ABSTRACT

Diyarbakir, which is located in the region of Southeastern Anatolia, is a settlement with a history that is thousands of years old. The walls surrounding the historic city centre, which reached their current extent in the 4th century, have been the most important symbol of the city since their construction. However, as they are no longer used for defence, the Diyarbakir city walls have been neglected, and repairs and maintenance have been insufficient. To properly preserve the walls, which have begun to degrade rapidly, it is necessary to ensure their correct analysis and documentation. In this study, in accordance with the information obtained from research conducted from January to June of 2012, the current status of the walls and the challenges associated with their conservation are presented together with their history and architectural features.

KEYWORDS: Diyarbakir, City Walls, Castle, Conservation, Architecture.
1. INTRODUCTION

Diyarbakir is a settlement with thousands of years of history embodied in its city walls, monuments and traditional residential buildings. The Diyarbakir castle walls, in which traces of many civilisations are visible, have been the most important symbol of the city throughout its history. City administrators have assigned great importance to the walls and have repaired them over time. Especially during the periods of strong government, new bastions, inscriptions and decorations were added to the walls. The deformation process accelerated after the walls lost their function as defensive structures and conservation efforts became insufficient. Nevertheless, in spite of their neglect, the Diyarbakir city walls remain magnificent in the present day (Figure 1-3).

In recent years, the interest in and sensitivity to the conservation and maintenance of the cultural heritage of Diyarbakir has been increasing. In addition, there is a greater awareness of the need to conserve and support places that play an important role in the identity of the city. The most fundamental part of effective conservation work is conscious analysis and documentation. In this study, during the period January-June 2012, all of the bastions and the walls connecting the bastions were examined to determine the current status of the city walls.

Based on the data obtained from this study the current status of the wall and the issues associated with their conservation are presented together with the history and architectural features of the walls. Moreover, the various distances and other measures, which are frequently used in references to the walls in the literature, are re-measured using modern measuring (GPS, total station, laser meter) and the results are also presented.

2. HISTORICAL DEVELOPMENT OF THE DIYARBAKIR CITY WALLS

One of the most significant historic centres of Southeastern Anatolia, the city of Diyarbakir was established at the junction of important trade routes in an area that was suitable for settlement. The city became an administrative centre as well as a centre for trade, culture, art and science in nearly all periods. In the present day, it carries with it the historical and cultural heritage of several civilisations.

Diyarbakir Castle is composed of two sections, the Inner Castle (İçkale) and the Outer Castle (Dış Kale) (Figures 1, 2). It is supposed that the Inner Castle, which contains the northeast of the city and is approximately 70 m high from the Dicle River bed (Toprak, 2012), constituted the core of the city and the primary settlement area. It is not definitively known when the Inner Castle was constructed. Within the Inner Castle is another area surrounded by city walls that is known as Virantepe. According to Gabriel (1940, 90), the tumulus that is located here marks the initial settlement area of Diyarbakir. It is known that the Hurris lived in the area and that the city was surrounded by walls in 2000 B.C. The old walls were repaired in 900 B.C. when the city was the capital of the Bit Zamani tribe (Beysanoglu, 1991, 63).

The Roman soldier Ammianus Marcellinus, who refers to the city as “Amida”, suggests that the city was surrounded by walls between 324 and 337 CE and that it was enclosed in a new wall that extended almost to its current borders between 367 and 375 (Gabriel, 1940, 180-181; Marcellinus 1986, 160, Sinclair, 1989, 166). For this reason, it can be said that the Diyarbakir city walls essentially reflect the status of the city as of the 4th century (Ahunbay, 2012). It is known that the fortification of the city using bastions occurred later, during the reign of Anastasius (505-520), and that in 528,
Justinianus addressed the restoration of the walls and the reconstruction of the city (Parla, 2005, 59).

In 638 A.D, the Arab armies invaded Diyarbakir. It is thought that in this period, the city wall had already reached its current borders, with the exception of the section that includes the Ulu Beden and Yedi Kardes bastions to the southwest (from bastion 26 to bastion 50). The construction techniques and inscriptions on the bastions suggest that this section was constructed during the Great Seljuk Empire and the Artuqids. Moreover, the inscriptions indicate that the Artuqids separated this section from the southern half of the Inner Castle by constructing a small pentagon-shaped castle on the tumulus in the Inner Castle (Parla, 2005, 64-71). As a result of the excavations conducted in this area, the remnants of a palace from the Artukogullari period (early thirteenth century) were discovered.

Nasir-i Husrev, who visited Diyarbakir between the years 1045 and 1051, mentions not having seen such a magnificent castle anywhere else in the world. In describing the architectural features of the walls, he notes that the city was surrounded by an external wall that was 10 archines (1 architect archine = 75.8 cm) high and had loop holed safety rails; that a gateway of 15 archines in length was situated between the ports of the external and inner walls; and that the inner wall, which was taller than the outer one, was 20 fathoms in height and 10 fathoms in width (Nasir-i Husrev, 1950, 12-14).

It is known that the second wall that Nasir-i Husrev mentions was pulled down by the Ayyubid emperor Melik Kamil, who captured the city in 1232, and that the remaining stones were used to repair the main walls. Records indicate that this frontal wall was composed of basalt and
this information by stating that the wall was surrounded by a gutter (Evliya Celebi 1314, 23-39). It is possible to see the remnants of the second wall today near the walls, especially in the northern and western areas.

In the Ottoman Period (1524-1526), another section was added in the shape of an 18-bastion half circle by enlarging the area of the Inner Castle (Beysanoglu, 1990, 535). There are data that demonstrate that these bastions were built on the old foundations (Parla, 2005, 75).

Diyarbakir frequently changed hands through wars or treaties throughout history. The inscriptions on the walls indicate that those who ruled the city from 909-910 to 1526-1527 repaired the walls and often strengthened them to ensure the security of the city (Parla, 2005, 64).

Until the early 20th century, entrance into and exit from the city was controlled because the wall ports were closed at nights. In the early 1930s, it was agreed that the walls surrounding the city would be destroyed to ensure air flow (especially during the hot summer months), to facilitate the expansion of the city beyond its walls, and to ensure the easy passage of vehicles at the time. Therefore, in the years 1930-1932, parts of the city walls were destroyed with dynamite, and residents were encouraged to remove the wall stones and use them in the construction of their houses. When Albert Gabriel (who visited the city in 1932) and the city’s intellectuals warned the relevant authorities that the destruction of the wall was a mistake, the process was stopped, but not until several bastions and walls had been destroyed (Gabriel, 1993, 9).

Two important gateways were opened in the walls in this period. According to measurements made today, the first one is located in the north and is approximately 256 m long. (The length between bastions 82-1 is 32 m, that between bastions 2-5 is 163 m, and that between bastions 5-7 is 61 m). The second, which is located in the east of the Mardin Bastion (between bastions 50-51), is 45 m in length and was opened during the construction of the modern road. The long section of 178 m in length that is located in the south of the Yeni Gate.

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Figure 3. A view of southeast part of Diyarbakir City Walls

When the historical and touristic importance of the city walls was recognised, they began to be repaired and preserved, beginning in the 1940s. The remnants of the destroyed sections were cleaned up, and a bastion that was separated (bastion 5) was repaired. To facilitate the development of the city beyond the city walls and to ease transportation, new ports that would enable the easy passage of the automobiles of that time were opened near the existing ports or where it was deemed necessary. First, in 1950, the Cift Gate (the Hintli Baba Gate) was opened between bastions 14-15; then, in 1959, the Tek Gate was opened between bastions 9-10. In 1940, between the two ports of the Urfa Gate, a taller port was opened. A large number of wall repair projects have been conducted in recent years (Beysanoglu, 2001, 1114-1117; Tuncer, 2012, 67). The partial repair of the city walls has continued from time to time, and the speed of the repairs has
increased since the 1980s.

3. ARCHITECTURAL FEATURES OF DIYARBAKIR CITY WALLS

Using the modern measuring devices, the dimensions of the walls were determined. The peripheral length of the Diyarbakir city walls is approximately 5200 m. The area within the walls, including the Inner Castle, is approximately 1.57 km$^2$. The area of the Inner Castle is approximately 0.074 km$^2$. The length of the section from Dag Gate to Urfa Gate is 1120 m, which of the section from Urfa Gate to Mardin Gate is 1560 m, that of the section from Mardin Gate to Yeni Gate is 1170 m, and that of the section from Yeni Gate to Dag Gate is 1350 m. The portion of the Inner Castle that is located within the city walls is approximately 599 m. The total length of the walls when the Inner Castle is included is approximately 5800 m. As of today, approximately 631 m of the walls have been destroyed or demolished for various reasons (Figure 2).

The walls have four main ports. The walls open to the north with the Dag Gate (the Harput Gate), to the west with the Urfa Gate (the Rum or Halep Gate), to the south with the Mardin Gate (the Tell Gate), and to the east with the Yeni Gate (the Su, Satt or Dicle Gate). These ports have played an important role in controlling entrances into and exits from Diyarbakir. The two main roads that connect the four main ports and intersect at the centre are still in existence today. These roads are 1120 m in length from the north to the south (the road located between Dag Gate and Mardin Gate) and 1610 m in length from the east to the west (the road located between Urfa Gate and Yeni Gate) (Figure 2, 4).
Figure 6. View of the exterior surface of the bastions.
The Inner Castle, which is located in the northeastern corner of the area surrounded by the walls, opens to the walled city through the Saray Gate and the Kupeli Gate and to the outside through the Ogrun Gate and the Fetih Gate (Figure 2, 5). In addition, 17 secret ports were identified by Albert Gabriel in the 1930s, most of which are still in existence today. In subsequent years, the Cift Gate and the Tek Gate were constructed for the passage of automobiles, and four smaller ports were constructed for pedestrians.

The most comprehensive works about the walls are Berchem and Strzygowski’s book entitled Amida, which was written in 1910, and Albert Gabriel’s book entitled Voyages Archeologiques Dans La Turquie Orientale, which was written based on research conducted during the 1930s. Gabriel identified 82 bastions on the walls and assigned those numbers from 1 to 82. He identified 18 bastions on the Inner Castle and named them using letters. In this study, a new numbering system that was developed by the relevant authorities in recent years has been used (Figure 2, 6, 7).

The city walls were repaired in different periods, and new bastions were added. Of these Bastions, the Dag Gate Bastions (bastions 1-2), the Yedi Kardes Bastion (bastion 41), the Ulu Beden Bastion (bastion 33), the Keci Bastion (bastion 52), the Nur Bastion (bastion 42), the Selcuklu Bastion (bastion 32), the Leblebi Kiran Bastion (bastion 62), the Findik Bastion (bastion 63) and bastion 55 are the most magnificent due to their inscriptions, their form and their magnitude (Figure 6).

The southeastern and eastern parts of the city walls, which extend from Mardin Gate to Yeni Gate (bastions 50-67) and to bastion 75, are situated on rocky ground that is difficult to reach. This area is also surrounded by the Dicle River, which functions as a natural protector. Because the enemy is not expected to come from the direction of the hillside and because there is no place to position heavy artillery and catapults, the bastions are spaced sporadically. In the positioning of the bastions, it was probably noted that shooting cannonballs at a very low range would not cause sufficient damage to the target (Ahunbay, 2012). The measurements taken indicate the varying distances between the bastions; however, in some areas, the distance between two bastions (282 m between 66-67, 85 m between 70-71 and 127 m between 71-72) increases dramatically. In these areas, the number of retaining walls and buttresses between the bastions is greater, and in some sections, the number of retaining walls is as high as four (between 69-70) or five (between 66-67, 70-71) (Figure 1, 2).
The bastions surrounding the Inner Castle are circular, triangular, square and polygonal (hexagonal and octagonal). Bastions A and B are round; bastions I, K and P are triangular; bastions D, E, F, J and M are square; and bastions C, G, H, L, N, O, R and N-O are polygonal (Figure 7).

The bastions designed for defensive purposes are generally three or four storeys. The closed areas are comprised of two storeys. The basement was used for storage, and the first and second floors were used to house soldiers. The basement areas are small in scale. The space on the upper floors is larger. In some of the bastions, there are two penthouses. In other bastions, the basement is used only to scale the upper floors up from the ground. The upper floors of the bastions can be accessed by climbing the stairs that face the inner walls (Figure 8).

There are numerous inscriptions on the Diyarbakir city walls, which carry traces of every ruler of the city. The names of the emperors, architects and engineers who constructed the walls can be gleaned from the text of some of the inscriptions. When large-scale repairs were made, the ruler responsible for the repairs and the repair date were indicated in the inscriptions (Parla, 2012). All of the symbols on the walls present information regarding the period in which the construction project occurred (Akargul, 1980, 172). There are numerous inscriptions, motifs and symbols associated with various stonemasons, especially near the Mardin Gate and the Dag Gate. In addition, the sun and stars; reliefs of lions, bulls, goats, tow-headed eagles, scorpions and horses; and weapons, fruit and grains are all imprinted on the walls and the bastions. Remarkably, there is even a relief of a “naked woman”, the likes of which is rarely observed in Islamic art, on bastion 42 (Figure 9).

The construction material used for the city walls is basalt. The city of Diyarbakir was built on basalt lava. All of the stones used to construct these walls were obtained from this basalt. As such, the stones hewn below were used in the wall immediately above. In the slopes along the Dicle River, jagged rock formations can be observed immediately below the walls. None of these are natural;
instead, the quarrying of the lava created 10 m artificial slopes. These slopes can be observed for several kilometres to the south and east of the city without interruption. The slopes formed directly under the walls contributed to the defensive function of the latter, but the dense settlement or cover that formed later now prevents the extent of these sloped from being clearly observed. The usage of basalt from nearby places decreased construction costs, labour and construction time (Toprak, 2012).

The exterior surfaces of the city walls are well crafted. Whereas the exterior surfaces of the city walls and the bastions were built using hammer-dressed masonry, the interior surfaces were built using less processed pitch-faced masonry.

The sizes of the stones used in the city walls vary widely. The stones used in the interior surfaces are smaller and less refined, and they vary in their dimensions. The stones used in the exterior surface are larger. The stones used for the exterior surfaces frequently have widths between 40 cm and 70 cm, heights between 30 cm and 50 cm and depths between 15 cm and 45 cm. In some parts of the city walls, the dimensions of the stones are as large as 78 cm in width and 53 cm in height (bastion 55).

As was the case with all traditional structures from Late Antiquity, the Middle Ages and later periods, master builders ranged stones one or two at a time and immediately filled the gaps with mortar and rubble stones (Ahunbay, 2012). The material used for these gaps was a varying, imprecise mixture of small and large stones laid down with a great deal of mortar.

The quality of the mortar was as important as the strength and craftsmanship of the stone material. Lime and sand were used as a binding material. Limestone was brought from nearby for the mortar used for the Diyarbakir city walls. Gabriel mentions that in cases in which a great deal of lime was needed, the lime was used immediately after the burning of the limestone, before it cooled; he calls this mortar “hot mortar” (Ahunbay, 2012).

Another material that appears frequently in the city walls is brick, which was used in the construction of the domes and vaults of the bastions. Brick was widespread in Syria, Iraq and North Mesopotamia in the fourth century, and it is also known that brick was
used in much earlier times (Ahunbay, 2012). In addition, brick and basalt were used together in some bastions. In some parts of the city walls, tri-serial brick masonry was used. Additionally, in some inscriptions, limestone was used.

Because the city walls were repaired in almost every period, the surface of the walls show traces of different historical periods, including stones and binding materials of different types and sizes.

4. RECENT CONDITION OF THE CITY WALLS

Because settlement was restricted to inside the city walls until the early years of the Republic (1930s), it was possible for the city walls and doors to be preserved in their entirety until that time. However, after the Republic, the expansion of the city beyond the walls began, and the process accelerated due to migration from villages to the city. Since the early 1990s, the process has been of a particularly casual and irregular character. The outer side of Ulu Beden (bastion 33), the areas around bastion 26 and the Urfa Gate, the Yeni Gate area between the inner and outer sides of the Inner Castle and the eastern walls have rapidly filled with slums. Some parts of the city walls have become surrounded by businesses. This process has resulted in serious damage to the city walls, conscious destruction and misuse. Although the process has been slowed through precautions taken in recent years, the destruction of the city walls has not yet been fully halted.

In short, the Diyarbakir city walls have experienced accelerated damage due to natural factors, human destruction, irregular and bad housing near the walls (both slums surrounding the city walls and high-rise housing near the city walls) and heavy traffic under the walls. The process has been further accelerated by the lack of regular maintenance and repair efforts, the lack of scientific research prior to these limited maintenance efforts, the mismatching of restored bastions with the original structures due to maintenance and restoration and the neglect and misuse of the city walls. Illegal excavations intended to locate treasure in the immediate surroundings and inside the bastions have led to the removal of important figures and inscriptions from the
wants and their immediate surroundings because of insufficient security precautions. For all of these reasons, structural problems that endanger the users of the walls and the inhabitants of the city have begun.

The investigation performed in 2012 revealed that bastions 3, 4 and 6 were demolished in the early 1930s; in addition, bastions 38, 53, 54 and 56 collapsed with time and mostly ceased to function as bastions. Some parts of bastions 58, 71 and 75 also collapsed and ceased to function as bastions. Bastions 7, 79, 80 and 81 lost their upper sides and can be classified as semi-bastions.

Based on the architectural properties of bastions 27 and 28, which were classified as such by Albert Gabriel (1940), it is more appropriate to classify them as support walls.

The exterior surfaces of the bastions were less damaged than the interior because they were made using stronger, larger stones that were more precisely cut. In contrast, the interior surfaces of some bastions are in poor condition although they appear better on the outside. The interior surfaces of bastions 7, 8, 10, 14, 15, 26, 48, 50, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 71, 72, 75, 76 and 81 are in poor condition. Moreover, structural corrosion and collapse in the upper covers and flooring were observed in many bastions. The remains of the exterior city walls that were demolished in the 13th century can be observed in the immediate surroundings, especially in the northern and western areas.

The walls and bastions of the Inner Castle are in better condition than the exterior city walls because they were constructed at a later date (in the 16th century) (Figure 7).

5. CONCLUSIONS

Since their construction, the city walls have been the most important part of the traditional urban fabric of Diyarbakir. Historical texts show us that the development of Diyarbakir began with the small Hurri city surrounded by the walls in the location of today’s citadel and that the city expanded in the fourth century and was surrounded by new city walls. It is also known that the consolidation of the city walls was only possible in the sixth century, during the Byzantine period. Diyarbakir passed frequently into different hands until Ottoman rule. The inscriptions placed on the city walls and bastions show us that those who gained control of the city in each period were fundamentally interested in ensuring the maintenance and repair of the demolished areas.

However, although they remained the most important symbol of the city in each period in its history, the Diyarbakir city walls were neglected once they no longer functioned to defend the city. Maintenance and repair efforts became inadequate, and hence, the walls began to deteriorate rapidly. The city walls that survive in the present day despite the many challenges facing them are mostly renewed sections that consist of antique bases or antique walls that were protected (Ahunbay, 2012). Because the city walls were repaired in each period, stones of different sizes and textures have been used with different binding materials. A detailed investigation of the restoration process makes it possible to identify the variations that occurred through time.

Because the artificial steep areas around the city walls give it the appearance of an “antique quarry”, their protection will contribute to the development of the area (Toprak, 2012).

The analysis performed indicated that three of the 82 outer bastions were demolished in the early 1930s, four of them collapsed over time, three collapsed partially and ceased to function as bastions and four can be classified as semi-bastions (only their ground floors can be used). Many of the bastions that appear to be in good condition when observed from the outside have interior surfaces that have been severely damaged. Thus, the bastions should be immediately protected in accordance with an emergency restoration and preservation plan.
REFERENCES


