

# THE SPATIAL ORGANIZATION OF PUBLIC SPACES IN THE ANCIENT THOUGHTS; THE CASE OF PERGAMON

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## Abstract

*Spatial organization of public spaces has been an issue that involves social and temporal differentiations reflecting the thought systems of the communities to which they belong. These differentiations make it obligatory to assess the forms of ancient thoughts, their conjuncture and spatial reflections together with the period when the publicity/public terms were formed and first appeared.*

*There are spatial differences that exist in the way of thinking and living in both the ancient era and the present day. The differences are caused by a transformation from a more public lifestyle to the self-oriented human profile in the present day. Public lifestyle here refers to a composition of differentiating ideas about the understanding and interpreting of all elements of life in the. At the same time, a self-oriented human profile is a human profile that returns to oneself and is personalized under the crushing capitalism which is based upon the assumption that Man can rule the world using technology.*

*Therefore, tracing and depicting the historical origins of the semantic and spatial meanings of the concept of publicity, with a parallel approach to the philosophy of Arendt is relevant. The subject of this paper is to interpret the critique of the modern era in reference to the ancient thoughts directing it to the idea of shaping the future.*

*In this context, the ancient Pergamum has been analysed with the help of archaeological expeditions in order to define the design criteria of public spaces in the ancient period. This has been one of the centres of civilisation that was established in Western Anatolia which became the capital of the Kingdom of Pergamum and played a significant role. Today, the ancient Pergamum is to the North and West of the modern city of Pergamum (Bergama) in Turkey. This study contributes to the comparisons between the ancient era and the contemporary times.*

**Keywords:** *The Ancient Era, Public Spaces, Spatial Organisation, Philosophy of Arendt, Pergamum.*

## Introduction

In the discourse on cities that treat them as living organisms, a structural and functional process of change which they have been through historically has been often described. However, it is known that the change is an outcome of human thought and its reflection on the spatial organisation of cities especially in terms of public spaces.

Evolution of the thought systems has caused also a change on the semantics of the space throughout history. The ancient period covers the history from the 8<sup>th</sup> century BC through to the 5<sup>th</sup> century AD including Greek, Hellenistic and Roman civilizations in chronological order. As it is the acceptance of this study; considering the search of human beings for divine and the meaning of even a natural phenomena in the ancient period, it is inevitable not to see the reflections of this perception on the spatial organisation of the cities.

Today, many public spaces are intentionally designed to be looked at but not touched. They are neat, clean and empty, as if to say, “no people, no problem!” (Madden, 2001). Yet, great public spaces are where celebrations are held, social and economic exchanges take place, friends run into each other, and cultures mix. They are the “front porches” where people interact with each other and the government. When the spaces work well, they serve as a stage for our public lives (<http://www.pps.org/reference/grplacefeat/>). But when a public space is empty, vandalized or used chiefly by undesirables, this is generally an indication that something is wrong with its design, its management, or both (Madden, 2001).

Therefore, tracing and depicting the historical origins of the semantic and spatial meanings of the concept of publicity constitutes the subject of this study. It intends to define the design criteria of the public spaces in the ancient period with the help of archaeological excavations.

Methodologically examining the public spaces of Pergamon, this study aims to determine the main design criteria of ancient periods to compare in future studies if they have been considered or not today. Hence, the content has been limited to discuss these criteria through the organisation of public spaces in the ancient settlement.

### **Ancient Greek Thought and the Emergence of Public Sphere:**

The terms “private” and “public” were first mentioned during the Hellenistic period of history. The polis<sup>3</sup> in Ancient Greek had a structure that constitutes spatial organisations that all types of events can take place. Having a perspective as the basic criteria of everything is “human”, Ancient Greek cities include three types of uses in urban areas; public, private and sacred.

Here, the Acropolis which was generally located on a hill overlooking the city corresponds to the sacred space while “koine” and “oikos” were raising as two different living spaces. In the Ancient Greek cities, polis was strictly separated from the *oikos*. The public life went on in agora, where almost all the urban functions were located in hosting all political, religious, commercial activities surrounded by the public buildings such as bazaar, entertainment, public bath, small

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<sup>3</sup> Polis has been considered as identical as being a part of the city-state politically by Arendt and Habermas. (see also; Arendt, H., (1998), *The Human Condition*, Chicago University Press, Chicago, Habermas, J., (1989), *The Structural Transformation of the Public Sphere*, The MIT Press, Cambridge)

religious ceremony and meeting places. However, this did not mean that the public sphere occurred only in agora; it was constituted in discussion and action (lexis and praxis) (Habermas, 2009). On the other hand, "*Oikos*" was considered to belong to individuals representing the private life and domesticity.

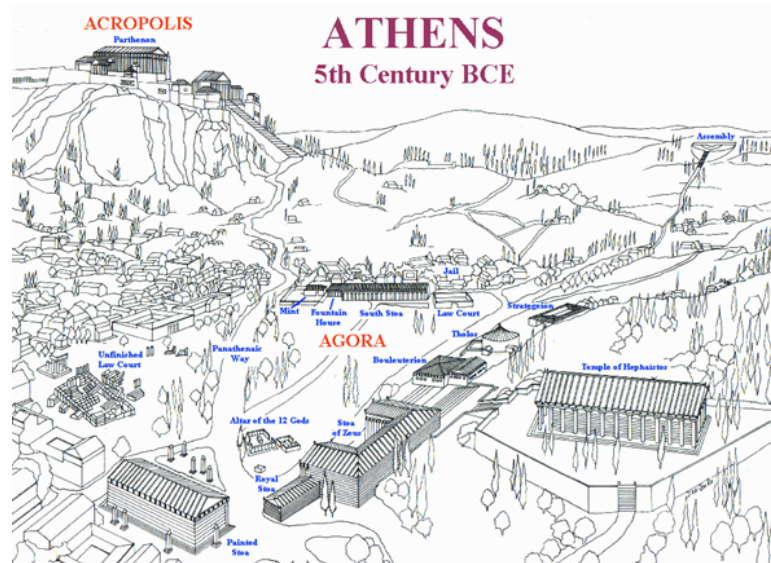


Fig. 1: Spatial relation between Acropolis and Agora, 5th Century BC  
Source: <http://socrates.clarke.edu/athens.gif>

In parallel with the historical origins of the concept of the public and publicity, Arendt has developed a critique of the modern world on the basis of the idea that the future is shaped today. He argues that in the ancient life and the ancient Greek, all the humane elements were still visible considering them as deceived in the modern world today. Arendt located the origins of the public sphere in the Ancient Greek polis, based around the meeting of citizens in the public space of the agora (Sheller and Urry, 2003). According to Greek thought, the human capacity for political organization is not only different from but stands in direct opposition to that natural association whose center is the home and the family. In this view, individuals have learned to see the world from the standing point of others and understand each other while spending most of their daily lives in polis having discussions.

Hence, the polis is the organization of the people as it arises out of acting and speaking together, and it lies between people living together for this purpose, no matter where they happen to be. The distinct specialty of the *oikos* is how the people live together according to their demands and needs. Such that the continuity of one's existence can be related to his/her partnership with others (Arendt, 1998).

Considering the ancient Greek thought as an ideal form for the essence of present-day politics, Arendt describes the positions of the public and private spheres related with this perception. Arendt also reveals three great events as the threshold of the modern age determining its character; the discovery of America and the ensuing exploration of the entire planet; the Reformation, the invention of the telescope and the development of a new science (Arendt, 1998).

In this period that began with the modern age, the distinction between what is public and private had disappeared, the impact of the principles of publicity had been lost and thereby the public sphere had been destroyed in the twentieth century. In the absence of the public sphere, individuals have faced ontological, epistemological, and psychological problems isolated from each other losing their ability of observing different perspectives, neutrality and objectivity (Öztimur, 2003).

In this sense, the issue that must be handled is the publicity of Man. As it has been conceptualized by Sennett, it is possible to address the public man, in other words the side of man that belongs or in concern of the society. In his study, "The Fall of Public Man" which has been described as a process, Sennett argues that by the 19<sup>th</sup> century, after the consolidation of the power of the bourgeoisie and under the continual influence of capitalist economies, people have retreated from meaningful public interaction into a private life (Sennett, 1977).

Besides, what is more important for Arendt, is the blurring awareness on understanding and re-establishing the public sphere in the twentieth century. This lying fallow of that important capacity might cause individuals to become inhuman or just a passive government object (Lewis, Hinchman, 1996).

This period, which Habermas also indicates as the beginning of the increase in the circulation of goods and information, is a process that affects both the form and the use of the cities. Hence, this process has brought along class conflicts and a turning point in terms of the change of cities and especially the public spaces. Public spaces which had to be the stage of compromises of different social groups have been witness to violent clashes of different interests.

Today, the present situation of the publicity and public space in terms of its historical transformation has to be considered in reference with the terms globalization, individualization and alienation. The process has been described as resembling the people on the one hand creating a standard culture and lifestyle through the technology and on the other hand. These are being melted under the thumb of capitalism to become polarized and atomised. In our history of humanity, these experiences require solidarity and social responsibility more than ever. However, the individual is now getting lost on the way to his/her personal welfare getting apathetic to the community that he/she belongs losing all the social responsibilities.

Thus, remembering its meaning, public spaces are subject to urban design not only in a spatial perspective but also in a social perspective. These spaces are where the commune has to get together and debate about their mutual life face to face. In terms of urban design, an ideal public space must be organized not for the needs of only a specific group or class to make the possibility of debating more but for the needs of all.

Examining if the spatial organisation of public spaces affects the daily lives of individuals or contrarily if the urban life itself creates the organisation and the use of public spaces, on a stimulus-response scheme will remain inconclusive. However, what is significant here is getting the importance of the absolute interaction between the public role of human and the spatial organisation of public spaces.

Taking the coexistence of people into consideration, the organization of the cities as public spaces is only likely to be actualized through quality of life and public welfare oriented approaches. Thus, the harmony of the social life and the relation with the space will be reflected in each other. Thereby, cities determine and present the quality of urban life and the values of the social life (Otaner, Keskin, 2005). However, this organization can only be actualized for the

public spaces when the sense of “spaces that do not belong to anyone” change into “spaces that belong to everyone”.

### **The Ancient City of Pergamon and its Public Spaces; Historical Development of the Ancient City of Pergamon:**

As a word, Pergamon belongs to a very old pre-Greek language that especially has left marks on the place names near the Eastern Mediterranean basin. In that language, Pergamos or Pergamon means “castle” and/or "fortress". Pergamon is located the coast of a valley that Caicos (Bakırçay) River pass through the east-west direction (Radt, 2002).



Fig. 2: Location of Pergamon  
Source: Radt, 2002

In 334 BC, after Alexander-the-Great defeated the Persians, Western Anatolia began to experience Hellenistic Period as a mixture of Greek and local culture. Since 280 BC, Pergamon became one of the centers of this civilization and so has been desired by various kingdoms and tribes throughout history (BTO, 2002).

Pergamon had a large hinterland and productive agricultural lands due to its compact and identified urban form and location on the Castle Mountain which is about 300 meters high. The hill that visually dominated the agricultural landscape, and its proximity to major transportation routes was convenient in for defensive purposes and drainage. These were key elements of the view of Pergamon. Topography has created the third dimension of Pergamon and made it unique in terms of form and pattern separating the city from other contemporary cities in Hellenistic Period (Yenen et al., 2008).



In terms of **constructional & perceptual features and image**; Impressive marble building facades towards the west and the theatre highlights the stunning and the unique character of Acropolis in silhouette. Public buildings such as Agora, the Altar of Zeus, palaces and the Temple of *Tranianus* remind of statues with their view in the third dimensions. In the Roman period, the magnificence of the city, that connected with Asclepius by a marble columnar way called the *Via Tecta* (Sacred Way) from Acropolis towards the plain, can easily be perceived through the splendour public buildings (Serapion Temple, stadium, forum, gymnasium, 30,000-seat theatre and a 50,000-seat amphitheatre) (Yenen, Hamamcioğlu, 2006).



Fig. 3: The Aerial view of Ancient Pergamon

Source: [http://wowturkey.com/t.php?p=/tr31/emrekan\\_bergama.jpg](http://wowturkey.com/t.php?p=/tr31/emrekan_bergama.jpg)

Size & capacity and hinterland, which is also related with natural thresholds and resources directly, is a very important criteria and had been considered in the spatial organisation and development of ancient cities. Circumstances such as limited resources and pedestrian access, shows the necessity for the spatial development within certain boundaries reflecting the technological level of the period in Pergamon as well as the other ancient city-states. Before the Industrial Revolution, cities that were close to the agricultural areas had been surrounded by the walls in order to ensure the safety of central functions and life (Money, 1975). These walls border the residential structures, workshops and all the settlement with the population for short. In the ancient period, the population of Pergamon was approximately about 40,000 and spread over 90 hectares in Acropolis that was defined by walls (Eriş, 2003).

Forming a kind of dual core, the relationship between acropolis and the agora had gained a different look due to the evolving political changes in time. Agora had gained continuous, practical and political significance until it became the most vibrant and exclusive element of the city in contrast with acropolis. Acropolis was seen not as a vibrant core but as a supplement while the political regime was in progress from kingdom to democracy through aristocracy. In this sense, agora is the element that gives and reflects the character of the Greek cities (Wycherley, 1962).

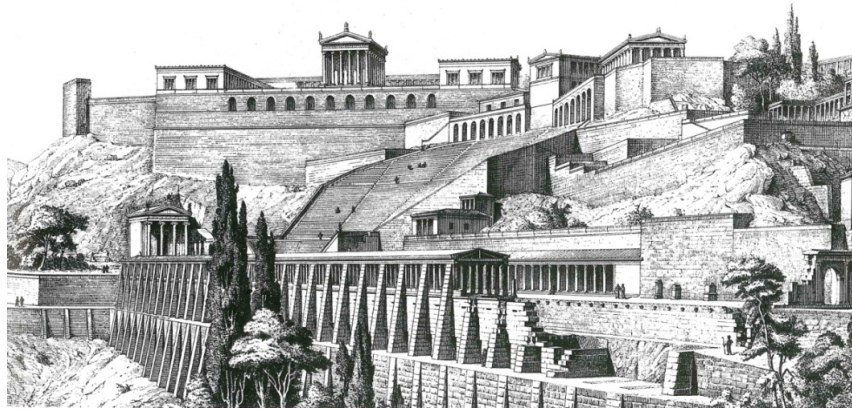


Fig. 4: The Majestic Acropolis of Pergamon – Reconstruction by R. Bohn  
Source: Radt, 2002

Acropolis as the center of governance structures and religious functions, upper agora as having a multi-purpose daily economic activities, gymnasium and theaters where the cultural events were hold are the basic structural elements of Pergamon surrounded by the city walls. In Pergamon, urban planning was considered as an art; special attention has been paid for the design of interconnected, interrelated semi-open and open urban spaces and also for the design of the buildings that has formed these spaces. Since the beginning of the archaic period, the temple of the city has been chosen as a tool to materialise and reflect the most competent achievements and the greatest aspirations in the field of art. While we see the consideration of accessibility and infrastructure features as a design criteria (Wycherley, 1962).

Therefore, despite the various topographic and technological difficulties, Pergamon has been a monumental city integrating art in architecture through civilization and wealth (Malay, 1993). On the other hand, in the 4<sup>th</sup> century BC, the Sanctuary of Asclepius, the god of healing has been launched in Pergamon. Later on, Pergamon was also famous for its extensive hospital and healing sanctuary dedicated to the god of healing Asclepius, where people with health problems, especially psychological disorders were treated with water bathing in the sacred spring (Radt, 2002).

Also in terms of management and again accessibility & infrastructure criteria; during the Hellenistic Period, the "Pergamon City Law" has been issued which is considered to be the basis of understanding of today's municipality. According to this law, main roads were not allowed to be narrow than 9 m, and the second level roads not less than 4 m. There are two separate channel systems for the drinking water supply and waste water of the city. The existence of an important infrastructure shows the development level of the city (Eriş, 2003). Roman emperors set up local administrations for providing the security in provinces and to continue life and started to collect taxes in the cities.

This style of governing caused selected people to be in control of the management of the city. This resulted in the governing class becoming richer in proportion to the rest of the population. Public buildings from which all population was expected to benefit were built with the sources provided by rich people. Examples of these buildings are temples, theaters, fountains, galleries and baths with colonnaded arteries. Members of wealthy families obtained prestige and high status in return of their contributions to the construction of public buildings. This is the reason, why public buildings are large and fairly decorative (Rheidt, 1996).

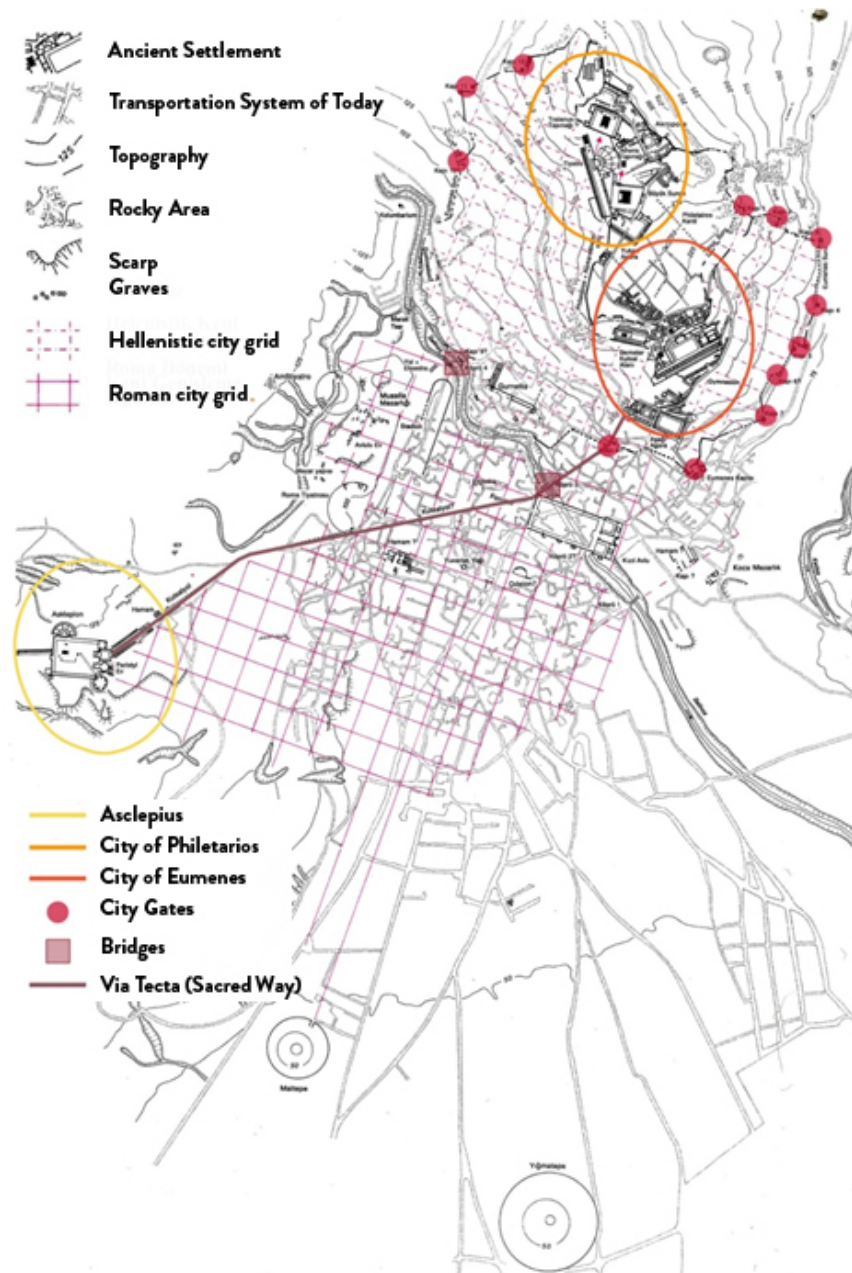


Fig. 5: Ancient City Development of Pergamon / Natural Thresholds & Accessibility  
Source: Author

In fact, 1<sup>st</sup> century AD was a period of re-construction and enrichment for Pergamon entirely. However, the opposition between the glory of the public structures and the modestness of the residential structures was not a boasting tool of the cities which not only achieved the political independence. As mentioned earlier, it is more an indicator of an understanding that emphasises public life and publicity as much more important than the private in terms of social aspect.



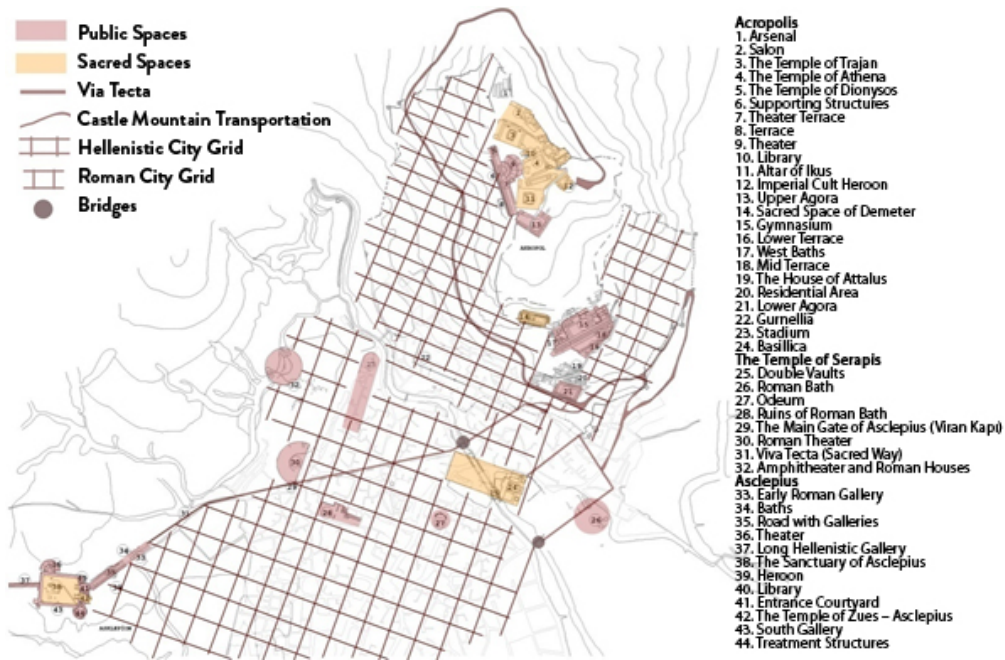


Fig. 6: Public and Sacred Spaces of Pergamon and Road System / Functional & Spatial Relations  
 Source: Author

The majority of the economy, which was based on slave labour during the ancient period, enabled leisure time for citizens to spend on recreational actions. Impressive public buildings of Pergamon that were built during especially the Roman period are important indicators of trends in leisure. This situation has also affected the development of cultural activities. As a matter of fact parchment was developed in Pergamon for the first time during 2<sup>nd</sup> or 3<sup>rd</sup> century BC, Pergamo from which name it is believed the word "parchment" evolved. In addition, as it is also understood from the fairly decorative and flashy buildings or statues, due to the special interests of the governance and its promoting approaches on art and aesthetic, Pergamum became one of the best-known centers where the training of handicrafts like sculpturing and carving was given (Yenen et al., 2008).

During the later period of Roman rule, the importance of Pergamum was still maintained with population of 120,000 people and a remarkable Christian community. It is known that midst of the 4<sup>th</sup> century, two churches were built; one in to the court of Lower Agora and the other on the Selinos Stream, Seraplion (Kızılavlu). As the churches and monasteries have been built instead of the temples which were pulled down, the city of Pergamum is known as a centre of Christianity. Pergamon is one of the first places where the Bible became widespread. Today, the Church of Pergamon is the only one of seven churches, which is mentioned in the Bible and of which the location is determined (Özden et al., 2006).

Beside the mentioned features of public spaces, functional and spatial relations were also considered between different types of uses like private and sacred spaces. Private (residential) spaces is one of the three types of uses in ancient cities that has been mentioned before and as it is seen from the map above, residential areas have been located in connection with the public and sacred spaces via different grid road systems of Hellenistic and Roman periods. Furthermore, there has been an absolute transportation relation between both public and

sacred spaces through *via tecta* (sacred way) and bridges as well as the passages that can be seen in detailed plans. The following section offers these details of the mentioned public spaces.

### **Spatial Organisation of the Public Spaces in the Ancient City of Pergamon**

**Roads:** Starting from the Gate of *Eumenes* (South gate) and moving from the southern slope towards the North, the main road continues to the Gymnasium through the main gate of the Lower Agora. This main road served the need for an extensive road system to transport especially the construction materials of the Upper City with a proper ramp and also the need for connecting the public spaces to each other. There are continuous series of stores and workshops on the main road. *Via Tecta* (Sacred Way) that connects Castle Mountain with the Sanctuary of Asclepius has been integrated with the grid street pattern passing the main and side gates of Gymnasium (Radt, 2002).

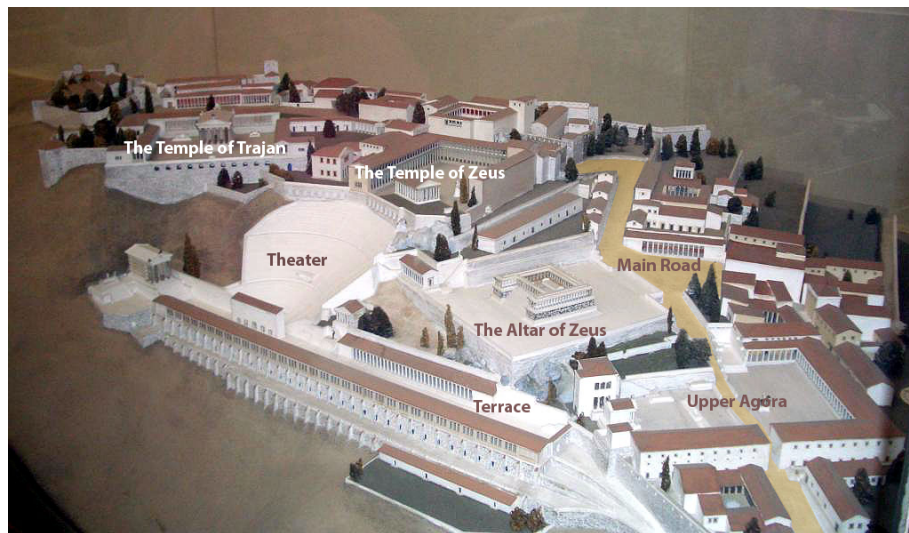


Fig. 7: Spatial Organisation of the Upper City; Theater, Temples and Agora  
Source: [http://www.midillituru.com/bergama/bergamares/zeusModell\\_Pergamonmuseum.jpg](http://www.midillituru.com/bergama/bergamares/zeusModell_Pergamonmuseum.jpg)

### **Upper and Lower Agoras (The Market Places)**

The Upper Agora was used both as a bazaar and also as a religious centre, located on the terrace below to the south of the Great Altar. But the Lower Agora was essentially a marketplace. The roads that surround the Lower Agora from all directions connect with the main road in the South. The main road of the city passes right through the middle of the Upper Agora in the shortest distance. This route has been designed not to increase the transition to the castle while still providing access to the square of the Upper Agora. The connection between the Upper Agora and the Great Altar and also the theatre was provided by staircases (Radt, 2002).

### **Theaters, Stadium and Amphitheater**

A single theatre had not been enough for a city like Pergamon in the long run. Thus, during the Roman period, new theatres and other structures with similar functions were added to the first theatre that existed since 2<sup>nd</sup> century BC in the Upper Agora. The constructions of an amphitheatre and a stadium were required for the entertainments that were not known before like gladiator fights and chariot races. In the understanding of this period, the theatre was not a place for just entertainment or training but was also a place for the meetings of citizens where

they have politically influential discussions. The theatre of the Upper Agora is located on a steep slope that the palaces towards the west cut the stiff northeast wind. There are also connections between the theatre and the sacred spaces like the Great Altar, the Sanctuary of Trajan and the Upper Agora by staircases and tunnels. During the Roman period, an ambitious building programme was carried out: a stadium, a theatre and an amphitheatre were constructed on the road between the Upper City and the Asclepius. In addition, there is another theatre in the Asclepius, the healing sanctuary (Radt, 2002).



Fig.8: Spatial Relation of Theatre of Acropolis and Main Road  
Source: Author

## Gymnasium

Pergamon has the largest known Gymnasium of the Hellenistic world. It is known that there were seven Gymnasiums but the others have not been discovered yet. Gymnasium is a type of structure that was used for many different purposes during the Hellenistic period. Gymnasium includes functions such as school education, philosophy classes, sport competitions, and public bath etc. Social life and entertainment were essential to daily life so public banquets, feasts and celebrations were also held in here. There was also an archive of a very large number of inscriptions which was open to the public (Radt, 2002).

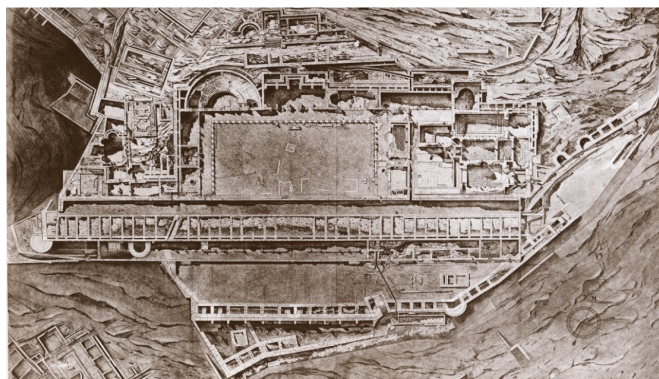


Fig. 9: Great Gymnasium and the Temple of Hera  
Source: Radt, 2002



## Odeum

It is known that there were two *odeums* with almost no architectural remaining one in gymnasium with 1,000-seat capacity and one in Asclepius that are comparatively small theatres in which musicians and orators performed. The one which is still standing today in the south of the Red Basilica is disappearing in today's urban pattern (Radt, 2002).

**Asclepius:** Dating back to the 4<sup>th</sup> century BC, Asclepius is one the most important healing sanctuaries as a medical school in which the most famous doctors and physicians of the period worked and which is the world's first psychiatric hospital. The connection with Acropolis is provided by the *Via Tecta* starting from the main gate of Asclepius (Radt, 2002). The sanctuary of Asclepius contains also galleries, odeum, temples, sanctuaries, baths, spa, springs, exercise rooms, library, 3,500 seat theatre offering music, water and spa therapies, mud baths, meditation, special diets, dream interpretations as well as the surgical operations. It served not only as a hospital but also as a social and religious centre to the city (Menekay, 2009).



Fig. 10: The Temple of Asclepius and Theater  
Source: Author

## Conclusion

In this study, the needs of human for socialisation being part of the community has been emphasised. It attempted to explain this based on the terms such as urban communication, liveability and public. The close relationship between human beings and place with the criteria that must be taken into account in terms of urban design and planning disciplines have been discussed on the example of Pergamon which is one of the most important ancient cities in Turkey.

In the historical process, Pergamon was developed in the form of a compact city with a population of 120,000 people and unique public structures of the period such as 30,000 - seat theater and a 50,000-seat amphitheater and also with private and sacred spaces. The scale of the development indicates natural thresholds, access and the limits that people can recognize each other in as a living example by virtue of the archaeological excavations.

Today's Pergamon (Bergama) with a population of 61,406 people has no theater and/or even a cinema hall in contrast with the 30,000 - seat theater and all these public structures of ancient Pergamon. Even so, the macroform of the settlement (Bergama) has sprawled over a much

wider area which ignores the sustainability of the natural thresholds, resources, public interaction and accessibility basically again in contrast with the development of ancient Pergamon.

This contrast, which is detailed in this study on the example of ancient Pergamon, brings a striking reality on the issue of both the spatial and the social quality of public spaces giving an idea about the “development level” of the cities in general, regardless of the technological sophistication and conditions throughout the history.

In this sense, the considered design criteria of the public spaces throughout the ancient Pergamon are examined in comparison with today’s Bergama in the following studies as;

- 01) Size & capacity and hinterland,
- 02) Accessibility & infrastructure,
- 03) Natural thresholds and resources,
- 04) Functional relations and spatial features,
- 05) Constructional & perceptual features and image,
- 06) Management

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