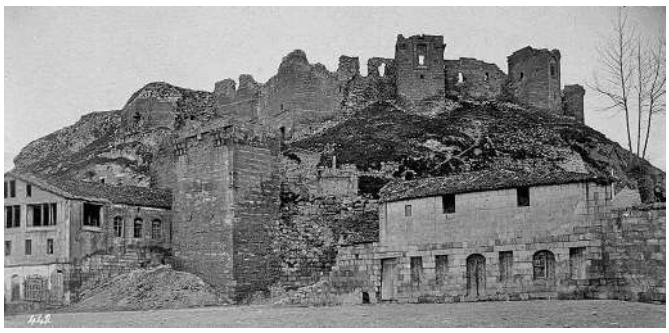

Fig. 8 – A postcard of Gaziantep Castle dated 1941, showing the destructions of both the Independence War during 1920's and the 1822 earthquake (photographer unknown).

The castle was largely destroyed again by two consecutive earthquakes of magnitude 7.8 and 7.4 on February 6, 2023 (fig. 7).

Restorations

Gaziantep Castle, which has been destroyed many times over the past centuries, was seriously damaged by the 1822 earthquake and the ensuing Independence War between 1920-1922 (fig. 8). The first repair of the castle was carried out by the municipality of its time in the 1950s With this restoration, the ruined outer walls and main walls of the castle were partially repaired, the trenches around the castle, the tunnels and rooms in the castle were filled. The second restoration of the castle was also made by the municipality at the end of the 1960s and the beginning of the 1970s. With these projects, the dilapidated gallery on the southwestern outskirts of the castle was collapsed and a symbolic gallery was built. The major walls which were not restored during the 1950 repair were completed, giving the castle a present-day appearance.

Conclusion

Gaziantep Castle, which has a history of more than a thousand years and has undergone countless wars and sieges, has been destroyed and rebuilt several times. On the other hand; February 6, 2023 earthquakes have done more damage to the castle than many wars.

In our opinion, the main causes of this huge destruction can be summarized as;

a) The ground on which the castle is built is loose. Although the north and east of the hill are partially rocky, other parts are soil.

b) In addition to this soft ground, the bottom of the hill has been excavated from almost all directions. In other words, the hill on which the castle stands is hollow.

c) The upper soil cover is open to erosion. Although many methods have been tried to find a solution to this problem over the years, none of them were sufficient. When you look at fig. 7, you can see how inadequate the surface coatings made to prevent erosion are.

d) Old restorations were poorly made. The walls of the castle are not entirely rock-cut. Although the front and back coverings of the walls are rock-cut, the 90 cm gap between them is filled with rubble. This idle rubble move and hit the front and rear rock-cut structure during an earthquake, and causing it to collapse.

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