THE CURRENT DISCOURSES IN PRESERVATION AND PRESENTATION OF ARCHAELOGICAL HERITAGE

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Abstract. Archaeological studies are considered as a principal source of knowledge of prehistoric, ancient, and extinct cultures. The unearthed evidence as architectural artefacts are very important resources of the history and cultural and architectural heritage values. Archaeological areas are cultural heritage sites, which have ruins that can be easily damaged by destructive and corrosive effects. Therefore it is hard to protect this cultural heritage sites from effects stemming from nature and human.

In archaeological sites, both preservation and exhibition of the findings are very important items that are taken into consideration in today's preservation manner.

This Paper aims to put forward the main principles of the applications on Archaeological Sites in terms of preservation and exhibition.

And mainly will concern on;

- Main Intervention principles related on site planning;
- Methods for raising the attraction of the archaeological sites, methods for making sites visible from outside.
- Planning principles of walking routes of the site, the entry points and related items.
- Main Intervention principles related on archaeological findings;
- Conservation methods of the archaeological remains,
- Archaeological Restoration methods of archaeological findings both for preservation and exhibition criteria.
- Design criteria of protection roofs.
- Design criteria of walking platforms

Keywords: Archaeological Restoration, Archaeological Heritage, Anastylosis, Protection Roofs/Shelters.

Introduction. The notion of archaeological heritage includes structures, constructions, buildings, developed sites, moveable objects, monuments of other kinds as well as their context, whether situated on land or under water (Achleitner, F. 2000, Başgelen, N. 2006, Özdoğan, M. 2001, Oliver, A. 2008). When an archeological findspot is discovered, a number of factors determine its potential value as a source of knowledge about the past.

An archaeological resource, as defined by ICOMOS is "that part of material heritage for which archaeological methods provide primary information" (ICOMOS, 1990). Archaeological heritage comprises all traces of human existence, both in terms of places associated with human activities such as abandoned structures and remains of all kinds, as well as portable cultural materials (ICOMOS, 1990). The two main components of archaeological heritage resources are:

- the archaeological places and sites on the landscape;
- collections of objects housed in museums and in private ownership are normally referred to as 'archaeological' if they have been found buried in the ground or recovered from archaeological sites (ICON, 2011).

Given that archaeological heritage is a material record of past human activities, it constitutes an outstanding instrument for a better knowledge of the past and for emphasizing cultural diversity that has emerged within any given territory in the course of history, irrespective of the present-day political context. Its protection and proper management is therefore essential (ICOMOS, 1990).

A primary objective of archaeological heritage management is the preservation of monuments and sites in situ, which implies not only the long-term conservation of the fixed heritage assets, but also all related records and collections (ICOMOS, 1990).

The aim of archaeological heritage management is therefore to protect archaeological heritage as a source of collective memory and as an instrument for historical and scientific study. Archaeological heritage

encompasses all past physical traces of humankind, whether on land or underwater. This includes not only monuments, buildings and other structures, but also entire sites, their contexts, and movable objects.

Therefore in order to preserve and present archaeological heritage interventions should be made in two scales; (Tanac Zeren M. 2016, Tanac Zeren M. 2018).

- -Main Intervention principles related on site planning;
- -Methods for raising the attraction of the archaeological sites, methods for making sites visible from outside.
- -Planning principles of walking routes of the site, the entry points and related items.
- -Main Intervention principles related on archaeological findings;
- -Conservation methods of the archaeological remains,

Archaeological Restoration methods of archaeological findings both for preservation and exhibition criteria. Design criteria of protection roofs. Design criteria of walking platforms

"Anastylosis" as an Archaeological Restoration Method. Anastylosis is an archaeological term for a reconstruction technique whereby a ruined building or monument is restored using the original architectural elements to the greatest degree possible, combined with modern materials if necessary, ensuring that the latter are unobtrusive while clearly recognizable as replacement materials. (Tanac Zeren M. 2018) This is done both preserving and presenting the monument. In this case two examples will be given below as Anastylosis examples done both to preserve and present and also represent the archeological assets. One of them is **Tyyateria** ruins which is located in the center of a city. The restoration work is done firstly to preserve the ruins of an Roman Arch, and to represent the asset within the city. The second case is the anastylosis woks held in the city **Metropolis**, the restoration works is done as well as mainly to preserve the architectural ruins, but also to present the ancient city center and monumental buildings properly.

Thyateira is the ancient name of Akhisar district and the city was named by this name from Ancient times to the Byzantine period. Thyateira Ancient City was one of the most important settlements of the Lydian state and the Kingdom of Pergamon in ancient times. Some of the ruins belonging to the city can be seen at the Tepe Mezarı ruins located in the city center of Akhisar today. (Akdeniz & Şahin, 2014).

When the ancient texts are examined, the oldest written data that gives information about Thyateira belongs to the 3rd century BC. (Akdeniz & Şahin, 2014). During the Lydian state, Thyateira was the second most important city after the capital Sardes. After 190 BC, the city and its surroundings came under the rule of the kingdom of Pergamon. The last Pergamon king III. After the death of Attalos in 133 BC, his kingdom was left to the Roman Empire upon his will. (Akdeniz, 2013, p.430).

Thyateira shared a similar fate with other ancient cities that lie beneath modern settlements. Archaeological remains in Akhisar have almost completely remained under the modern settlement. However, what distinguishes Thyateira from its contemporaries with six other settlements in Western Anatolia (Ephesos, Smyrna, Pergamon, Sardis, Philadelphia, Laodikeia) is that it is one of the first 7 churches mentioned in the Bible (Akdeniz, 2013, p.431). For this reason, Thyateira, is visited by visitors from many different countries.

Today, the ruins of the ancient city of Thyateira in Akhisar have been unearthed in two archaeological sites called Tepe Mezarı (Hill Cemetery) and Hastane Mound. The part between these two areas is thought to be the center of the ancient city. Of these two archaeological sites, only Tepe Mezarı is open to public. Therefore an anastilosis work held both to preserve and present the archaeological ruins. As the ruins, Tepe Mezarı covers an area of 70 meters in the west, 70 meters in the east, 76 meters in the south and 65 meters in the North (Akdeniz, 2013, p. 432).

In the ruins of Tepe Mezarı, the building remains were first found in the excavation pit opened by the Forestry Administration in 1962 (Doyduk, 2003, p.49). Then, between 1968 and 1971, archaeological excavations were carried out by the archaeologist Rüstem Duyuran. As a result of the excavations, the traces of the structure identified as a basilica without a religious function dating from the 2nd to the 6th centuries AD and a portico from the 2nd to the 4th centuries AD were found at the site (Akdeniz, 2013, p.432). At the end of excavations, a main building extending in the north-south direction and other connected structures surrounding this main building were uncovered. At the center of these structures stands the main building with a rectangular plan and an an abscisca in the north side. (Figure 1) The preserved structure is 10 meters in width and 48 meters in length from the abscisca. The actual length of the southern section cannot be determined, since it remains beneath's today modern street and buildings. The walls of the monumental

building were made of rubble stone, lime and sand mixed mortar and its height was preserved up to 4 to 5 meters (Akdeniz, 2013, p. 433).



Figure 1. Apsidal Building Remain (Tanac Zeren Archive)



Figure 2. Remain of Roman Columns (Tanac Zeren Archive)

Another ruins unearthed as a result of the first period excavations are a portico and a colonnaded Roman street extending in the north-south direction to the west of the ruin (Figure 2). The street in front of the portico; It was found covered with a floor made of small rubble stones. From the ruins; It was found that the street belongs to the Roman Period and is surrounded by rows of columns on both sides (Duyuran, 1974, p.19)

All the portamentos found in this area are in-situ, as well as all the other parts on top of them according to their state at the time of collapse. In this street, the stylobate blocks of the colonnade, consisting of two rows, are placed on a foundation made of rubble stone with sand and lime mortar. Most of the capitals in-situ in the colonnaded road and portico are in the Ionic order and some of the capitals in the northern part of the area have a Corinthian order (Duyuran, 1974, p.18). These were temporarily placed on pedestals and exhibited in the ruins.

As a result of the first period excavations carried out in the Tepe Mezarı, the remains found in the area were revealed and documented. However, this study could not be sustained and no studies were conducted in the field until 2011. The area has been cleaned with the recent works and the portable findings in the area were placed on the north wall of the area in an order. In addition, the information contained in the old information boards was updated in accordance with the results of the work carried out, and was renewed and placed in their places. The most important work done recently during 2018-2021 is the restoration work of the Roman Columned Street and the preservation and anastylosis of the columns. During the restoration process, the broken drums, column capitals and pedestals found in situ in the area were first cleaned. Then, the parts that need to be completed or reproduced in accordance with the project are made of marble material to be distinguished from the original. Carbon rod and epoxy are used to assemble the parts. Particularly, the joining of the arch parts was carried out first on the ground, on the skeleton made in accordance with the opening of the arch and placing it on the column heads with the help of scaffolding. In addition, a wooden walkway surrounding the Roman Columned Street in the shape of a u was arranged. In order not to damage the 20th century flooring under the walkway, it was first laid with pebble stone and a wooden path was placed on it. During the restoration work, it can be concluded that both the preservation of the findings were ensured and the building was restored to its former glory. As a result of the completed restoration works, the Roman Columned Street was revived, making the street and portico more perceptible. Thus, it showed the importance of presentation in archaeological areas and the need to improve the apsed building in the west of the street with restoration works.



Figure 3. The Stylobat(Tanac Zeren Archive)



Figure 5.
The Anastylosis Work of Columns
(Tanac Zeren Archive)



Figure 7.
The Stylobate and the Column
(Tanac Zeren Archive)



Figure 4. The Archs (Tanac Zeren Archive)

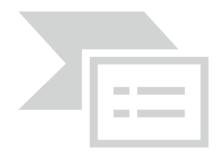


Figure 6.The Project of The Anastylosis Work of Columns



Figure 8.
The Arch's and the Architrave
(Tanac Zeren Archive)

The Anastylosis works in Metropolis Ancient city done aiming firstly protecting the Archaeological Assets, secondly to present them to the visitors on sight more properly. The Anastylosis of the three columns of the Peristyle House is done just to define the square courtyard of the Peristyle House more properly to the visitors. The figure 10 is showing the situation of before Anastylosis application, and the figure 9 shows the current situation. A restoration work is done as well for the Bouleuterion Building and the Byzantine Fortification Wall. As shown in the figure 11 and 12 the fortification wall dating back to Byzantine Period is built on the center of the Cavea of Hellenistic Period Bouleuterion Building. After the excavations of the Bouleuterion Building it is aimed to make the very well preserved Cavea of the Bouleuterion Building visible, and accessible by both preserving the togetherness of the two ancient periods, the Bouleuterion and the Byzantine Fortification Wall. For this purpose; the part of the wall locating just upside part of the Orchestra space of the Bouleuterion building is consolidated, and some stone blocks are removed, and a passage is produced. By this passage the perception of the two equal sides of the Cavea beneath the Fortification wall is managed to be detected. This passage also has a role to direct the Visitors through the Bouleterion Building to the Stoa of the city (Figure 13,14).



Figure 9. The current position of the Peristyle House



Figure 10. Peristyle House before Anastylosis (Tanac Zeren Archive)



Figure 11.

Bouleuterion and Byzantine
Fortification Wall
(Metropolis Exavations Archieve)



Figure 12.
Bouleuterion and Byzantine
Fortification Wall
(Metropolis Exavations Archieve)



Figure 13.
Photo showing the Cavea of Bouleuterion under the Byzantine Fortification Wall



Figure 14. The Passage (Tanac Zeren Archive)

Design Criteria of Protection Roofs and Walking Platforms. Natural factors affecting the sites are high winds, heavy rain and snow, accumulation of water around the site, hot days and sunlight. Archaeological sites are also defenseless against the natural catastrophes as earthquakes, floods, fires and other disaster as the erosions and heavy winds. Impacts of the animals and biological growth can be counted as natural factors

too. Human factors are the agricultural activities, real estate activities, inappropriate interventions, vandalism and intense tourism leading parking area and infrastructure problems, distortion on the paths and rubbish. Actual challenge of the remains starts after their excavation. Changing the balance of natural and built areas, and removing the protective earth covers over the remains excavations are one of the destructive forces in archaeological sites.

Preserving and presenting the remains in situ, in their original environment and context is the best way for maximizing their values and benefiting from them. Protective structures are one of these methods that allow the presentation of the site while providing control over deterioration factors. The protective shelters need to be applied to the archeological sites for three main reasons; (Tanac Zeren M., 2018-Tanac Zeren M, Uyar 2010)

- -To preserve the unearthed artifacts; the archeological ruins and the environment of the ruins, providing control over deterioration factors.
- -For presentation of the Archeological site (To show way to the visitors)
- -To preserve the ongoing field work (Keeping the visitors with adequate planning away from these areas)

The protection roof structure needed within the scope of the urgent protection areas in the archaeological sites might be provided with two application model when taking Charter of Venice into consideration (Tanac Zeren M.2018)

The first possibility is the reconstruction of the ancient ruin up to the roof level in the correct historic form, as well as the modern utilization of the new building with all the consequences of the reconstruction in regard to the state of preservation of the building substance, architectural details, the building materials used, the distribution of light, accessibility and use. The other possibility is a modern construction which is very different to ancient ruin in design, and neither borrows from its formal aspects (for instance the floor plan, the spatial dimensions and the roofline) nor adheres to its material appearance (such as in the choice of building materials), but is instead something quite different: It is only obliged to conform to the function of a protective structure and aesthetics as an architectural feature (Tanac Zeren M. 2018).

The provisions in the international instructions and charters about preserving the ruins and taking necessary precautions are clearly putting forward the importance of the subject and its choice priority on the application model. For example, in 15th provision of Venedic Charter about the excavations, states that "the ruins should be protected; necessary precautions should be taken to continuously protect the findings and architectural components. Moreover, every attempt should be made to facilitate the artefacts to be more understandable and to show its meaning without spoiling. The whole reconstruction should be dispensed in advance".

The design process of the new protection structure in the archaeological site should be in a planning schedule which features the cultural value of the remains, transforming the site to an understandable place for the visitors, making the in-structure administration successful, protecting the in-structure cultural values against negative environmental affects.

The main criteria that a protective structure should sustain can be classified as follows; (Tanac Zeren M., 2018-Tanac Zeren m., Uyar 2010).

- The protective structure has to be completely reversible, causing no damage to the site ruins,
- It ought to be low-tech, low cost and low maintenance,
- Interventions should be in minimum,
- It should not damage the remains underneath or around the protected area,
- It should respect and provide the interpretation of the authenticity and spirit of the site both with its natural and manmade elements.
- It should not break the relation of the protected area with the rest of the site,
- It should not cause the architectural evidence and values lost,
- It should supply the water drainage
- It should protect the remains against environmental conditions and biological threats
- It should protect against man and nature originating threats
- It should protect the ongoing excavation
- It should reduce the effects of sudden environmental changes

- It has to integrate accessible informative aids, such as plans, details, figures, texts, etc. in order to support every visitor's understanding and comprehension of the site and its surroundings.
- Additional night lighting, and if necessary even day lighting, should be integrated in the design.
- Last, but not least, the site's visit ought to be designed with the aid of an accessible, comfortable and safe guidance path.

Metropolis Ancient City which is located in Torbalı, İzmir managed to build some protective shelters both for preserving the archaeological ruins and to preserve the ongoing Works on the field and to present the Assets by supporting the roofs with small restoration interventions.

The shelter of the upper Roman Baths; will be given as an example for this case which is made completely reversible with new materials and new structural system elements aimed to respect and provide the interpretation of the authenticity and spirit of the site both with its natural and manmade elements by not causing any evidence and value loss of the archaeological monument. The roof has a gridal structural system, the pillars are very thin and none of them damage the remains underneath or around the protected area. The foundations are hidden. (Figure15-16-17-18) the roof is also integrated accessible informative aids, such as plans, details, figures, texts, etc. in order to support every visitor's understanding and comprehension of the site and its surroundings.

Fig.15,16 The Protection Roof placed on the Roman Bath Ruins in Metropolis (Tanac Zeren Archive)

To support the presentation idea, some small mapping works and anastylosis works of the arches have been done after the excavation period. The Arch's were consolidated and mapping is applied on the surface the consolidated Arch's (Fig. 19, 20). The floor coverings are reorganized on the floor on a membrane applied in situ. Some anastylosis works such as marble façade coatings were gathered to give an idea to the visitors about the wall finishing's of the Monument (Fig. 21, 22).

All the Archeological Ruins on site are combined with each other with walking platforms. The walking platforms of the city is made of wooden material in harmony with the nature and the Archaeological ruins.

Conclusion. The structures and artefacts unearthed at archaeological sites are important cultural and historical inheritance carrying the lives of ancient people to nowadays. It is necessary to take them under protection against environment and human oriented dangers, as every one of which has a cultural and historical value. The structures and artefacts taken under protection should at the same time be suitable for exhibition.

Actual challenge of the remains starts after their excavation. Changing the balance of natural and built areas, and removing the protective earth covers over the remains excavations are one of the destructive forces in archaeological sites. The problems of exposed remains are common due to the fragility and vulnerability of the materials that have lost their protective layers. One of the valuable materials that need special attention during and after excavation is the earthen materials, wall paintings and mosaics. Wall paintings and mosaics need special attention.

Presentation and interpretation of an archaeological site is defined in the ICOMOS Ename Charter as "public explanation or discussion of a cultural heritage site, encompassing its full significance, multiple meanings and values". Interpretation of a site meaning is regarded as an integral part of its conservation. Preserving and presenting the remains in situ, in their original environment and context is the best way for maximizing their values and benefiting from them.

In this Context; preserving the Archaeological Assets in situ can be managed in two ways, consolidation and anastylosis of the ruins concerning to preserve the uniqueness of the heritage, and protecting the consolidated and non-consolidated ancient material with a protection roof or a shelter which cause no damage to the site ruins.









Figure 17, 18. The Protection Roof placed on the Roman Bath Ruins in Metropolis (Tanac Zeren Archive)



Figure 19.
Consolidation of an Arch in order to preserve and present the Architectural assets,



Figure 20.

Some mapping applications both on the façade of the consolidated arch and the dome

(Tanac Zeren Archive)



Figure 21.
Consolidation of the hypocaust System of The Roman Bath by using membrane and reorganizing the original floor coatings



Figure 22.
Anastylosis work of the marble parts of the wall (Tanac Zeren Archive)





Figure 23, 24.The walking Platforms of the city (Metropolis Excavation Archive)

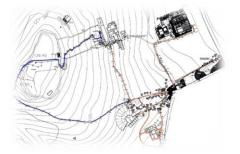


Figure 25.

The Organization of the walking platforms on site (Metropolis Excavation Archive)

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