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Identification and Typological Analysis of Ancient Theatres in Anatolia; Assessment of Their Protection Status

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Abstract

Anatolia has hosted various civilizations from the beginning of history to the present. Some of the architectural works left by these civilizations have been preserved and survived until today. Among the works from the Classical, Hellenistic, and Roman periods, theatres stand out with their artistic and technical features and magnificence. Studies on the subject are related to partial or single structures. It has been determined that comprehensive research has yet to be conducted. This study, which used fieldwork and literature review as methods, has been aimed to examine the theatres from a comprehensive perspective, determine their levels of preservation, and contribute to the field of preservation. Within the scope of the study, Anatolian theatres have been identified and analyzed in terms of their construction periods, levels of preservation, excavation-restoration status, orientations, and plan typologies. The findings have been presented through graphical data.

1. INTRODUCTION

Even when considered in its literal sense, 'conservation' is a complex action that includes activities such as preservation, protection, stewardship, and taking preventive measures. Asatekin [1] has asserted that the first stage of conservation begins with determining what is worth preserving. Binan [2] has stated that "conservation" encompasses all limited resources with irreplaceable natural or cultural qualities. Tapan [3] has regarded conservation as an economic, physical, social, and scientific effort aimed at transferring natural or cultural assets to future generations. According to Erder [16], at the stage when humans established settlements, they developed a system for the protection of monuments.

Ahunbay [4] has noted that while the history of restoration can be traced back to the beginnings of architectural art, the intellectual origins of restoration based on scientific methods began in the 19th century. The scientifically oriented approach to conservation and restoration has been shaped by the principles outlined in the Venice Charter. Although the Venice Charter has published as a result statement, it has not served merely as a conclusion but rather as the beginning of accelerating and intensifying conservation efforts on an international scale [2].

In addition to the Venice Charter, major international regulations have been established such as the European Convention on the Protection of Archaeological Heritage, the European Convention on the Protection of the Architectural Heritage, and the UNESCO World Heritage Convention. In Turkey has been designed to align conservation legislation with international standards with Law No. 2863, along with its associated regulations, principle decisions, and guidelines. Alongside these, regulations, agreements, and foundational texts addressing current themes and issues arising during the process have also been published. An example of a thematic regulation is the 'European Council Regulation on the Use

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of Ancient Performance Areas' (1997), which addresses the sensitivity of ancient theatres and the balance between conservation and visitor expectations.

As a reflection of international developments, conservation legislation in Turkey has been designed to align with international standards through Law No. 2863, along with its associated regulations, principle decisions, and guidelines. These regulations, briefly discussed in relation to conservation, have shaped the present and future of cultural assets in the Anatolian region.

Since Anatolia hosts excellent civilizations that have left significant impacts on history, such as the Hittites, Urartians, Lydians, and Phrygians since ancient times, as well as communities whose names are unknown outside the scientific circles, it has been the subject of numerous studies. The artistic and technical value of the structures unearthed during the excavations further increased the interest in Anatolia. Settlements unearthed through archaeological excavations and containing movable cultural assets and data on past life have become important data sources for architectural research. With the period of the Greeks, who were a high-level civilization, especially in terms of the artistic and technical value their civilization reached. The city-states that grew and increased in number during the Hellenistic Period and the Roman Period had a particular importance with the diversity and number of public buildings they contained. Buildings such as agora, temples, gymnasiums, theatres, and baths in these cities have become a subject of research due to their features such as form, use of materials, and construction techniques.

"Theatres," which were placed using topography, unlike other structures that make up the city, are the most striking structures of ancient cities. The theatres' circular and gradual seating rows were positioned by carving and shaping the slopes, taking advantage of the natural slope. Acoustic reasons largely shaped the form of theatres. They consist of a circular platform, arc-shaped rows of seats directed towards this platform, and a rectangular-shaped closed space behind this platform. According to popular opinion, the foundation of ancient theatre dates back to the festivities held for Dionysus, the ancient Greek god of wine. Over time, actors were added to the artists who sang and danced in these festivals, and theatre art and architecture developed. Theatre architecture, which started with the Greek civilization, developed in the Hellenistic period and reached the highest technical and artistic level with the Roman rule. However, this specific form of theatre is not only in shows; It was also used in other places within the scope of parliamentary meetings, music concerts, and religious rituals. Functional differences also contributed to the development of theatre typology.

When scientific studies on theatres in Anatolia are examined, it is seen that they are generally evaluated in excavation results meetings because they are part of a whole. However, very few studies focus on specific periods and types of theatre. Theatres in Western Anatolia were examined by Ferrero [14], and in the catalog created by Sear, ancient theatres from all over the Roman world, including Anatolia, were included [17]. Frederiksen made a typology study for late Classical and early Hellenistic theatres [18], while Sear tried to reveal the geometry of Roman theatres in another work [23]. Yaşar examined and photographed theatre structures in Anatolia [32] and Özdilek published publications about Lykian theatres [19-33]. However, documentation studies regarding theatres have generally been found within the scope of excavation research. Although theatre structures were also included in the declarations regarding the results of excavations and research, it was also observed that there were studies directly related to theatres. The main ones of these studies include the analysis of the restoration of the Rhodiapolis Theatre and the theatres of Lycia by Özdilek [34], the documentation and damage analysis of the Arykanda Odeion by Kalfa [35], the documentation of the Teos Bouleuterion by Çalışkan [37], the documentation of the architecture of the bouleuterions in the Ancient City of Smyrna by Göncü [36], Kahraman and Acun Özgünler on the conservation problems of the Aizonai Odeion [5], Zoroğlu on the architecture of the Kelenderis Odeion [6], and Say Özer & Özer on the analysis of the architecture of the Kaunos Theatre [7]. However, none of these publications identify and document the state of preservation of theatre structures in Anatolia from a holistic perspective, and a comprehensive typological analysis has not been made.

The study, that main aim is to contribute to the preservation of ancient theaters, was initiated under the assumption that effective and high-quality preservation can only be achieved through the production of detailed and comprehensive information from various professional disciplines. As the initial step of this holistic perspective, this article has aimed to identify Anatolian ancient theatre, to make a typological analysis that includes the period to which they belong materials, location, and orientation, and determine their status as subjects for scientific research and preservation. Within the scope of the study, field studies, comprehensive literature research, photographs, and written and vectorized data were compiled, and the data of 229 theatre buildings were accessed. In the research carried out, it was seen that in the structures unearthed during the excavations, the distinction between small theatre-odeion and odeion-bouleuterion was not always clear, and double names referred to them, and bouleuterions were transformed into odeions in the process. For this reason, the "Theatre buildings" evaluated in the study were limited to having a monumental cavea and the analyses were made to include these structures.

The theatre structures identified within the scope of the study were analyzed on visual and literary data in terms of construction period, plan type, cavea orientation, excavation-restoration status and level of preservation, and a result chart was created with the data obtained and evaluated.

2. THEATRES IN ANCIENT ANATOLIA

Ancient Age, Anatolia B.C. It is a period that started in 3000 BC and includes four sub-periods: Archaic, Classical, Hellenistic, and Roman. At the end of the Dark Age in 800 BC, new settlements were established in Anatolia by the Greeks [8]. These settlements, called "city-states" [9], are political formations that develop around a religious center and are located in an area that includes rural areas, urban areas, border areas, and non-urban sacred areas [10]. Theatres, associated with religious structures in the Greek civilization, also began to take a permanent place in city plans in this period, and theatre architecture became clear [11].

The Hellenistic period began in Anatolia in 334 BC with the rule of Alexander the Great, king of Macedonia [12]. During this period, Hellenistic Kingdoms were established in Anatolia, and the cities previously established also developed [13]. With the beginning of Hellenism, "theatres" continued to be built in all important cities as a part of the democratic structure [14].

The inheritance of Pergamon, one of the Hellenistic kingdoms, to Rome in 133 BC enabled Rome to enter the Anatolian lands [15]. Rome annexed this region to its territory as the "Asia" province and, in the process, annexed other Anatolian lands as provinces [15]. When the Romans began to dominate the Hellenic geography, they continued the Hellenic traditions and emphasized urbanization and city planning [16]. As the Romans expanded the cities, the theatres of the cities also grew, and from the end of the 1st century to the 3rd century A.D., the theatres of the big cities reached dimensions never seen before [14]. Justinianus, who ultimately aimed to end Paganism with the acceptance of Christianity in the Roman period, made regulations regarding theatres, and over time, theatres lost their reason for existence [14].

Although the theatres of the Classical, Hellenistic, and Roman Periods differed, theatre architecture developed through three main unchanging elements defined by Frederiksen: cavea, orchestra, and scene [18]. In theatre buildings, the inclined section where the gradually arranged seating rows (auditorium) are located is called "cavea"[18]. Cavea was used as a semi-circle in the theatres of the classical period and transformed into a horseshoe form in the Hellenistic period [19]. "Orchestra" is the name given to the platform surrounded by cavea. In the archaic period, before the stage and seating area were built, the orchestra, which is the part where the choir was located, and games were performed, was built, and over time, the orchestra took the form of a full circle [19]. The "scene", used as a stage building, reached its traditional form in the

Late Classical Period and continued its development in the Hellenistic Period [19]. In the 2nd and 3rd centuries A.D., with the influence of gladiator games, amphitheater structures were needed in cities [17]. For this purpose, elliptical or circular planned amphitheaters were built instead of theatres, or existing theatres were converted into amphitheaters [17].

Table 1. *The differences between Roman period theatres and Greek-type theatres built in the Classical and Hellenistic periods [21]*

Greek Theatre	Roman Theatre
The orchestra is full circle. The stage house and the orchestra are separate from each other.	The orchestra is semicircular. The stage house and the orchestra have become a whole.
The stage is high and shallow. The proscenium is decorated with columns and painted.	The stage is low and deep. The proscenium has a facade with ornaments, niches, and sometimes half-columns adjacent to the wall.
The back of the stage has large openings with views.	The background is a magnificent architecture
Entrances are open. For priests, there are seats of honour at the bottom.	There are vaulted entrances and areas reserved for game providers on these entrances.
There is no class distinction in the seating areas. All audience members enter from the same area leading to the orchestra.	Rich and distinguished people sit in the orchestra. The people sit in areas separated by parapets according to their classes. The public enters through different vaulted entrances.
Since the seating areas are built on a hillside, they have no facade and no colonnade system.	Although the seating rows are sometimes built on the hillside, they are mostly built on flat ground, on an infrastructure with a rich façade and galleries with columns.
Theatres were built in sacred areas.	A theatre could be built wherever the ground was solid. Sometimes there could be a mausoleum above the cavea.
Greek theatre is a religious and democratic theatre. There are equally good seating chairs for everyone. The plays staged are mostly literary works.	The Roman theatre had a class order. There are different seats for different classes in society. Special seats were made for elite classes, leaving less space for performances. Roman performances are products for the tastes of the public.

2.1. Past Studies on Typological Analysis of Theatres

The first information about the plans of the theatres can be found in Vitruvius' 5th Book called "De Architectura." Vitruvius, who distinguished theatres as Greek and Roman theatres, gave information about the three-centered plan design of Greek theatres. He described the design of Roman and Greek theatres. [22]. However, Frederiksen is the first to classify theatres typologically [18](Fig.1). He typologically classified 98 Classical and early Hellenistic Greek theatres in terms of their plan features, and also included examples from Anatolia in this classification. Frederiksen determined that there are 7 types of theatre in total.

The buildings designated as Type A have seating areas carved into the rocks in the classical period and were built after the 5th century B.C. However, Frederiksen determined that these structures as not suitable for typology [18]. Buildings designated as type D are defined as buildings built with a rectangular plan and without a monumental seating area. However, it was excluded from the evaluation because it had no continuity after the classical period [18].

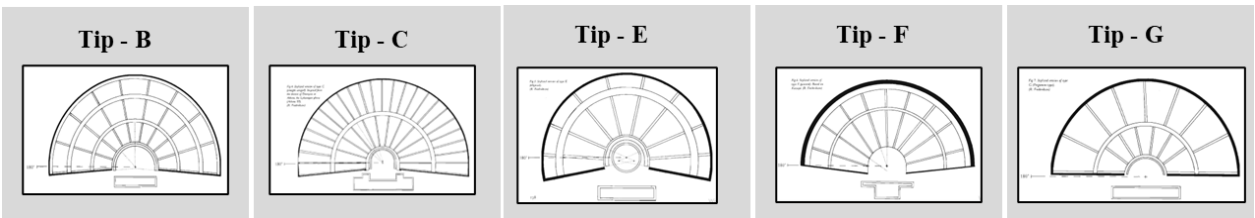


Figure 1. *The typology according to the plan types of the theatres by Frederiksen [18]*

The cavea and orchestra of the B-type theatres are larger than a semi-circle and concentric. This type, in which the cavea is mostly finished with a kerkides design, constitutes the simplest plan type[18]. Although it belongs to the early Classical period, it was found to be widespread at the beginning of the Hellenistic period [18].

The theatres called C type were defined by Frederiksen as having straight wings, it was determined that the cavea wing was parallel to the kerkides above in the lower cavea, the orchestra and the cavea were concentric in the semicircular section, and they were mostly seen in the late Classical period in the second century BC [18].

Theatres called E type are defined as having an elliptical plan. Frederiksen determined that these theatres had three circular centers, which was the example most similar to Vitruvius' Greek theatre plan[18]. He explained that it was mostly applied in Asia Minor, that there were examples of all sizes, and that examples of this plan type were mostly dated to the second and third centuries BC [18].

Frederiksen stated that type F was seen in very few examples and that in these examples, the cavea was reduced backward to indicate the stage [18].

He stated that in the so-called G-type theatres, the cavea walls formed an angle of 180° or close to 180°, and although he had reservations about whether it was a separate plan type from the B type theatres, these types of theatres had a common characteristic that was set to a standard and continued in the Roman period [18].

Vitruvius' Roman theatre plan, similar to Frederiksen's G type, was designed by placing four equilateral triangles at equal distances inside the circle designed as an orchestra. In this setup, the side of the triangle in front of the scene was determined as the front line, and other architectural elements were placed to meet the corners of the triangles[22]. However, researchers have stated that they could not find any examples of theatres that fit Vitruvius' plan scheme in the theatre buildings they examined [23-25]. Fuchs stated that Vitruvius explained the general framework of Roman theatres and probably presented his favorite theatre designs [25]. Sear also analyzed the plans of Roman theatres, based on Vitruvius' method, and produced schemes based on the geometric relationships between the elements of the theatres [23](Fig 2). In addition to examples based on four equilateral triangles placed inside the Vitruvian orchestra circle, Sear also identified examples based on two pentagons and two squares. In these models, the points where geometric shapes intersect with the circle are formed as axis. Architectural elements such as the cavea wall, skene, and stairs between the rows of seats were placed on these axes.

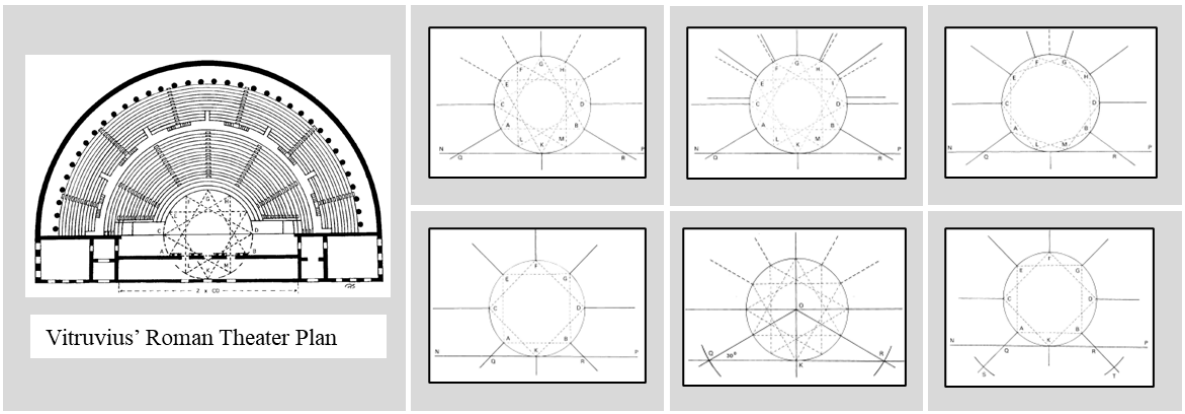


Figure 2. *Vitruvius' Roman theatre plan and plan types drawn by Sear[23]*

Small, on the other hand, examined theatres regarding the suitability of the colonnaded facades of the stage structures to the Vitruvian model and classified them into 3 groups [24]. 1st group; These are examples where the front of the scene forms a straight line. Vitruvius' model is also classified in this group. He classified the second group as those with a recessed front façade and semi-circular niches surrounding the protocol doors. He defined the third group as semi-circular niches surrounding the stage doors [24].

2.2. Past studies about The Typological analysis of the theatres of Anatolia

Ancient theatres spread over a wide geography in Anatolia and are generally defined as Hellenistic, Roman, or Greco-Roman in the literature. Although Ferrero, who examined theatre structures in Western Anatolia, stated that he could not detect any pre-Hellenistic theatre in Anatolia [14], Özdilek stated that she identified 32 theatre structures in the Lykia Region and that they date back to the Classical Period [19]. She stated that there are examples consisting of almost rectangular seating areas carved into the bedrock, dating back to. She cited the theatrical areas in the acropolis of Mnara and Myra as examples of this [19]. The Kıran Lake sacred area theatre was dated to the classical period by researchers [26], and the excavation results revealed that there was a classical period stage building in the Kaunos theatre [27].

In addition to all these, there are theatres in Anatolia such as Telmessos Acropolis Theatre, Kandyba Theatre, Simena Theatre, whose entire cavea was carved into the primary rock, and it is difficult to determine the exact construction dates of the rock-carved theatres [34]. For this reason, these structures are dated with approximate time intervals in the literature.

Theatres in Anatolia are mostly described as Greco-Roman in the literature. Greco-Roman theatres were obtained by enlarging Hellenistic theatres with Roman construction techniques or by leaning a part of the cavea on the hillside and continuing the Hellenistic tradition to save labor in theatres built during the Roman period [34]. Tek stated that most of the theatres in Anatolia were changed during the Roman Period and gained Greco-Roman features [13]. Özdilek, according to its inscription, was built by the architect Zenon in A.D. He stated that even the Aspendos theatre, built in the 2nd century, leaned on the hillside by the Hellenistic tradition and thus had Greco-Roman characteristics [34].

According to Ferrero, the Roman theatre scheme, which is solid, practical, and can be built immediately anywhere, was applied all over the empire, while the Anatolian peoples and the Hellenes did not use this vaulted scheme directly but made some improvements in their traditional arrangements [14]. This is how Greco-Roman-style theatres in Anatolia emerged. Özdilek stated that Greco-Roman theatres, which are accepted as a form specific to Anatolia, are also found in Greece outside Anatolia [34]. According to Sear, during the Roman period in Asia Minor and Greece, theatres developed adhering to the Hellenistic tradition, the cavea exceeded the semi-circle, and the Hellenistic character was preserved in the stonework and carved details [17].

Hellenistic period theatres and Roman theatres in Anatolia are partially different in terms of building materials. Hellenistic Period theatres were generally built with local materials such as limestone, travertine, and granite [14]. However, marble was also used in places where the local stone was marble or in cities such as Miletus and Priene, where marble could be easily transported by sea [14]. In the Hellenistic period, skene and cavea were generally built from the same material, and stone or marble was used for the decorated sections [14]. Covering boards and knitted blocks were usually used in the seating rows. Limestone was mostly preferred as the cladding/block material in theatres, and marble was preferred in Ionia [14]. Although local stone material was used in the infrastructure in Roman period theatres, marble material was used in the seating rows and decorations [14].

The plan types of some theatres dating back to the Hellenistic period were examined by Fredersiksen, Balabaura, Iassos, Antiphellos, Kaunos, Kibyra, Knidos-1, Letoon, Termessos, Stratonikeia, Sikyon, Rhodiapolis and Pinara theatres are classified as type B, Assos theatre was as type C, Ephesus, Magnesia am Meander, Kadyanda, Oinoanda, Priene theatres are classified as type E, and Pergamon and Perperene theatres are classified as G type [18]. In his study, Small classified the Daphne, Aspendos, and Pergamon theatres dating back to the Roman period as the first group [24].

In addition to these, there are examples in Anatolia that have a closed plan type, as in the Side Theatre (Fig.3a), but whose orchestra is more than a semi-circle and whose cavea exceeds 180°, as well as examples that have a closed plan type, a semi-circular structure, as in the Aspendos Theatre (Fig. 3b). There are also examples of a shaped orchestra and a 180° cavea. Another plan type is mostly seen in

small theatres and odeions or bouleuterions, such as the Kibyra Odeion (Fig. 3c). This plan type has a semi-circular orchestra, a 180° cavea, and a corridor separating the cavea and the scene.

Other plan types seen in odeions and bouleuterions consist of examples surrounded by rectangular walls. Types with caveas exceeding 180°, as in the Smyrna Early Roman Bouleuterion (Fig. 3d), and examples with caveas of 180°, as in the Troy Bouleuterion (Fig. 3e), were identified. Additionally, plan types with angular U-shaped caveas have only been encountered in bouleuterions. There are examples with angled cavea corners, as in the Priene Bouleuterion (Fig. 3f), and examples with straight corners, as in the Notion Bouleuterion (Fig. 3g).

In addition to all these theatre structures, amphitheater structures were built in Anatolia, as in other Roman lands. It is thought that a part of the cavea of the Mastaura Amphitheatre, whose excavations have just begun, leans on the hillside and in this respect it may have been built on a Hellenistic theatre [28] In the Pergamon Amphitheatre, the cavea and its relationship with the slope were investigated, and according to the first results, it was understood that the cavea was built with a more cost-effective method than a vaulted infrastructure [29].

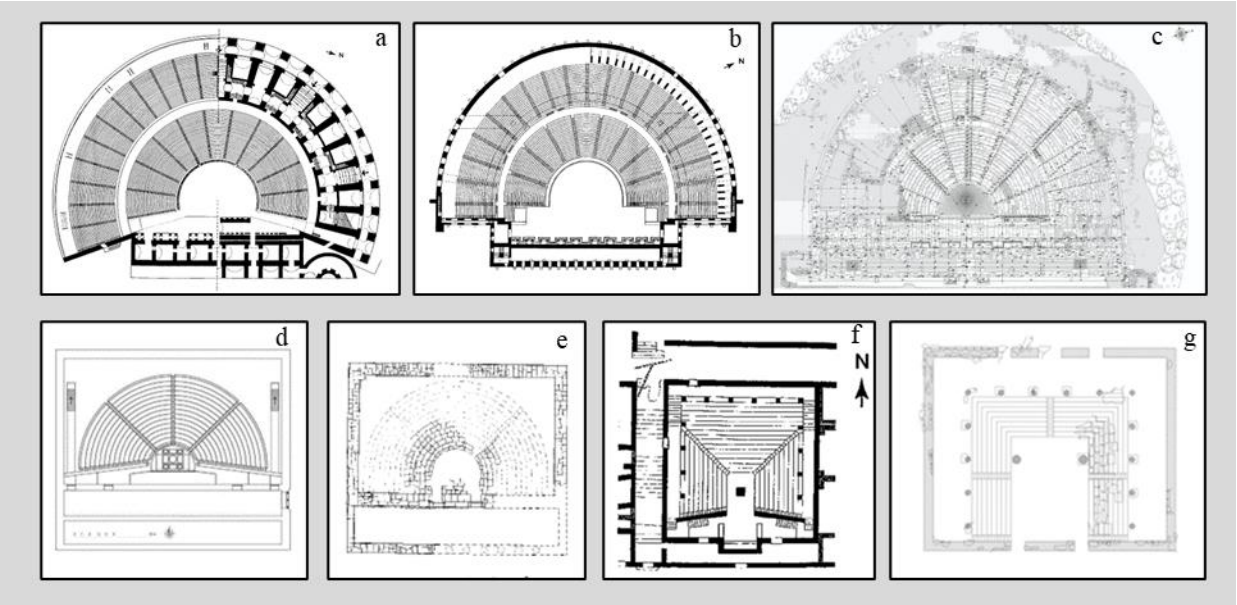


Figure-3. *a.Side Ancient Theatre Plan[17], b. Aspendos Ancient City Theatre[17], c. Kibyra Odeion[30], d. Smyrna Early Roman Bouleuterion[36], e. Troy Bouleuterion[17], f. Priene Bouleuterion[17], g. Notion Bouleuterion[31]*

3. CURRENT FINDINGS REGARDING THE IDENTIFICATION AND TYPOLOGICAL ANALYSIS OF ANATOLIAN THEATRES

Within the scope of the study, as a result of data scanning on ancient theatre structures in Anatolia - including odeions and bouleuterions - a total of 229 theatre-shaped structures were identified. First, the identified theatres were listed, and then individual research was conducted on the listed theatres. By determining the locations (city/district) of the theatres, photographs of their general appearance, site plans that will help understand their relationship with the city, plans sufficient to give an idea about their architectural features, literary data including their dating, and information on whether excavations and restoration work have been carried out have been tried to be obtained. The data about the theatres where excavations were carried out have been obtained largely, but only some of the desired data about many theatre structures could be obtained. The theatre buildings were analyzed regarding the first construction period, plan type, cavea orientation, excavation, and restoration status in light of the data obtained. In addition, the preservation levels of the theatres were determined as a percentage based on the visual and literary data in previous publications.

It was seen that interventions were made in various periods in the theatre buildings identified within the scope of the study. Therefore, the first construction periods were taken as a basis, and it was determined that they were theatre buildings dating back to the Classical, Hellenistic, and Roman periods. It was understood that the theatres built in the Classical and Hellenistic periods were of the Greek type, and differences between these theatres and Roman theatres were identified. Greek-type theatres have an open plan type, while Roman theatres have a closed plan type; The orchestra elevation was lower in Roman theatres than in Greek-type theatres, and there were mostly water channels in the orchestra. In Roman theatres, the scenery became more ornate and flamboyant and formed the background, while in Greek-type theatres, the background was the landscape. In Roman theatres, it was observed that the stage was lower and deeper than the Greek type theatres, due to the lower orchestra level and the plays being played on the stage. The most distinctive feature of Roman theatres is the arch-vault system used; larger theatres could be built in this way. Vaulted passages are opening to different parts of the cavea; It was understood that the seating rows were mostly decorated, and seating was allocated to different groups.

However, it has been observed that in Roman theatres in Anatolia, there were frequent examples where the orchestra exceeded the semi-circle, and the number of theatre structures rising on their structure was very few, mostly caveas leaning on the hillside. It has been observed that especially the Late Hellenistic Period theatres and the Early Roman theatres are mainly similar, and this makes the dating of theatre structures difficult. It was understood that the fact that the theatres that were reshaped with the additions made during the Roman period and the theatres built according to the Greek plan type during the Roman period were called Greco-Roman in the literature caused a conceptual confusion, and instead of classifying the theatres in terms of style, theatre structures were classified according to their first construction periods.

Plan Type		Plan Characteristics	Plan Type		Plan Characteristics
Type – A	Carved From main rock	Cavea is entirely carved from main rock	Type R1		Dating mostly to the Early Roman Period, it has a closed plan type, an orchestra of more than a semicircle, and a cavea of more than 180°.
Type – B		cavea larger than a semicircle, seen since the classical period.	Type R2		Dated to the Roman Period, it has a closed plan type, a semicircular orchestra and a 180° cavea.
Type – C		Mostly dated to the Late Classic period, the cavea is larger than 180° and U-shaped.	Type – O1		It has a cavea of approximately 180° and a corridor separating the cavea and the skene, mostly seen in small theatres, odeions or bouleuterions.
Type – D	Without Typology	Unique examples that do not directly match any theater type	Type O2		It has a 180° cavea surrounded by a rectangular wall, seen in odeions or bouleuterions.
Type – E		It was built mostly in the second and third centuries BC, and its cavea was larger than 180° and had an elliptical plan.	Type– O3		Surrounded by a rectangular wall, seen in odeion or bouleuterion, cavea exceeding 180°
Type – F		*Cavea* is smaller than180°	Type B1		It has a cornered U-shaped cavea, seen in Hellenistic bouleuterions, with angled corners of the cavea.
Type – G		Seen in the Hellenistic and Roman periods, the cavea is 180° or close to 180°	Type– B2		It has a cornered U-shaped cavea, seen in Hellenistic bouleuterions, with flat corners of the cavea.

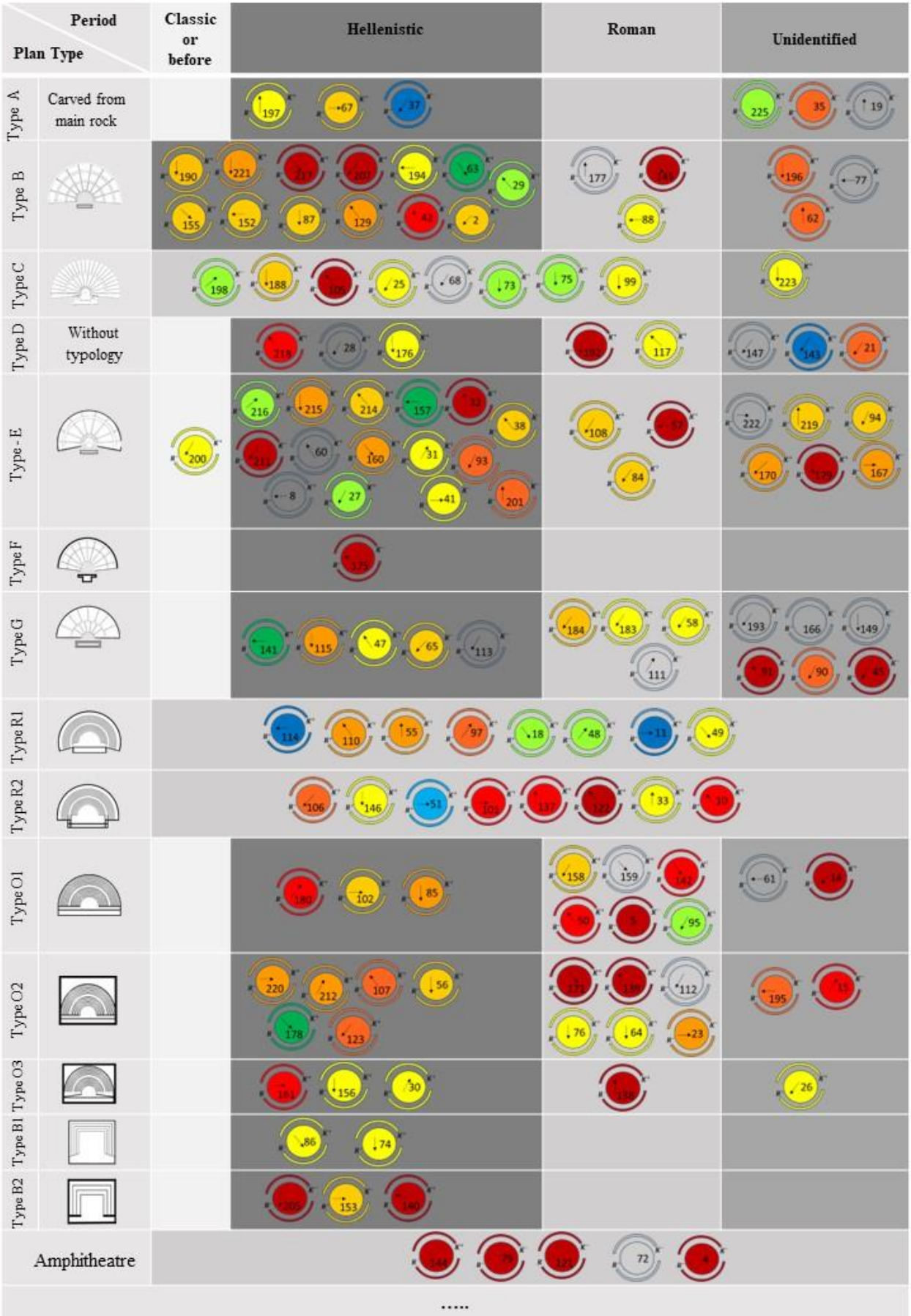
Figure 4. *Plan type and the characteristics of the theatres and theatre shaped structures*

It has been observed that the rock-carved theatres, which were built by carving all or almost all of the cavea into the main rock, did not exactly comply with the Greek or Roman plan types. In rock-carved theatres, unlike other theatres, no stone blocks or covering material were used on the cavea steps; the main rock was carved directly into the seating step. In some rock-carved theatres that were shaped as geographical features allowed, the cavea steps differed within themselves. For this reason, rock-carved theatres are typologically considered as a separate class.

Anatolian amphitheatres are also discussed typologically in a single class. Among the amphitheatre structures, only the plan survey of the Pergamon amphitheatre was available; the plans of the other structures were not available. The research has revealed that the number of studies on amphitheatres is low, the protection level of most of these structures is very low, and excavations still need to be carried out or have not been completed. Since the data obtained were mostly plans processed schematically on site plans, it was seen that it was not possible to analyze the plan type based on the visuals of the ruins. For this reason, no distinction was made in terms of plan type.

In the study, making a typology according to the plan schema was deemed appropriate. The plan types created by Sear for Roman theatres were not evaluated within the scope of the study because they were based on determining the geometric principles that may have been used in theatre design rather than the morphology of the theatre. Since the grouping made by Small was based only on the morphology of the front side of the scene, it did not coincide with the holistic structure of the study and was excluded from the scope. For this reason, Frederiksen's previous classification was deemed appropriate, but additions were made due to the different types of theatres identified over time (Fig 4)

In determining the level of protection of the theatres, their pre-restoration state was considered for those that could be identified; For those who could not be identified, their current situation was considered valid. Protection levels are expressed with color codes; the best protection status (90-100%) is shown using blue, and the worst (0-10%) using dark red.


Period
Plan Type
Classic or before
Hellenistic
Roman
Unidentified
Type A
Carved from main rock
Type B
Type C
Type D
Without typology
Type - E
Type F
Type G
Type R1
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Type B2
Amphitheatre
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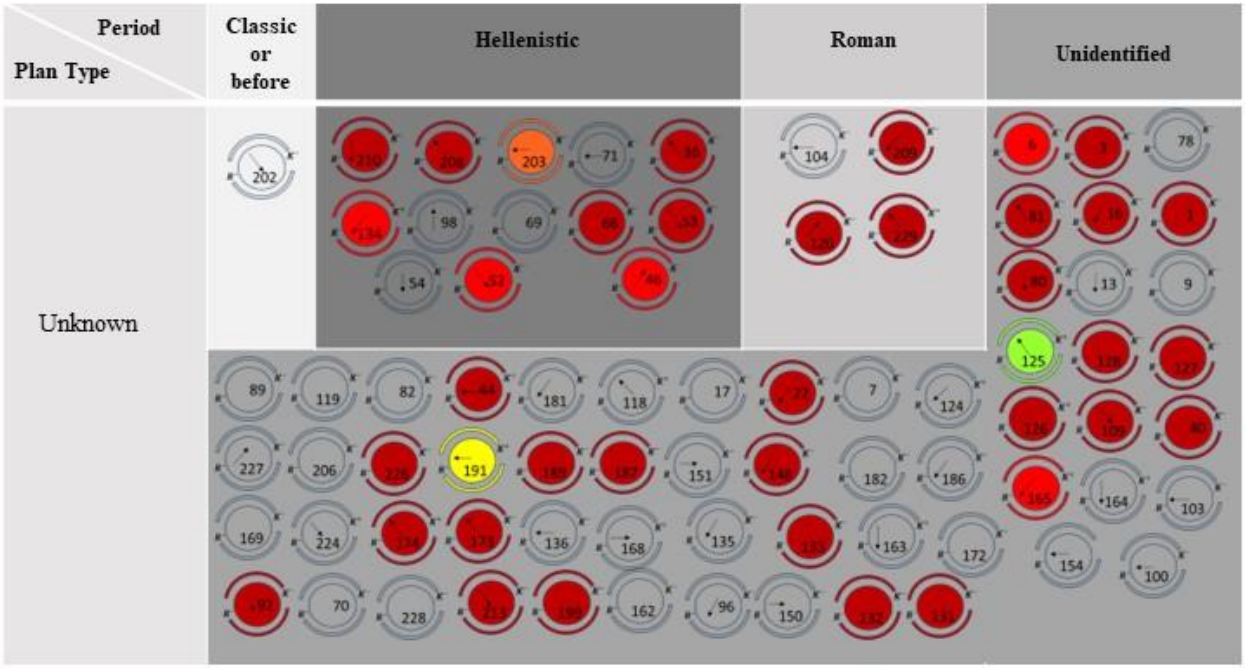

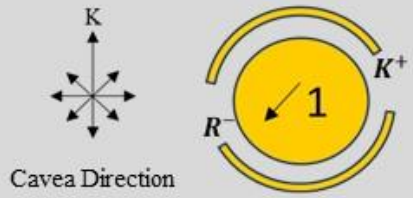

Cavea Direction

K^+:Excavation process continues / finishes
K^- :Excavation process has not started
R^+ : Conservation / restoration continues / finishes
R^- : Conservation has not started
1 … 229 : Number of theatre

Level of Preservation

1. Adana, Ceyhan, Mapsuestia/ Misis Ancient City Theater
2. Adana, Karataş, Magarsus Ancient City Theater
3. Adana, Kozan, Anavarza Ancient City Theater
4. Adana, Kozan, Anavarza Ancient city Amphitheatre
5. Adana, Seyhan, Augusta Ancient City Theater
6. Adana, Tufanbeyli, Comana (Şar) Ancient City Theater
7. Adana, Yumurtalık, Aigeai/ Ayas Ancient City Theater
8. Afyonkarahisar, Dinar, Apameia Kibotos/ Kelainai Ancient City Theater
9. Afyonkarahisar, Sülün, Prymnesos Ancient City Theater
10. Ankara, Altındağ, Ankyra Ancient City Theater
11. Antalya, Aksu, Perge Ancient City Theater
12. Antalya, Alanya, Antiochia ad Cragum Ancient City Bouleuterion
13. Antalya, Alanya, Colybrassos Ancient City Theater
14. Antalya, Alanya, Syedra Ancient City Theater/ Bouleuterion
15. Antalya, Alanya, Selinus / Trianapolis Ancient City Odeion
16. Antalya, Alanya, Laertes Ancient City Theater
17. Antalya, Akseki, Kotenna (Gödene/Dösene) Ancient City Theater
18. Antalya, Demre, Myra Ancient City Theater
19. Antalya, Demre, Myra Ancient City Acropolis Gathering Area
20. Antalya, Demre, Kyaneai Ancient City Theater
21. Antalya, Döşemealtı, Ariassos City Bouleuterion/Odeion
22. Antalya, Döşemealtı, Ariassos Ancient City Theater
23. Antalya, Döşemealtı, Termessos Ancient City Odeion / Bouleuterion
24. Antalya, Döşemealtı, Sia/Osia Ancient City Theater
25. Antalya, Finike, Limyra Ancient City Theater
26. Antalya, Finike-Elmalı, Arykanda Ancient City Odeion / Bouleuterion
27. Antalya, Finike-Elmalı, Arykanda Ancient City Theater
28. Antalya, Finike-Elmalı, Arykanda Ancient City Bouleuterion
29. Antalya, Kaş, Antiphellos Ancient City Theater
30. Antalya, Kaş, Patara Ancient City Bouleuterion
31. Antalya, Kaş, Patara Ancient City Theater
32. Antalya, Kaş, Xanthos Ancient City Hellenistic Theatre
33. Antalya, Kaş, Xanthos Ancient City Roman Theatre
34. Antalya, Kaş, Nisa/Neiseus Ancient City Theater
35. Antalya, Kaş, Kandyba Ancient City Theater
36. Antalya, Kaş, Phellos Ancient City Theater
37. Antalya, Kaş, Simena Ancient City Theater
38. Antalya, Kaş, Apollonia Ancient City Theater
39. Antalya, Kemer, Mnara Ancient City Theater
40. Antalya, Konyaaltı, Attaleia Ancient City Theater
41. Antalya, Korkuteli, Termessos Ancient City Theater
42. Antalya, Kumluca, İdebessos Ancient City Theater
43. Antalya, Kumluca, Rhodiapolis Ancient City Theater
44. Antalya, Kumluca, Gagai Ancient City Theater
45. Antalya, Kumluca, Korydalla Ancient City Theater
46. Antalya, Kumluca, Olympos Ancient City Theater
47. Antalya, Kumluca, Phaselis Ancient City Theater
48. Antalya, Manavgat, Side Ancient City Theater
49. Antalya, Manavgat, Selge Ancient City Theater
50. Antalya, Serik, Aspendos Ancient City Bouleuterion
51. Antalya, Serik, Aspendos Ancient City Theater
52. Antalya, Serik, Sillyon Ancient City Theater
53. Antalya, Serik, Sillyon Ancient City Odeion/ Bouleuterion
54. Aydın, Bozdoğan, Piginda/Bargasa Ancient City Theater
55. Aydın, Çine, Alabanda Ancient City Theatre
56. Aydın, Çine, Alabanda Ancient City Odeion / Bouleuterion
57. Aydın, Didim, Didyma Ancient City Theater
58. Aydın, Didim, Milet Ancient City Theater

59 Aydın, Didim, Milet Ancient City Bouleuterion
60 Aydın, Germencik, Magnesia Ancient City Theatre
61. Aydın, Germencik, Magnesia Ancient City Odeion
62. Aydın, Germencik, Magnesia Ancient City Theatron
63. Aydın, Karacasu, Aphrodisias Ancient City Theater
64. Aydın, Karacasu, Aphrodisias Ancient City Odeion/ Bouleuterion
65. Aydın, Karpuzlu, Alinda Ancient City Theater
66. Aydın, Koçarlı, Amyzon Ancient City Theater
67. Aydın, Kuşadası, Panionion Ancient Theater
68. Aydın, Merkez, Tralleis Ancient City Theater
69. Aydın, Merkez, Tralleis Ancient City Ecclesiasterion
70. Aydın, Nazilli, Antiochia am Meander Ancient City Theater
71. Aydın, Nazilli, Harpasa Ancient City Theater
72. Aydın, Nazilli, Mastaura Ancient City Amphitheater
73. Aydın, Söke, Priene Ancient City Theater
74. Aydın, Söke, Priene Ancient City Bouleuterion
75. Aydın, Sultanhisar, Nysa Ancient City Theater
76. Aydın, Sultanhisar, Nysa Ancient City Gerontikon/ Bouleuterion/ Odeion
77. Aydın, Yenipazar, Orthosia Ancient City Theater
78. Balıkesir, Bigadiç, Blados Ancient City Theater
79. Balıkesir, Erdek, Kyzikos Ancient City Amphitheatre
80. Balıkesir, Erdek, Kyzikos Ancient City Theater
81. Bartın, Amasra, Amastris Ancient City Theater
82. Bartın, Amasra, Amastris Ancient City Odeion
83. Bolu, Merkez, Claudioplis Ancient City Theater
84. Burdur, Ağlasun, Sagalassos Ancient City Theater
85. Burdur, Ağlasun, Sagalassos Ancient City Odeion
86. Burdur, Ağlasun, Sagalassos Ancient City Bouleuterion
87. Burdur, Altınyayla, Balboura Ancient City Upper Theatre
88. Burdur, Altınyayla, Balboura Ancient City Lower Theatre
89. Burdur, Bucak, Sia / Osia Ancient City Theater
90. Burdur, Bucak, Melli/Milias Ancient City Theater
91. Burdur, Bucak, Cremna / Kremna Ancient City Theater - 1
92. Burdur, Bucak, Cremna / Kremna Ancient City Theater – 2
93. Burdur, Gölhisar, Boubon Ancient City Theater
94. Burdur, Gölhisar, Kibyra Ancient City Theater
95. Burdur, Gölhisar, Kibyra Ancient City Odeion-Bouleuterion
96. Bursa, Gölyazı, Apollonia ad Rhyndacum Ancient City Theater
97. Bursa, İznik, Nicea Ancient City Theater
98. Bursa, Mudanya, Apameia -Myrlea Ancient City Theater
99. Çanakkale, Ayvacık, Assos Ancient City Theater
100. Çanakkale, Bayramiş, Skepsis Ancient City Theater
101. Çanakkale, Biga, Parion Ancient City Theater
102. Çanakkale, Biga, Parion Ancient City Odeion
103. Çanakkale, Ezine, Alexandria Troas Ancient City Theater
104. Çanakkale, Ezine, Alexandra Troas Ancient City Odeion
105. Çanakkale, Merkez, Troya Ancient City Big Theatre–A
106. Çanakkale, Merkez, Troya Ancient City Small Theatre– Odeion -B
107. Çanakkale, Merkez, Troya Ancient City Bouleuterion -C
108. Denizli, Buldan, Tripolis Ancient City Theater
109. Denizli, Honaz, Kolossai Ancient City Theater
110. Denizli, Pamukkale, Laodikeia Ancient City West Theatre
111. Denizli, Pamukkale, Laodikeia Ancient City North Theatre
112. Denizli, Pamukkale, Laodikeia Ancient City Bouleuterion
113. Denizli, Pamukkale, Hierapolis Ancient City Greek Theater
114. Denizli, Pamukkale, Hierapolis Ancient City Roman Theater
115. Düzce, Konuralp, Prusias ad Hypeium Ancient City Theater
116. Eskişehir, Sivrihisar, Pessinus Ancient City Theater
117. Eskişehir, Sivrihisar, Pessinus Ancient City Theatron
118. Gaziantep, Nizip, Zeugma Ancient City Theater
119. Hatay, Antakya, Seleuceia Pieria Ancient City Theater
120. Hatay, Antakya, Antiochia am Orontes Ancient City Theater
121. Hatay, Antakya, Antiochia am Orontes Ancient City Amphitheatre
122. Hatay, Defne, Daphne Ancient City Theater
123. Hatay, Erzin, Epiphaneia Ancient City Odeion
124. Hatay, Erzin, Epiphaneia Ancient City Theater
125. Isparta, Atabey, Adada Ancient City Theater
126. Isparta, Atabey, Seleukeia Sidera Ancient City Theater
127. Isparta, Atabey, Agrae Ancient City Theater
128. Isparta, Uluborlu, Apollonia Ancient City Theater
129. Isparta, Yalvaç, Pisidia Antiokheia Ancient City Theater
130. İstanbul, Beyoğlu, Byzantium/ Constantinople Ancient City Galata Theatre
131. İstanbul, Fatih, Byzantium/ Constantinople Ancient City Small Theatre
132. İstanbul, Fatih, Byzantium/Constantinople Ancient City 14. District Theatre
133. İstanbul, Fatih, Byzantium/ Constantinople Ancient City Big Theatre
134. İzmir, Aliağa, Erytrai Ancient City Theater
135. İzmir, Aliağa, Kyme Ancient City Theater
136. İzmir, Aliağa, Myrina Ancient City Theater
137. İzmir, Bayraklı, Smyrna Ancient City Theater
138. İzmir, Bayraklı, Smyrna Ancient City Early Roman Bouleuterion
139. İzmir, Bayraklı, Smyrna Ancient City Late Roman Bouleuterion
140. Smyrna Ancient City Hellenistic Bouleuterion
141. İzmir, Bergama, Pergamon Ancient City Akropolis Theatre
142. İzmir, Bergama, Pergamon Ancient City Odeion/ Bouleuterion
143. İzmir, Bergama, Pergamon Ancient City Heroon Odeion
144. İzmir, Bergama, Pergamon Amfitheatre
145. İzmir, Bergama, Pergamon Ancient City Roman Theater-Viran Kapı
146. İzmir, Bergama, Pergamon Ancient City Asklepion Theater/Odeion
147. İzmir, Bergama, Pergamon Ancient City Demeter Sacred Area-Aheatral Area
148. İzmir, Bergama, Pergamon Ancient City Odeion
149. İzmir, Bergama, Perperene– Theodosiopolis Ancient City Theater/Odeion
150. İzmir, Dikili, Pitane Ancient City Theater
151. İzmir, Foça, Phokaia Ancient City Theater
152. İzmir, Menderes, Notion Ancient City Theater
153. İzmir, Menderes, Notion Ancient City Bouleuterion
154. İzmir, Ödemiş, Hypaipa Ancient City Theater
155. İzmir, Seferihisar, Teos Ancient City Theater
156. İzmir, Seferihisar, Teos Ancient City Bouleuterion
157. İzmir, Selçuk, Ephesus Ancient City Theater
158. İzmir, Selçuk, Ephesus Ancient City Odeion/Bouleuterion
159. İzmir, Selçuk, Ephesus Ancient City Artemision Odeion
160. İzmir, Torbalı, Metropolis Ancient City Theater
161. İzmir, Selçuk, Metropolis Ancient City Bouleuterion
162. İzmir, Urla, Klazomenai Ancient City Theater
163. Kastamonu, Taşköprü, Pompeipolis Ancient City Theater
164. Kastamonu, Taşköprü, Pompeipolis Ancient City Odeion
165. Kırklareli, Vize, Byzias Ancient City Theater
166. Kocaeli, İzmit, Nicomedia Ancient City Theater
167. Konya, Hadim, Astra Ancient City Auditorium
168. Konya, Karatay, Savatra Ancient City Theater
169. Konya, Sarayönü, Laodikeia Kombusta Ancient City Theater
170. Kütahya, Çavdarhisar, Aizanoi Ancient City Theater ve Stadium
171. Kütahya, Çavdarhisar, Aizanoi Ancient City Bouleuterion/Odeion
172. Malatya, Merkez, Melitene Ancient City Theater
173. Manisa, Alaşehir, Philadelphia Ancient City Theater
174. Manisa, Merkez, Magnesia ad Sipyllum Ancient City Theater
175. Manisa, Merkez, Aigai Ancient City Theater
176. Manisa, Merkez, Aigai Ancient City Bouleuterion
177. Manisa, Salihli, Sardis Ancient City Theater
178. Mersin, Anamur, Anemorium Ancient City Odeion
179. Mersin, Anamur, Anemorium Ancient City Theater
180. Mersin, Aydıncık, Kelenderis Ancient City Odeion
181. Mersin, Mezitli, Soloi Pompeipolis Ancient City Theater
182. Mersin, Mut, Claudiopolis (Mut) Ancient City Theater
183. Mersin, Silifke, Diokaisareia Ancient City Theater
184. Mersin, Silifke, Olba Ancient City Theater
185. Mersin, Silifke, Elaiussa Sebaste Ancient City Theater
186. Mersin, Silifke, Seleucia ad Calycadnum Ancient City Theater
187. Mersin, Tarsus, Tarsos Ancient City Theater
188. Muğla, Bodrum, Halikarnassos Ancient City Theater
189. Muğla, Dalaman, Lydai /Lydae Ancient City Theater
190. Muğla, Datça, Knidos Ancient City Small Harbor- Theater
191. Muğla, Datça, Knidos Ancient City Odeion
192. Muğla, Datça, Knidos Ancient City Bouleuterion
193. Muğla, Datça, Knidos Ancient City Big Theater

194. Muğla, Fethiye, Pinara Ancient City Theater
195. Muğla, Fethiye, Pinara Ancient City Odeion/ Bouleuterion
196. Muğla, Fethiye, Telmessos Ancient City Theater
197. Muğla, Fethiye, Telmessos Ancient City Akropolis Theatre
198. Muğla, Fethiye, Kadyanda Ancient City Theater
199. Muğla, Kavaklıdere, Kyon/Kys Ancient City Theater
200. Muğla, Köyceğiz, Kaunos Ancient City Theater
201. Muğla, Marmaris, Amos Ancient City Theater
202. Muğla, Marmaris, Kıran Lake Sacred Area Theater
203. Muğla, Marmaris, Kastabos sacred area Theater
204. Muğla, Marmaris, Herakleia Latmos Ancient City Theater
205. Muğla, Marmaris, Herakleia Ancient City Bouleuterion
206. Muğla, Milas, Mylasa Ancient City Theater
207. Muğla, Milas, Euromos Ancient City Theater
208. Muğla, Milas, Bargylia Ancient City Theater
209. Muğla, Milas, Bargylia Ancient City Odeion
210. Muğla, Milas, Keramos Ancient City Theater
211. Muğla, Milas, Iassos Ancient City Theater
212. Muğla, Milas, Iassos Ancient City Odeion/ Bouleuterion
213. Muğla, Seydikemer, Sidyma Ancient City Theater
214. Muğla, Seydikemer, Tlos Ancient City Theater
215. Muğla, Seydikemer, Oinoanda Ancient City Theater
216. Muğla, Seydikemer, Letoon Ancient City Theater
217. Muğla, Ula, Thera Ancient City Theater
218. Muğla, Ula, İdyma Ancient City Bouleuterion
219. Muğla, Ula, Kedreai Ancient City Theater
220. Muğla, Yatağan, Stratonikeia Ancient City Bouleuterion
221. Muğla, Yatağan, Stratonikeia Ancient City Theater
222. Muğla, Yatağan, Hyllarima-Ullarima Ancient City Theater
223. Osmaniye, Merkez, Hierapolis-Kastabala Ancient City Theater
224. Tekirdağ, Marmara Ereğlisi, Perinthos-Herakleia Ancient City Theater
225. Tokat, Zile, Zile Ancient Theater
226. Uşak, Banaz, Akmonia Ancient Theater
227. Uşak, Ulubey, Blaundos Ancient Theater
228. Yozgat, Merkez, Tavium Ancient City Theater
229. Zonguldak, Çaycuma, Teios /Tieion Ancient City Theater

Figure 5. *Graphical representation of findings related to Anatolian Ancient Theatres*

3. EVALUATION AND CONCLUSION

In the Ancient Age, which was associated with developing Greek and Roman culture, many Greek city-states were established in Anatolia. One of the essential structures of city-states governed by democracy was theatres. After Alexander the Great conquered Anatolia, the Greek period, called the Classical period, ended, and the Hellenistic period began. The Hellenistic Kingdoms period, which started with the death of Alexander the Great, ended with the Romans annexing Anatolia to their territory. Like many other things in Anatolia during the Roman period, the theatres, which were developed and given a new dimension by the Hellenes, were shaped with a new form. The orchestra, which changed from a circular form to a horseshoe form in the Hellenistic period, reached a semi-circular form in the Roman period. The transition from open to closed plan type occurred during the Roman period.

In the research conducted within the scope of this study, a total of 229 theatre-shaped buildings were identified in Anatolia. These structures were classified in terms of plan type, cavea direction, and construction period and evaluated within the scope of literature and field study data in terms of their level of preservation. In the research, it has been revealed that some of the newly discovered theatre-shaped buildings over time cannot be evaluated within the scope of the classifications made in the past. For this reason, new classifications have been created within the scope of Plan type and the types previously identified by other researchers. The newly identified types were identified as structures with similar - different functions, both theatre and theatre forms. Within the scope of theatre-shaped structures added to the typology, bouleuterion structures with angular U-shaped cavea dating back to the Hellenistic period, semi-circular and odeion structures with caveas slightly exceeding the semi-circle surrounded by external walls and semi-circular odeion structures found in both the Hellenistic and Roman periods. In addition, examples that do not provide a typology in terms of plan type were also found. There is insufficient data to classify the amphitheatres built during the Roman period. In the closed theatres of the Roman period, examples with semi-circular plans or plans exceeding semi-circles were found; On this occasion, it was understood that the plan forms of the Hellenistic period continued during the Roman period.

It has been determined that there were enlargement works in Hellenistic theatres during the Roman period, and mostly a stage building and/or an upper cavea with a vault system was added. It has been observed that Hellenistic theatres with these features were also defined as Greco-Roman. However, it has been concluded that Romanized Greek/Hellenistic theatres and Roman theatres with Greek influence, which are different from each other in terms of the construction process and final product, should be conceptually separated.

The E-plan type is the most common form in theatres, and it has been determined that B-type theatres follow it. It has been understood that the earliest dated theatre dates back to the classical period and is the E-plan type Kaunos Ancient Theatre and the Kıran Lake Sanctuary Theatre, whose plan type could not be determined since excavations were not carried out. Within the scope of the work, 6 rock-carved theatres, 19 Type-B, 9 Type-C, 25 Type-E, 15 Type-G, 8 Type-R1, 8 Type-R2, 11 Type-O1, 14 Type-O2, 5 Type-O3, 2 Type-B1, 3 Type-B2 were detected. Additionally, 5 amphitheatres were added.

When looked at in terms of cavea directions, it has been seen that geographical conditions are the main factor affecting the cavea direction. 9 theatre buildings are oriented to the north, 19 to the south, 7 to the east and 15 to the west.

In terms of preservation levels, a wide range of preservation was encountered, from completely destroyed to completely preserved. The conservation levels of theatre buildings were determined as a percentage and expressed with color codes, within the scope of the criterion that they can reach the present day originally and holistically, based on literature data, field work, visual data and plan drawings. For example, the Augusta, Tarsos, Phellos, Lydai and Gagai theatres, which were colored in dark red (0-10%), were completely destroyed, and only a small part remained of the Anavarza amphitheatre, Ankyra, Smyrna and Olympos theatres, which were colored in red (10-20%) remained. The Priene and Letoon theatres, colored in light green (60-70%), are well-preserved examples, while the theatres of Assos, Miletus, and Limyra are shown in yellow (50-60%) due to the losses in the parts added during the Roman Period. The Xanthos theatre is a good example in terms of the partial preservation of the Hellenistic theatre under the Roman period theatre. The Xanthos Roman theatre is shown in yellow, and the Xanthos Hellenistic theatre is shown in dark red. Although there were collapses, the Side theatre was well preserved and was colored with light green (60-70%), while the Perge theatre was colored with dark blue (80-90%) due to its great preservation. Ephesus Theatre and Pergamon Acropolis theatres are also dark green (70-80%) in terms of their level of preservation. expressed in color. As mentioned before, the Aspendos Ancient Theatre is colored blue (90-100%), representing the best level of protection, as it has been preserved with almost all its elements. Except for the Mastaura amphitheater, the protection level of the other theatres is very low and is expressed in dark red (0-10%). Since the Mastaura amphitheater is in a landfill, there is no data on its protection level.

It was observed that 70 theatre structures date back to the Hellenistic period, while 58 theatre structures date back to the Roman period. Although there is no direct relationship between the level of preservation and the construction period, it has been understood that the best-preserved theatre examples are those built during the Roman period.

It has been observed that excavations have been carried out in almost all of the well-preserved theatres, and comprehensive restoration works have been carried out in a limited number of excavations. Ankyra, Myra, Arykanda, Antiphellos, Nysa, Ephesus, and Aspendos ancient theatres can be examples of restored theatres.

In this study, which was created as a result of literature review, fieldwork, and analysis of open access visual data, it was understood that the protection level of most of the Anatolian ancient theatres was below 50%, and only 9 theatre structures had a protection level above 70%. It has been seen that new results may emerge with the progress of excavations on theatre buildings and/or the increase in scientific publications about theatre buildings, and as the study continues, questions have arisen as to what the problems are that prevent the preservation of theatres and what distinguishes well-preserved examples from other theatre buildings.

As a result of the findings obtained and not obtained in the study, it has been assessed that making singular data on ancient theatres more accessible will lead to the emergence of more research questions related to these theatres. It has been concluded that creating updated catalogs and/or databases containing comprehensive and scientific data on theatres would facilitate the provision of answers to emerging research questions. This study has brought up the question of what common conservation issues theatres

face. It has been assessed that identifying common issues will enable the development of guidelines for the repair and preservation of theatres. It has been concluded that these guidelines could directly contribute to the effective and high-quality preservation of theatres.

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