



Building Past Landscapes for the Future: Landscape Biography of a Wetland

Geçmiş Peyzajları Gelecek için İnşa Etmek: Bir Sulak Alanın Peyzaj Biyografisi

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Abstract

Landscape biography is an analysis of the long-term changes, spatial transformations, values, and the complex interaction between social and economic developments in a particular region from prehistoric periods to the present. As an essential part of human life, landscapes have the potential to absorb moments, memories, and thoughts. Human existence and personal life cycles also contribute to this process. In this research, it is revealed biographically how landscape-human-space (wetland-Lake Bafa) and time characteristics shaped, changed, and transformed each other in the long-term (*longue durée*). For this purpose, the biographical database of Lake Bafa and its surroundings was created by processing historical maps and data using Geographical Information Systems. The data were first separated according to their periodic characteristics and mapped by making trend and density analyses. As a result, the connection of a wetland landscape with the past and the present is revealed biographically, and predictions are made for the future. With these predictions, the long-term changes of the landscape were examined and the importance of the biographical approach not only for landscape architects but also for different professional disciplines that would contribute to this work was emphasized. The results of this research will contribute to cultural heritage in terms of establishing the connection of wetlands and other landscapes to the past and the management of the future.

Keywords: Landscape, Landscape biography, Long term (*Longue Durée*), Lake Bafa, Wetland, Past landscapes.

Özet

Peyzaj biyografisi, belirli bir bölgenin tarih öncesi dönemlerinden bugüne kadar geçen süre içerisinde uzun dönem değişimlerinin, mekânsal dönüşümler, değerler, sosyal ve ekonomik gelişmelerin birbiriyle olan ilişkileri arasındaki karmaşık etkileşimin üzerinde yoğunlaşarak analiz edilebilir şekilde değerlendirilmesidir. İnsan yaşamının vazgeçilmez bir parçası olarak peyzajlar, insan yaşamındaki anları, anıları ve düşünceleri özümseme potansiyeline sahiptir. Bu özümsemeye insanın varlığı ve kişisel hayat döngüleri de katkı sağlamaktadır. Bu çalışmada; peyzaj-insan-mekân (sulak alan-Bafa Gölü) ve zaman özelliklerinin birbirlerini uzun dönemde (*longue durée*) nasıl biçimlendirdikleri, değiştirdikleri ve dönüştürdükleri biyografik açıdan ortaya konulmuştur. Bu amaçla; Bafa Gölü ve çevresinin biyografik veri tabanı tarihsel haritaların ve geçmişe yönelik verilerin Coğrafi Bilgi Sistemleri ortamında işlenmesiyle oluşturulmuştur. Veri tabanındaki sayısal veriler ilk önce dönemsel özelliklerine göre ayrılmış, eğilim ve yoğunluk analizleri yapılarak

haritalandırılmıştır. Sonuçta, bir sulak alan peyzajının geçmiş ve bugünle bağlantısı biyografik olarak ortaya konulmuş ve gelecek için öngörülerde bulunulmuştur. Bu öngörülerle peyzajın uzun dönem değişimleri irdelenmiş, biyografik yaklaşımın sadece peyzaj mimarları için değil, bu çalışmaya katkı koyacak farklı meslek disiplinleri için de önemi vurgulanmıştır. Bu araştırmanın sonuçları bundan sonraki çalışmalarda hem bir sulak alan peyzajının hem de farklı peyzajların geçmiş ve gelecekle bağlantısının kurulması ve geleceğinin yönetilmesi konusunda kültürel mirasla ilgili çalışmalara katkı sağlayacaktır.

Anahtar Sözcükler: Peyzaj, Peyzaj biyografisi, Uzun dönem (Longue Durée), Bafa Gölü, Sulak alan, Geçmiş peyzajlar.

1. INTRODUCTION

1.1. Landscape Biography Approach

Landscape biography is an analysis of the *longue durée* (long-term) changes of a given region from prehistoric times to the present, focusing on the complex interaction between of the spatial transformations, values, social, and economic developments in relation to each other (Kolen, Renes, & Hermans, 2015; Roymans, Gerritsen, Van der Heijden, Bosma, & Kolen, 2009; Sütünç, 2017). Natural, cultural and ecological processes change and transform landscapes as a result of the effects created by various dynamics. Describing these changes biographically provides a more comprehensive understanding of the landscape and each unit that composes it through time-based layers. From a social perspective, landscape biography aims to integrate historical landscape research with landscape planning, landscape design, city planning, and public participation (Sütünç, 2018). The concept of "Biography" has come to the fore, as the long-term history of the spaces and the interrelationships between the social-natural dimensions of the landscape remain in the background of researches, interpretations and intellectual reflections. The reason why this concept became popular in Europe in the 1990's is that addresses two main problems in landscape research (Crumley, Kolen, de Kleijn, & van Manen, 2017; Kolen & Renes, 2015; Sütünç, 2018). These are;

- Dividing the work area into multiple, specialised sub and unusual sections and the second is,
- The nontrivial link between landscape research and landscape planning.

Landscape architects, archaeologists, historical geographers, architectural historians, morphologists, cultural historians, and historical ecologists have evaluated different parts of the historical environment from different perspectives without any cooperation between them. Historical geographers did not consider the medieval period periodically in their studies, but focused on the early modern age and the modern landscape. Archaeologists, on the other hand, usually specialise in a single period such as the late Prehistoric or Roman Period. As a result of this subdivision, the long-term history of the spaces and the mutual relationships between the social and natural dimensions of the landscapes have resolved the above-mentioned issues (Kolen et al., 2015; Sütünç, 2018). The study, which is considered as one of the benchmarks of the above-mentioned approaches belongs to Meinig (1979). Since this study also includes a publication by Samuels (1979), it is considered the basis of "Biography" studies and presents metaphors of human geography. With the term of "biography", Samuels (1979) drew attention to the specific role if individuals in shaping landscapes. Meinig (1979) also showed that the landscape is related to the perception of the viewer and therefore the vision of the landscape emerges according to the desire, interest and inclination of the person who perceives it. This topic was expanded a few years later by Cosgrove (1984/1998), who contributed to the development of the new cultural geography (Mead, Cosgrove, & Daniels, 1989). In 1996, Danish-American geographer Olwig (1996), re-introduced the "true" nature of the landscape by detailing his research on the foundations of the landscape concept. Landscape has been desired to be handled by different professional disciplines in various periods. Landscape archaeology, as one of the sub-branches of archaeology, has received the closest attention from archaeologists (Sütünç, 2018).

1.2. Cultural Heritage, Longue Durée (Long-Term), and Landscape Biography

Cultural heritage is the result of active decisions by a group of individuals, for personal, social, political, and economic reasons, about what consider to be culturally important and what they want to preserve and pass on to future generations (Hupperetz, 2015). Cultural heritage is a part of our individual/social memory. Creating a perceptible value in terms of quality of life and environment, giving a sense of belonging and meaning of cultural heritage are the most important contributions it provides in a globalisation world. In addition, cultural heritage makes an important contribution to the planning of public space, making people aware of pluralism, authority, and originality (Hupperetz, 2015). The most important contribution of the international heritage sites that have reached to present is that they provide information about the actions of the generations who lived in the past, their perception of the landscape with these actions and how they shaped it. According to Ingold (2000), landscapes tells us a chronological story of life and settlement. It reveals the lives and times of our ancestors and previous generations that have been displaced in their formations over generations. Perceiving the landscape is, therefore, performing the act of remembering and remembering is more than recollecting an internal image in memory, but more than perceptually relating to an environment loaded with the meaning of the past. It is inevitable that this meaning attributed to the landscape will give a role to some authorities belonging to landscape architects, archaeologists, and historians. From this point of view, biographical approaches created for landscapes and spaces seem promising. Because in this way, it is possible to link social memory with the long-term, from the micro-histories of places to their large-scale developments and to integrate the experience and the process (Hupperetz, 2015).

Longue Durée (Long-Term) is a term used by the French Annales School to express their approach to history in historical writings, giving priority to long-term historical structures/situations over events. The long-term approach includes social scientific methods such as the evolution of the economic history into general history in the interwar period. The long-term was developed and continued by Braudel and Matthews (1982); Braudel and Reynolds (1995) in the second half of the century (Sütünc, 2018). With the idea of multiple-temporality, Braudel and Matthews (1982); Braudel and Reynolds (1995) emphasized the importance of long-term. The long-term is not a socially structured word, but a fixed attribute of the social system. The long-term is a historical relationship that provides an open an empirical approach that envisages large-scale historical change and the theoretical re-structuring of the long-term. The concept converges to physical geography representing a very slow but stable temporal rhythm, denoting a rather slow passing historical time. It takes shape at the interface (physical space and human space) of human social action with the natural physical world. The long term is a unifying element in human history. According to Braudel and Matthews (1982), human history is shaped by long-term structures. People make their own history in space and time. The condition and limiter of this history is the planet we live on. For this reason, the concept created emphasizes the physical characteristics of the world, geography, natural resources, landscape, material processes, and culture. At the same time, the *longue durée* is a historical cognition and analysis tool that provides the basis for Braudel and Matthews (1982) thought of history and historical social science (Sütünc, 2018). The long-term allows for the creation of classes in the analytical and practical field to form a comprehensive social and analytical unit that allows inquiry. In this flexible, dynamic, and open approach, the purpose of inquiry should be understood not only as objects with characteristics, but also as communities that structure and shape relationships that are constantly adapting to certain historical processes around the world and from one to another (Annales, 1989). In this respect, the establishment of relational categories (long-term, conjuncture, event, material life, commercial economy, principle, etc.) and defining the relations between time and space are the keys to analysis and interpretation. For this reason, the long-term re-defines the transfer of intellectual heritage with a different methodological approach and explanation logic after 19th century. According to Braudel and Reynolds (1995), the product of our

long-term mind is not duration, but the fragmented state of duration (Sütünç, 2018). Another element included in the relational classes in the long-term evaluations was the landscape. The interpretation of the landscape in direct connection with human actions has given birth to the landscape biography approach. The most important feature that distinguishes landscape biography from other approaches dealing with the past periods is that does not finish the landscape at a single point in the past, but carries the past landscape to the future with the understanding of public participation. In this respect, landscape biography is at an important point in the transfer of the cultural heritage created by the past communities to the future.

In this study, how landscape-human-space and time features shape and transform a wetland biographically in the long-term was evaluated with the landscape biography approach. For this purpose, a biographical database was created using historical datasets. Periodical features and then their biographical connections were established. As a result, the connection of a wetland landscape with its past and present has been biographically presented and suggestions have been made for its future management. With these suggestions, the long-term changes and transformations of the landscape were examined, it was emphasized that the biographical approach is a multi-disciplinary approach and the importance of the contribution of different professional disciplines to this approach, especially in studies on heritage management.

2. MATERIAL and METHODS

2.1. Material

The main material of the research is Lake Bafa Nature Park and the ancient cities Latmos and Herakleia in its vicinity (Figure 1). Reference is made to the studies of the Peschlow-Bindokat (1996, 2015); Peschlow-Bindokat and Posamentir (2011) who worked for 25 years in Latmos, Herakleia, and Beşparmak Mountains. Lake Bafa Nature Park is bordered by Muğla-Milas in the southwestern part and Aydın-Söke in the northern part. Lake Bafa was declared as a Nature Park on 08.07.1994, with the decision of the Council of Ministers, along with the wetland and its surroundings, with an area of 12.281 hectare (Ministry of Environment and Forestry, 2007; Sütünç, 2018).



Figure 1: Lake Bafa and Border of Antique Cities

Latmos is a region with a very rocky terrain on the slopes of the Beşparmak Mountains and there are traces of settlement from many different periods in this region. These settlement traces date from prehistory to the Ottoman Period. The earliest testimonies of religious life in Latmos are Prehistoric rock paintings and traces of settlement. In the 2nd mill. BC, Latmos was within the territory of the Hittite Empire. Carians, who were driven to the interior by the Ion uprising on 1000 BC, are one of the most important communities that embraced this region. It was abandoned in 300 BC approximately and replaced by Herakleia. The newly established city is connected to its neighbours by a road network made of paving stones and also connected to the main roads in the Menderes and Marsyas valleys (Peschlow-Bindokat, 1996, 2015; Peschlow-Bindokat & Posamentir, 2011).

Other pre-Roman settlements and sanctuaries on the mountain are near the present-day villages of Karakaya, Güzeltepe, and Bağarcık. Herakleia and Latmos were somewhat neglected during the Roman Imperial Period. On the other hand, in the Middle Ages, Mount Latmos became a centre of monastic life and returned to life. Many monasteries, churches, defensive structures and settlement remains and caves decorated with frescoes from this period provide the best evidence of this. With the advances of Turkish tribes from the end of the 11th century, the crosses had to leave Latmos from time to time, and after a new revival period, the monasteries were definitively abandoned at the end of the 13th century. The most important proof that the people who lived here throughout history benefited from the area they had in very different ways, are the two marble quarries located on the shore of the lake and operated in the Ancient Period. Of these, those to the east of Lake Bafa belong to Herakleia, and those to the south belong to Miletus (Peschlow-Bindokat, 1996, 2015; Peschlow-Bindokat & Posamentir, 2011).

Pleistarchus, who took a large part of Caria under his rule at the beginning of the 3rd century BC, made Herakleia the capital of the lands he ruled. The city was then called Pleistarcheia, after the Macedonian general. After his death, the name of the city was changed to Herakleia. With its location at the rear end of the Latmos gulf, Herakleia was the last stop of the ships coming from the west, and the beginning of the highway extending into the Caria Region. Thus, it had a certain importance due to being both a port city and a place of transfer of goods. The development of the city coincides with the Hellenistic Period. During the Roman Imperial Period, the city lost its former importance. Herakleia reveals itself as a typical Hellenistic Period city, unlike Latmos, the settlement of Caria, which exhibits a natural development with its regular city plan and more impressive appearance. There are other public and religious buildings around the big agora in the city centre; the houses are mostly built on slopes. The testimonies of the modest construction activities of the Roman Imperial Period, such as a small bath and water tank, hardly change the face of the Hellenistic city. While the people of the city were moving from the first settlement to the new settlement, the old city was razed to the ground and served as a quarry providing building materials to be used in the construction of the newly established city. The complete destruction of the old settlement cannot be explained for a practical purpose, such as the reusability of the removed building material. Pleistarchus, faced the resistance of the people of Latmos against the settlement policy he determined for the new city, and forced the people of the city to move to the new settlement as a result of the forcible destruction of their places of residence. In this way, it also prevented the people from returning to their old settlements (Peschlow-Bindokat, 1996, 2015; Peschlow-Bindokat & Posamentir, 2011).

2.2. Methods

According to Kolen, Renes, and Bosma (2016), there are five operational principles for using landscape biography as research approach. The first is, landscape biography is historicizing the landscape and it aims understanding the evolution of landscape from the prehistoric to the present day. So, this can be combined different and multiple ways to reveal how the landscape constructed

in the past. Secondly, landscape biography does not necessarily start from an exact period of time. Landscape is understood as a continuum or succession of transformations, which the past is experienced in ever different ways. Thirdly, landscape biography is not an approach applied by a specific professional discipline, in essence, it adopts cooperation with different professional disciplines. Fourthly, landscape biography moves from point of view of dwelling. Therefore, the key point of landscape biography is how local people construct and shape their landscapes through time with their own ideas and identities. Fifthly, landscape biography does not methodically focus on the retrospective analysis of landscapes today, but rather on the multi-dimensional aspects of landscapes.

The method applied in the study area (Sütüncü, 2018), taking into account the above principles, will show how intensively the landscape around Lake Bafa and its surroundings was used through historical periods and how this density changed and transformed the wetland and its surrounding landscape. For this purpose, in the first stage, historical data from various sources were collected and separated according to their periods such as Prehistoric, Antiquity, Roman/Byzantine, Ottoman, and Present) and a biographical database was created. In the second stage, density analyses were applied using the data in this database. How and why these periods are determined is explained below.

- Prehistoric Period (8000-3000 mill. BC): The emergence of prehistoric rock paintings in the Beşparmak Mountains.
- Antiquity (3000 mill. BC-5th BC): The first traces of settlement in and around Lake Bafa, Alexander the Great's recapture of the region from the Persians and the establishment of Latmos as the capital of Caria.
- Roman/Byzantine ((5th – 13th AD): A short period of stagnation, the invasion of the Goths and the abandonment of the marble quarries in the region.
- Ottoman Period to the Present (13th AD – Present): The region first passed to the Menteşe Beylic and became a part of Ottoman Empire, after the population loss and the settlement in Kapıkırı village by nomads after a long period.

The purpose of the trend and density analyses is; to determine the location and direction of structural density in periods. Directional distribution and Kernel density calculations, which are statistical calculation methods, were used for the analysis of periodic and spatial density. It is aimed to answer these questions:

- What is the place of the structural density periodically?
- In what direction does this density move?
- What could be the reason for the displacement of the density?

Kernel density estimation is a fairly general approach to density calculation as it does not require any prior knowledge to calculate the density function.

3. RESULTS and DISCUSSION

3.1. Prehistoric Period

The rock paintings found in the Beşparmak Mountains by Peschlow-Bindokat (1996) reveal the history of the wetland and its surroundings. It shows that it is dated to 8000 mill. BC. In this period, the pressure of the people on the landscape in the region is almost non-existent (Knipping, Müllenhoff, & Brückner, 2008). Prehistoric inhabitants preferred to take advantage of the rocky structure of the Beşparmak Mountains rather than the wetland (Figure 2). This is due to the fact that Lake Bafa has salty water features due to its connection with the Aegean Sea and to be protected from dangers according to seasonal conditions. It can be interpreted as that the communities in the region benefit from streams and rivers, not salty water, in order to maintain their vital activities.

However, the drawing of the God of Air and Rain, depicted in the Karadere Cave in the Chalcolithic Period (second half of 4000 mill. BC), also shows that the communities living in the region at that time knew the positive effect of meteorological events such as rain, snow on agricultural production and engaged in agricultural production (Peschlow-Bindokat, 2015). Although the pressure of people between 8000 mill. BC-4000 mill. BC on the landscape was not felt, the first traces of settlement and vegetation change began to appear in the Miletus peninsula during the Chalcolithic Period. But after 3000 mill. BC (Early Bronze Age), a decrease in settlement density and a renewal of vegetation was observed in the region (Knipping et al., 2008). A wave of change at this point is very interesting. Manning (1997) stated that natural disasters and climate change may have had an impact in this period, and that this wave of change may have also had effects on the civilisations in the region.

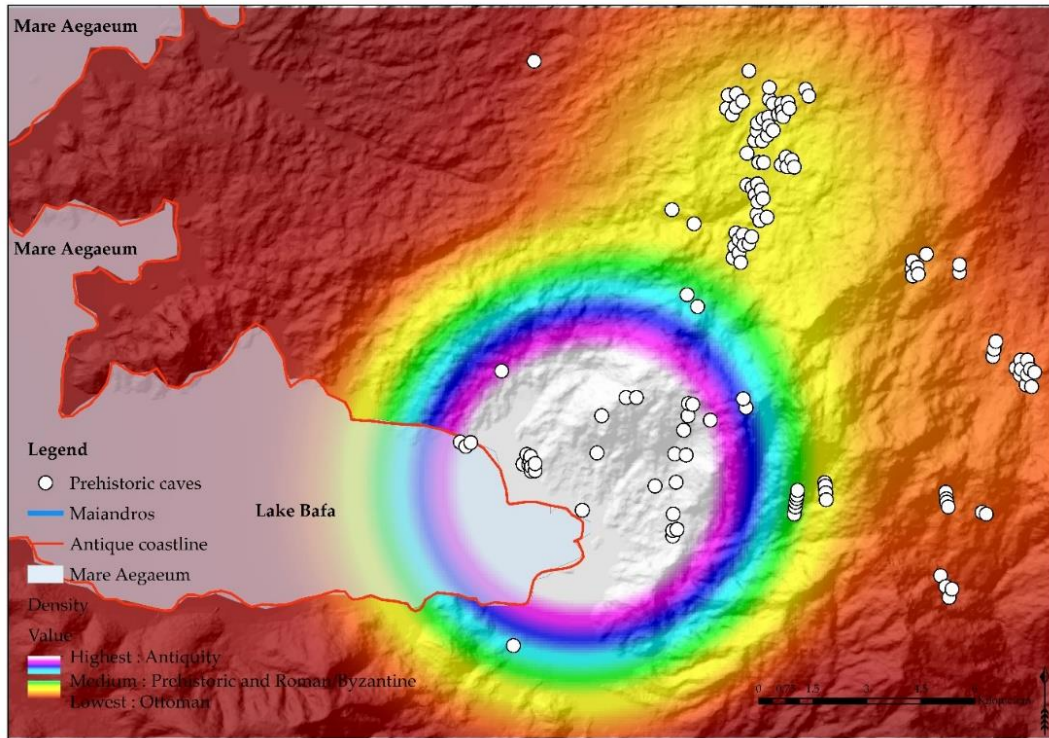


Figure 2: Prehistoric Caves Around Lake Bafa and Besparmak Mountains

3.2. Antiquity

As a result of the density analyses done, the most intense period around the wetland was experienced between 1900-1200 BC. This period is the settlement period of the Mycenaean civilisation and the most intense human impact on the landscape (Knipping et al., 2008). This intensity has also manifested itself in Lake Bafa and its surroundings. The Mycenaean brought the goat to the region and the extraordinary increase in settlement activities had negative effects on the landscape. The fact that the Hittite Empire was active in the region in the same period also supported this density. Especially with the Ionian uprising, the Carians who were driven from the coasts to the interior, they settled in the Latmos region to the east of Lake Bafa in 1000 BC. and created a new living spaces are also contributed greatly to the change and transformation of the landscape around the wetland. (Knipping et al., 2008; Peschlow-Bindokat, 2015; Sütünc, 2018). This rate of structuring triggered the Büyük Menderes to function as a sediment trap, and the connection between Büyük Menderes and the Aegean Sea started to break as of 1500 BC. The new city, Herakleia, which was built by Pleistarchus, appears as a city established to show Pleistarchus' ambitions and power, both economically, politically and militarily, with other cities of the period (Sütünc, 2018). The best indicator of this is the easy construction of the road network, which is extremely difficult and costly to build. The road network, one of the power shows of Pleistarchus, can be observed even today.

According to Latmos, Herakleia also differs a lot in terms of city plan. The Hippodamia plan, which is one of the most well-known urban practices of the Hellenistic Period, could be implemented in Herakleia, even if not completely. An agora in the centre, a parliament building within the complex created in connection with this structure, a bath/palaestra, sanctuaries, defence structures-especially the walls- outside formed the character of this new city. In Latmos, on the other hand, a very scattered settlement pattern has been applied (Figure 3). In addition, agriculture came to the fore in this period and products such as olives, honey, figs, grapes, and marble were exported (Peschlow-Bindokat, 2015; Sütüncü, 2018).

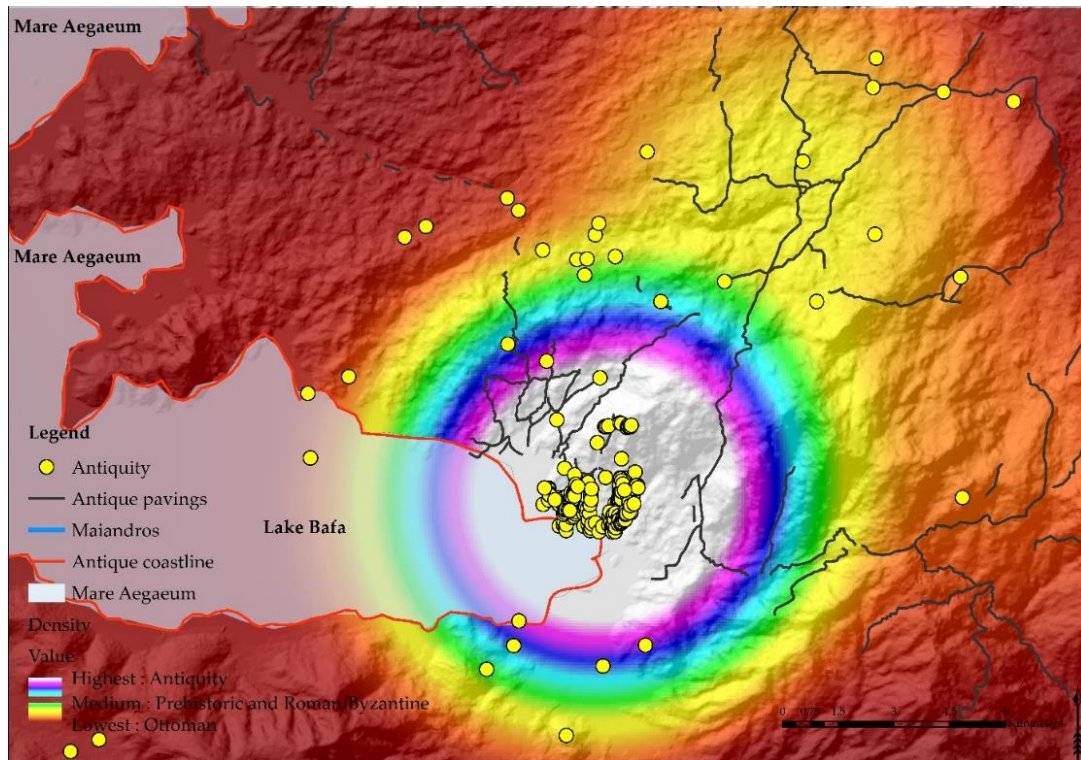


Figure 3: Hellenistic Period settlements around Lake Bafa

3.3. Roman/Byzantine

Especially the Roman Empire and Byzantine Period, although it was a shining period for some cities in the Caria Region, this was not valid for Herakleia, which existed in the same period. It was unfortunate for Herakleia that the inner parts of the city were surrounded by mountainous lands and the connection between the Aegean Sea and the Lake Bafa was cut off due to the sediments accumulated by the Büyük Menderes (Knipping et al., 2008; Müllenhoff, Handl, Knipping, & Brückner, 2004). In these two periods, the existing buildings in the city were used as they are, and the damaged ones were repaired and continued to be used. The fact that the landscape was under intense pressure on other periods and its transformation as a result showed itself in this period as well. Intensive use of marble quarries, in particular, has increased the sediment inflow to Lake Bafa and accelerated the erosion process. The Goths invasion in 258-262 AD also had a negative impact on the wetland and its surroundings, and the population began to decrease rapidly (Figure 4). According to sources (Knipping et al., 2008; Peschlow-Bindokat, 1996, 2015; Peschlow-Bindokat & Posamentir, 2011), the time between 6.-8. century AD was generally a period of decline due to the invasion of Persians and Arabs. It is seen that settlement and land use activities intensified again in the following centuries. In the 10th century AD, there was an intense population increase in the region once again and it lived in prosperity.

3.4. Ottoman Period

The population decline, which started in previous periods, continued in this period as well. Lake Bafa and its surroundings, which first passed to the Menteşe Beylic, later took place within the borders of the Ottoman Empire (Peschlow-Bindokat, 2015). Unfortunately, the wetland and its surroundings did not attract enough attention in the Ottoman Period (Figure 5).

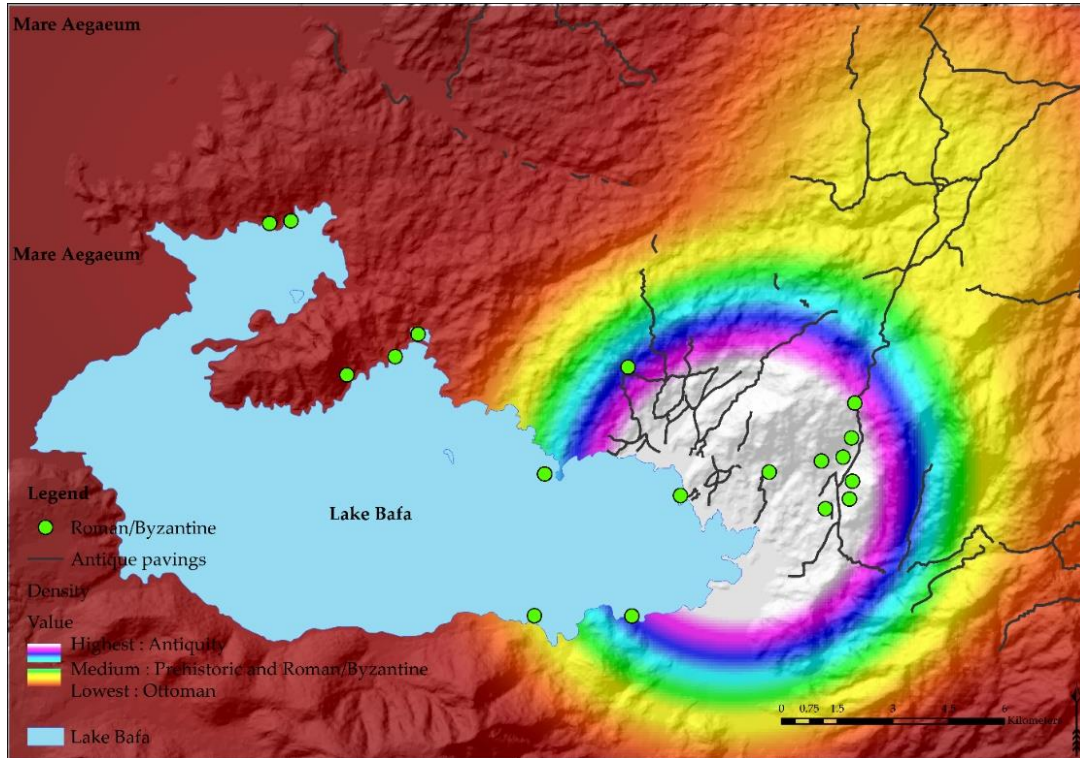


Figure 4: Roman Imperial/Byzantine Period Settlements Around Lake Bafa

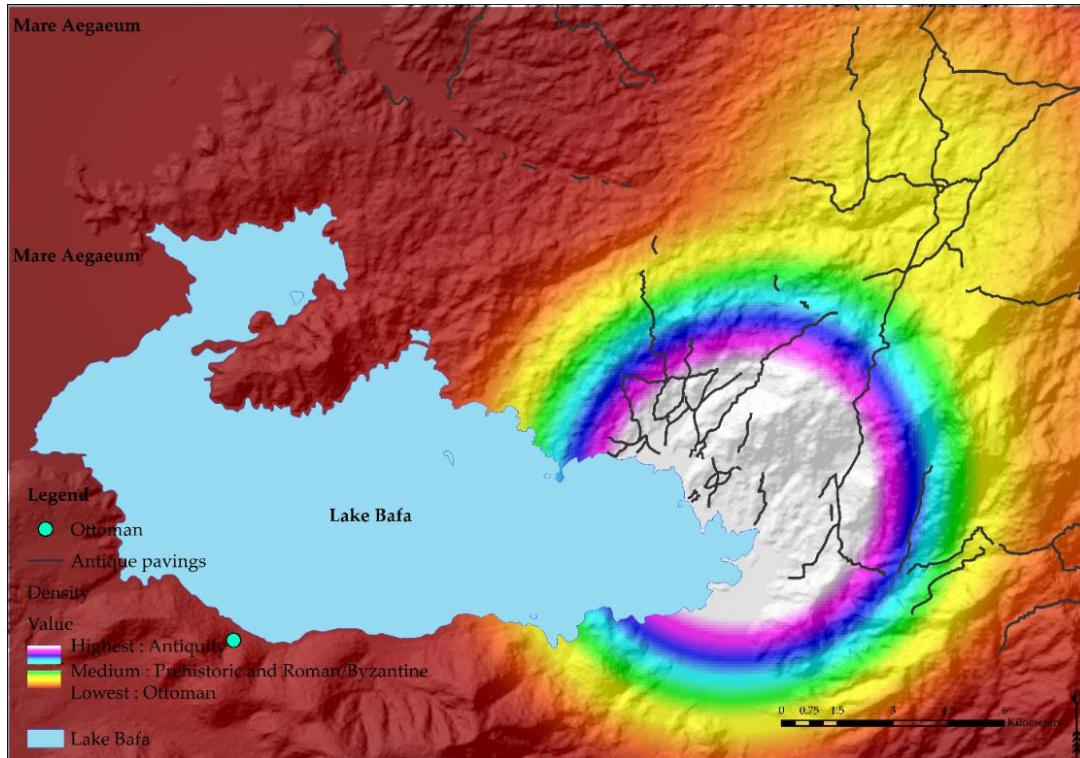


Figure 5: Ottoman Period settlements around Lake Bafa

The best evidence of this is a caravanserai and a cistern on the Söke road. Then, no settlement was seen in the region until many years (approximately 200 years from today). The nomads who came to the region established a Turkish village called Kapıkırı here.

3.5. Present Day

Nomads from the Taurus Mountains established their first settlements in the city centre, which was a settlement in the Ancient Period. Adhering to the grid plan system of the Ancient Period, they resolved the land divisions among themselves with equal parcels (Distelrath, 2011). Due to the increasing needs as time progressed, the settlement dynamics of the region continued unplanned. There is Kapıkırı village on the shores of Lake Bafa today, where Herakleia was located in the Ancient Period (Figure 6). Since this village is among the ancient ruins, the traces of the city of Herakleia have reached the level of extinction. Many ruins belonging to the ancient city remained under private land ownership. When necessary, the remains were broken up and used as additional material during the construction of new structures. The people of the village today mainly earn their living from agriculture. Honey production, olive farming, and fishing (eel) in Lake Bafa are other sources of income. In addition, they have small and large cattle and grazing areas. Today, irrigated agriculture is carried out on the sediment areas deposited Büyük Menderes. Tourism has developed as an additional source of income. Family-run hostels are located on the shore and south of the lake. The development of all settlements together with modern structures is a reflection of the social development of the people in the rural areas. It is clearly seen that the natural harmony of nature and rural settlement, which grows by intertwining with each other, is in danger of gradually disappearing.

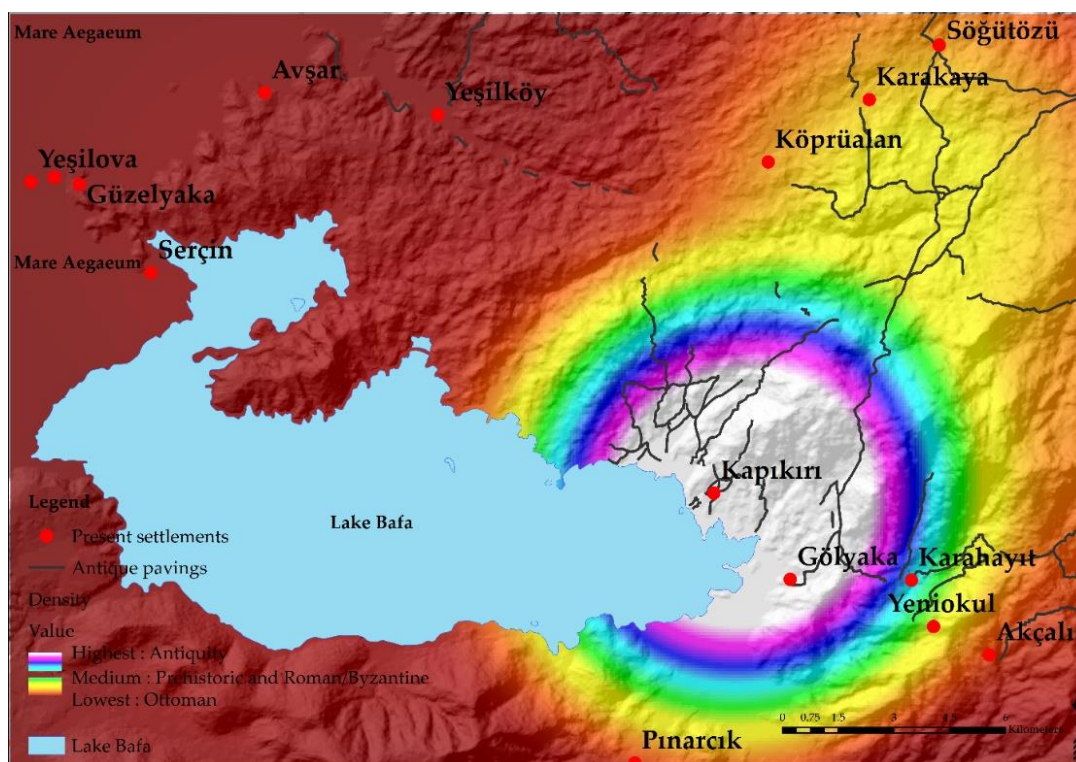


Figure 6: Present settlements around Lake Bafa

4. CONCLUSIONS

4.1. Protection Issues

As a result of the study, wetland and its surroundings, which are protected as a Nature Park, need statuses with increased protection degrees. The ancient cities of Latmos and Herakleia on the coast and the Beşparmak (Latmos) Mountains, which draw a quite different natural landscape with the unplanned growth of Kapıkırı village, are under the threat of mining. For this purpose, on 30.01.2016, Aydın Cultural Heritage Preservation Regional Board took the Beşparmak Mountains under protection with the decision numbered 4491 (Figure 7).

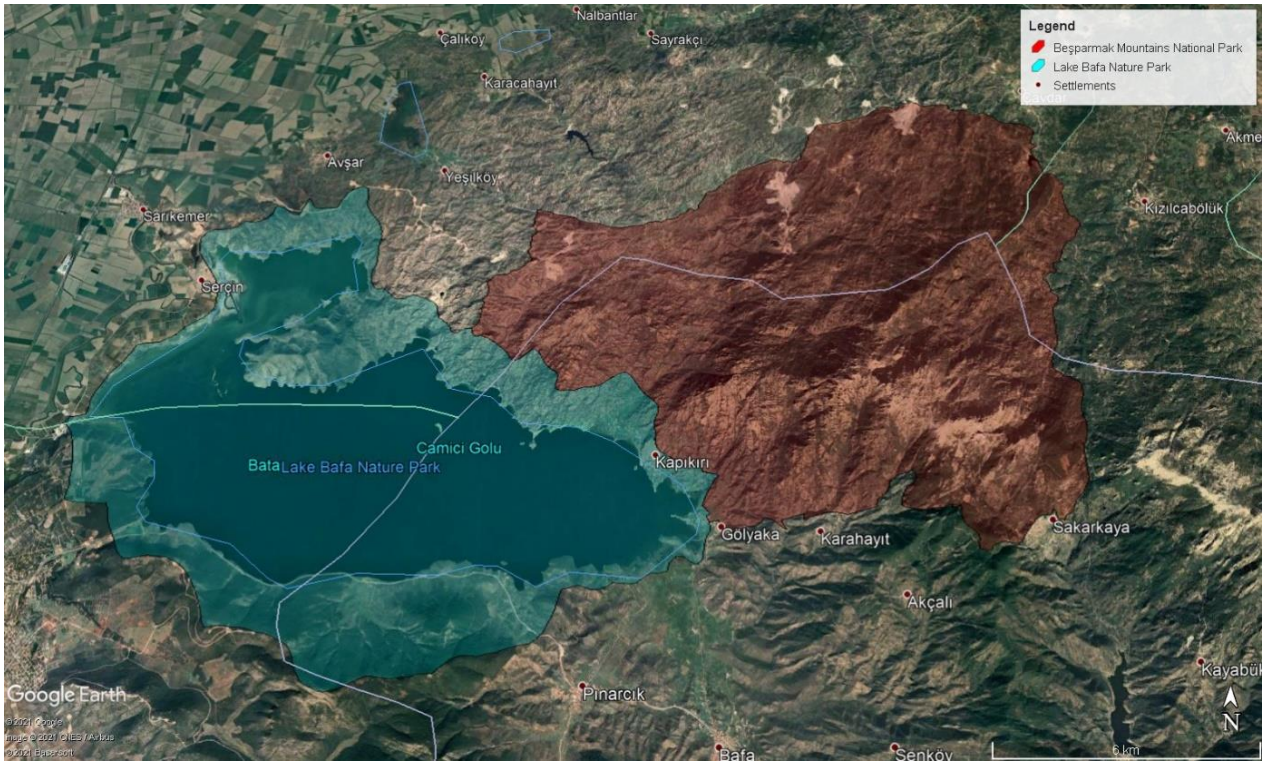


Figure 7: Protected area borders of Beşparmak Mountains and Lake Bafa (Ministry of Culture and Tourism, 2015).

The Beşparmak Mountains, which have been considered sacred to every community without exception since Prehistory, have brought together very different landscapes with their extremely different rocky structure. A total of 1050 rock paintings have been found at 350 different points over 25 years by the German archaeologist Peschlow-Bindokat (1996, 2015); Peschlow-Bindokat and Posamentir (2011). It is a fact that should not be overlooked that there are many undiscovered and unrecorded rock paintings in the Beşparmak Mountains at an altitude of approximately 1400 meters. This protection boundary surrounding the Beşparmak Mountains is valid for a part of the Lake Bafa Nature Park and the part of the Beşparmak Mountains within the borders of Aydın province. Until now, no protection boundary has been established for the part of the Nature Park and Beşparmak Mountains within the borders of Muğla province. It is suggested that the same conservation work be carried out by the Muğla Cultural Heritage Preservation Regional Board and combined with the protection areas determined within the borders of both provinces to form a "holistic landscape protection border".

It is also among the suggestions that this border should be transformed into the "landscape biography border" and evaluated with the landscape biography approach of both regions. This will contribute to the future of both Lake Bafa and Beşparmak Mountains. It will also be beneficial for the future management of landscape biography by preparing archaeological, ecological and cultural phase plans for Kapıkırı village and its nearby settlements, which are shaped in the middle of the ancient cities of Herakleia and Latmos on the shore of Lake Bafa, and to control the changes/transformations that these settlements will bring about in the future landscape.

4.2. Using Landscape Biography Approach for Heritage Studies

Landscape biography naturally contributes to heritage studies with its methodological long-term approach. Landscape biography finds its way into local and regional planning policy, integrating landscape and heritage knowledge with planning and design. While doing this, it attaches importance to the participation of the people who have created their own landscapes in their own region in this process. Due to its multi-disciplinary approach, it takes an active role in

transferring the heritage to future generations in a sustainable and meaningful way by making use of the expertise of different professional disciplines. In the field study carried out by the author in and around Lake Bafa in 2017, it was observed that the historical structures remained under the sediment load by Büyük Menderes, apart from human pressure. The biggest risk that observed is extremely weak and indifferent protection of this cultural heritage, which is part of the Caria Region. Landscape as included in the European Landscape Convention, to which our country is also a party, has been expressed as an expression of the diversity of the cultural and natural heritage shared in common and as a part of people's identities. Therefore, landscape biography is one of the most up-to-date approaches that can contribute to heritage conservation studies.

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