

Evaluation of Prusias ad Hypium (Konuralp) Ancient City as Archaeological Park

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Abstract

Aim of study: The main aim of the research is the formation of an environment revealing and protecting the historical and cultural values of Konuralp Archeological Site; and dealing within the framework of the main idea of "archeological park" which is the method of protection and refuncioning of the area and historical environment enlivenment method; and putting forward an integrated approach evaluated as far as social, cultural and trading aspects are concerned.

Area of study: This study was conducted at Konuralp Archeological Site and its environs situated at Konuralp District of Düzce province in the West Black Sea Region of Turkey.

Material and Methods: The method of the research had three stages, literature survey and data collection, site analysis studies in Prusias ad Hypium (Konuralp) archeological site at macro and micro scales studies phases.

Main results: An archeological park landscape design project has been proposed to emphasize the importance of Konuralp Ancient City (*Prusias ad Hypium*) and to protect and re-funcioning of cultural heritage in a healthy, livable and aesthetic environment. During the project preparation, the targets have been determined for any type of physical-spatial arrangements based on the qualification of archeological site, and the necessities determined in the research area were considered and it was aimed that historical environment quality will be improved by environmentally compatible designs.

Research highlights: In this paper, "archeological park" concept was scrutinized as a cultural heritage protection method for sustainable development, and application of this model in Konuralp Ancient city was offered.

Keywords: Archaeology, Archaeological park, Landscape design, Prusias ad Hypium, Konuralp

Prusias ad Hypium (Konuralp) Antik Kenti'nin arkeolojik park kapsamında irdelenmesi

Özet

Çalışmanın amacı: Bu araştırmanın amacı; Prusias ad Hypium (Konuralp) arkeolojik sit alanının tarihi ve kültürel değerlerini ortaya çıkaran ve koruyan bir ortam oluşturulması, alanı koruyarak yeniden işlevlendirme ve tarihi çevre canlandırma yöntemi olan "arkeolojik park" ana fikri çerçevesinde ele alınması; kentsel alanın arkeolojik sit alanı ile bütünleşen bütüncül bir yaklaşımın ortaya konmasıdır.

Çalışma alanı: Türkiye'nin Batı Karadeniz Bölgesi'nde yer alan Düzce kentine bağlı Konuralp Mahallesi'nde yer alan Prusias ad Hypium (Konuralp) Arkeolojik Sit Alanı olarak tescillenmiş alan ve yakın çevresi oluşturmaktadır.

Materyal ve Yöntem: Araştırmanın gerçekleştirilmesinde izlenen yöntem; literatür ve veri toplama, bugünkü adı ile Konuralp arkeolojik sit alanı üst ve alt ölçek etüt-analiz çalışması, değerlendirme olmak üzere üç etaplı olarak gerçekleştirilmiştir.

Sonuçlar: Konuralp Antik Kenti'nin önemini vurgulamak ve sağlıklı, yaşanabilir, ergonomik ve estetik bir çevrede kültürel mirası korumak ve yeniden işlevlendirmek amacı ile arkeolojik park tasarımı hazırlanmıştır. Proje hazırlanırken arkeolojik sit alanının niteliğine bağlı olarak her türlü fiziki-mekansal düzenlemelere ilişkin hedefler belirlenmiş, araştırma alanında saptanan ihtiyaçlar göz önünde bulundurulmuş ve çevreye uyumlu tasarımlar ile tarihi çevre kalitesini yükseltmek amaçlanmıştır.

Araştırma vurguları: Bu çalışmada 'arkeolojik park' kavramı incelenerek, Konuralp Antik Kenti'nde bu modelin uygulanması önerilmiştir.

Anahtar Kelimeler: Arkeoloji, Arkeolojik park, Peyzaj tasarımı, Prusias ad Hypium, Konuralp



Introduction

Archeological parks are defined as archeologic sites that are protected and open to public consisting settlement ruins of various cultures since prehistoric era. According to Declaration of Salalah of ICOMOS-ICAHM, an archaeological site becomes public space, one that simultaneously promotes and threatens its scientific and historic value an archaeological park is an approach for sustainable management of archaeological sites through negotiating these tensions in planning, inventory and evaluation, facility construction and operation, building management capacity, and inclusion of local stakeholders. According to Salinas and Osorio (2006), archeological parks are places representing important periods of human history, integrating local culture with global culture. According to Ojeda (2002), archeological parks as “they are tools enabling managing and controlling local societies and protection of cultural heredity in sustainable city centers“. The main criteria of archeological parks are planning, design and administration process. Therefore, archeological parks are a phenomena to be handled in different scales. At this stage, primary principle is the preparation of a protection program. Accessibility and

usability of the territory is analyzed at the design stage and the remnants that it contains are integrated with recreational and educational functions. ‘Improvement of protection and value‘ of the cultural heritage that the area contains would contribute to the development of the area not only at the local scale but also at the international level, therefore, multiple researches should be performed and the design process should be initiated. Enabling sustainability of an archeological park can be realized by management. The formation process of an archeological park is shown in Table 1.

Konuralp Archeological Site, which is a district physically located in Düzce Province, at the West Black Sea Region of Turkey, was selected as the project area. since it does not display an integrated development with the archeological assets that need to be protected, and development of city center with plans and plans with no protection anxiety and therefore the historical city center faces with the historical and cultural identity loss. (Figure 1).

The research aims to deal with protection of current archeological site which faces with indicated problems integration and contribute to the sustainable progress of the city both at local and national levels in the scope of archeological park concept.

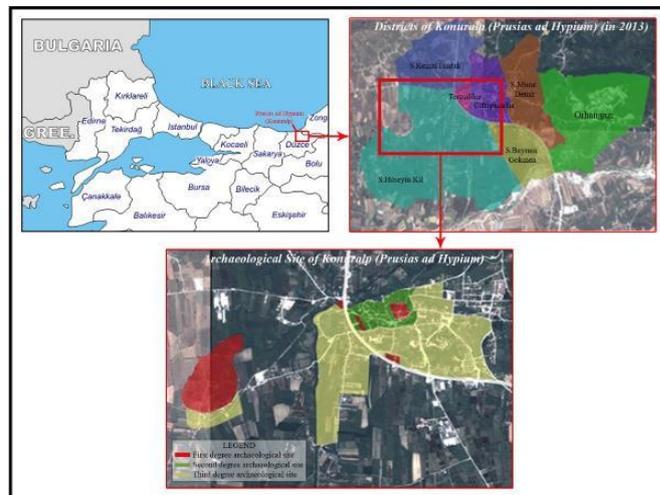


Figure 1. Location of the research area: Konuralp (Prusias ad Hypium), administrative and archeological site borders (WorldView-2 8 band Multispectral and panchromatic satellite image was obtained by ArcGIS 9.3 software)

Material and Methods

Prusias ad Hypium (Konuralp) Ancient City, situated in Düzce province, and its close surrounding forms the main focus of the research. This area was selected because of its historical identity and intense urban activities due to its proximity to the university. Its location on the main route which connects to shore to the historic core, and scientific excavation studies within this area recently conducted by Düzce University.

The method of the research had three stages, literature survey and data collection, site analysis studies in Prusias ad Hypium (Konuralp) archeological site at macro and micro scales studies phases.

Before spatial analysis and classification in macro scale is used Gram-Schmidt Pan Sharpening to sharpen of WorldView-2 8 band multispectral data using high spatial resolution data. With ENVI software performs Gram-Schmidt spectral pan sharpening is best revealed in images with homogenous surface features (flat deserts or water, etc.) (Laben et al., access date 2015).

Current map of 1/1000 scale of the research area was updated in order to define research area's typical characteristics and obtain current information about the area. The updated map was used as a base site plan in the evaluation stage. Strengths and weaknesses of the research area were determined by SWOT analysis as a result of planning scale and design scale analysis studies. Physical and social situation in the research area was determined by this analysis, and how the strength aspects and opportunities will be evaluated in the scope of historical environment vitalisation strategy, and how the weak aspects will be turned into a powerful situation and the requirements to remove limitation were scrutinized. In order to document current situation of archeological remainings situated in the research area where design decisions are made, their evaluation in terms of architectural history and to form a site plan to the project of "*Prusias ad Hypium Archeological Park*" suggested in the research scope, and architectural survey of archaeological heritage were generated such antique theatre and scene, aqueducts ruins and holy well (*hagiasma*) in the scope of

scientific research project. In the scope of area site analysis studies and based on the results obtained at the different scale evaluation stage, reliability state evaluation table was generated to form a foundation to the archaeological site analyse in order to determine unique situation of the buildings located in the archeological site and to reveal the changes that occurred in time. Reliability levels were determined primarily to determine reliability situation of the research area. Scoring was made based on the structuring situation of findings in determining reliability degrees. According to the reliability levels that were obtained, the intervention methods were determined that are dealt with in the scope of *Prusias ad Hypium* (Konuralp) Archeological landscape design project.

Suggestions were made about the protection and sustainability of *Prusias ad Hypium* (Konuralp) archeological site and making its integration into urban development with sustainable principles after the planning scale site analysis studies at the result stage of the research, and after design scale evaluation stage where design decisions were brought, and after the determination of design scale intervention areas, and *Prusias ad Hypium (Konuralp) Archeological Park Landscape Design Project* was proposed.

Results and Discussion

Historical Process of Prusias ad Hypium (Konuralp) Archeological Site

Although many studies were conducted about Prusias ad Hypium Ancient City, there are not adequate data on the ancient remains and city plan. However, it is known that the area is made of a hillside and lower city due to its topographic building as a result of site analysis studies.

The settlement is known with many different names throughout history. The area's oldest name is "Kieros" (Dörner, 1949), it was known as Prusias ad Hypium (Prusias at the front of Melen River) during Bithynia Kingdom, and as Üskübü (Eskibağ, Eskiba) during the Ottoman period and as Konuralp starting from the Republic Era (Özlu, 2009). The name of Kieros has been changed with respect of King as "Prusiass" after participating of Bithynia Kingdom. The

name of Kieros has been changed with respect of King as “Prusias” after participating of Bithinia Kingdom. However, the city is called as *Pros Hypios* (Prusias edge of Melen River) in order to distinguish from other Prusias city. (Zeyrek, 2005).

Pausanias expressed that the land in recently founded cities required equal sharing the easiest and most appropriate manner, therefore Prusias expressed that it could develop according to a certain plan. The form that is applied to the upper parts of the grate system that developed in the framework of major avenues in Prusias city plan is seen. It is observed that the planning element is applied in Prusias as well, which suggests the dwelling and public buildings remain within certain limits in the settlement plan that is prepared according to the roads intersecting each other vertically in the first Hellenistic period that were founded at the western shores of Anatolia (Zeyrek, 2005). Fritz made the schematic plan of Prusias ad Hypium city in 1965 (Figure 2). Konuralp Ancient City is situated in the skirts of Mons Hypium, which dominates the plain and easily defended, and it developed at the South direction towards the savanna. Today, the theatre, a portion of city wall and the ruins of water system are archeological ruins above the ground remaining among contemporary buildings (Zeyrek, 2005).

The theater, which is the only monumental building of the ancient city that reached today and having typical characteristics of Hellenistic Era; the stage building showing the characteristics of the transition from Hellenistic Era to Roman Era; the city walls were built in 258 A.D. during the “Kingdom Crisis” period and surrounding the city at the South and West directions; the door connecting the city walls that continue at the West direction and buildings, circulation were determined and the spatial analysis table and map of the archeological site was formed (Table 2) (Figure 3-4).

named as “Atlıkapı”; 11 aqueduct ruins that reached today among the ruins as the part of the water system of the city; Domitius Bathhouse which is damaged extensively and mentioned in the honor scripture erected for the son of M. Iulius Babinius from Prusias; the bridge that is thought to be made during Roman Era and protected during Ottoman Era and lacking its norther foot and its three arched length is 30,25m, are the existing buildings of Prusias ad Hypium ancient city (Figure 3). Other buildings that are mentioned in inscriptions but not reached today are a temple, stadium, gymnasium and agora (Zeyrek, 2005). Moreover, Orpheus base mosaic, which portrays four seasons and includes a lyre playing person in the middle, is situated within the archeological site pointing the dwelling buildings belonging to the Roman ancient era.

Prusias ad Hypium (Konuralp) Archeological site analysis studies

While Konuralp Ancient City has a central town position until 2014, it was decided that legal statue of Konuralp Municipality was terminated by 2014 Regional Administrations General Elections, and as per article 11 of 5394 Municipalities Code, it was registered that it became a district connected to Düzce Province. The borders of the archaeological site were determined by dated 13.03.2013 of Kocaeli Regional Committee Directorship of Conservation of Cultural Assets of Turkey (Figure 1).

In the scope of usage characteristics, accessibility, spatial organization of the ancient city according to the findings obtained in area site analysis studies of the research area; settlement patterns, building-floor heights, architectural characteristics, urban masses and voids, registered

Table 1. The Process of Formation of the Archeological Park

The Process of Formation of the Archeological Park		
Planning Process (Strategic Planning Approach)	Design Process	Management Process
<p><u>Data Collection Stage (Upper Scale Analyses) (Nigro 2006)</u></p> <p>-Environmental analyses; preparation of the maps of</p> <ul style="list-style-type: none"> • Geology, • Geomorphology, • Hydrology, • Topography, • Climate, • Soil, etc. <p>-Archeological site spatial analyses</p> <ul style="list-style-type: none"> • Archeologic site area distribution (as per decisions of Regional Councils) • Area usage characteristics • Distribution and characteristics of registered buildings • Technical infrabuilding, • Structural situation-structural system <p>- Access, cycle analyses</p> <p>-Socio-cultural analyses (demographic building, education status, ownership status)</p> <p>- Interaction area analyses of archeologic sites for urban and rural areas (determination of protection zone, buffer zones)</p> <p>DATA COLLECTION STAGE (infra scale analyses)</p> <p>-Zoning plans</p> <p>-Zoning plans with protection purpose</p> <p>-Archeological assets survey and restitution projects</p> <p>DATA EVALUATION STAGE</p> <p>-Determination of strengths, weaknesses, opportunities, threats aspects of the region (SWOT analysis)</p>	<p><u>Design Principles (Puren et al 2006, Nikovic 2010)</u></p> <p style="text-align: center;">-Visceral design</p> <p>-<i>Genius loci</i> (soul of the place) concept strengthening,</p> <p>-Arrival sense (improvement of archeological site sensibility and legibility according to the character of the natural environment)</p> <p>-Defined entry and meeting places</p> <p>- Park presentation manners Experience by visitors</p> <p style="text-align: center;">-Behavioral effect</p> <p>- Orientation sense</p> <p>-Cycle line with inner archeological park definition (design of new cycle line by considering historical street texture)</p> <p>- Determination of major roads, secondary roads, knot points, and cross-roads points</p> <p>-Utilization of plant material orientation</p> <p style="text-align: center;">- Reflective effect</p> <p>- Selection and positioning of service units (cafe, informing point, communication unit, WC, etc.) fitting components</p> <p><u>FUNDAMENTAL PRINCIPLE:</u></p> <p>Complying with the structuring conditions in archeological sites determined by decisions of Regional Councils for usage and positioning of structural material, and protective approach to prioritize the identity of the historical texture</p>	<p><u>Action and Management Plans (Regional) (Nigro 2006)</u></p> <p>-Protection policies</p> <p>-Protection development interventions</p> <p>-Archeological site management</p> <p>-Landscaping planning and management</p> <p>-Economic and social intervention programs</p> <p style="text-align: center;">Archeological Park Management Stages</p> <p>-collaboration and coordination studies (local-private-civil collaboration)</p> <p>-Attempts to improve history awareness of local people</p> <p>-Enabling continuity of history and archeology researches,</p> <p>-Maintenance, supply and repair of service units and their supervision</p> <p>-Check of excavation studies and enabling safety and supervision</p> <p>-Establishment of archeological park visitor management units</p> <p>-Harmony to legal-managerial environment at the national and international level and formation of a supervision mechanism</p>

Konuralp Archeological Site Planning and Design Scale Analysis

SWOT analysis was conducted for the research area primarily in order to develop

archeological park project main idea and to determined sub region selection criteria.

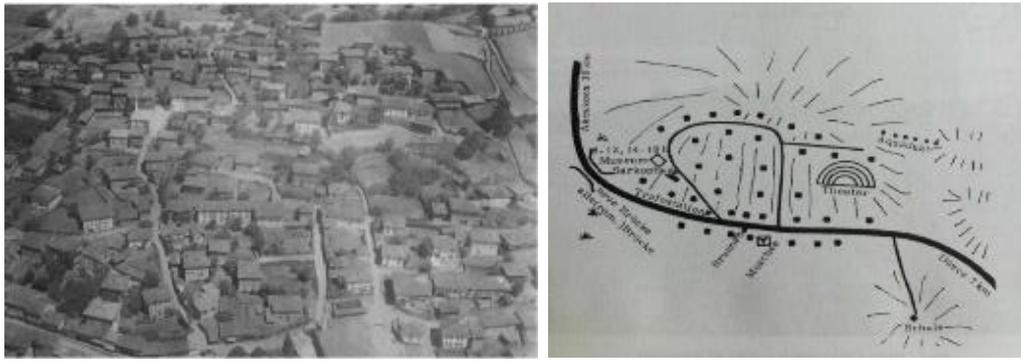


Figure 2. Prusias ad Hypium (Konuralp (Şimşek, 1958), schematic plan for Prusias ad Hypium (Fritz, 1965)

Table 2. Spatial Analysis of Konuralp Archeological Site

	ARCHEOLOGICAL SITE					
	Ist DEGREE		IInd DEGREE		IIIrd DEGREE	
Regions	Çiftelinarlar District, Terzialiler Dist. Ş.Hüseyin Kıl Dist. Tepecik Village		Çiftelinarlar Dist. Terzialiler Dist.	Dist.	Çiftelinarlar Dist. Terzialiler Dist. Ş.Hüseyin Kıl Dist.	
Archeological assets	Theater and stage building, western city walls, mosaics, Necropolis		Bathhouse ruins, Atlıkapı and southern city walls, aqueducts		Ottoman Era grave stones	
Area dimensions (ha)	26.08		15.06		101.32	
Settlement pattern	Archeological buildings registered in the building scale without conservation zone		An organic road pattern harmonized with natural slope, sporadic joined order traditional dwellings on small structural islands that do not have a certain geometric order		Building islands appropriate to main axes in the grid system and the grid system and intense new settlements	
Building-floor heights	There is no construction		2-3 floors		2-5 floors	
Architectural characteristics	Hellenistic period and Roman Period local stones		Local stones from Hellenistic era and Roman era, wooden framed brick and cob filled traditional dwelling examples, buildings with concrete frame system		Concrete frame, wooden framed brick and cob filled housing	
Urban masses/voids	Despite construction prohibition, archeological remains are harmed by new construction in their surrounding because of the lack of protection zone and failure to publicizing. These are open areas without identity.		Gaps among the buildings and dwelling gardens are open areas. They are public open areas that do not carry out their square function.		Hous gardens, park areas, graveyard and fields make up open green areas. Wheat, corn and hazelnuts are grown mainly in the fields.	
Registered buildings	Ancient theater and scene, western city walls, Roman bridge, mosaics, Necropolis (Tepecik region)		Atlıkapı and southern city walls, aqueducts, bathhouse ruins, 5 vernacular architecture examples, 2 mosques (Konuralp Central Mosque, Teke Mosque)		Ottoman era tombstones	
Access-Circulation	Unique stone coverings are situated between the ancient theater and stage building. There is no defined parking lot. There are no traffic signs.		Partially unique stone coverings were determined at Atlıkapı street. There are dead end and narrow streets. They are non-appropriate or vehicle traffic because they are sloped lands. There is no parking lot.		Road construction studies are continuing because it is a new structuring area. Different hard ground tilings are determined (hardwood, granite, basalt, etc.)	

SWOT Analysis for the Research Area

In the scope of the findings obtained in site analysis studies carried out in the research area, strengths and weaknesses of the research area, and opportunities and threats were set (Table 2). The research area is surrounded by 1-2-3. Degree archeological sites besides it's being the most important cultural area of Duzce Province. The region gains more importance by its regeneration with educational facilities with the foundation of Düzce University in 2006. It is necessary that dense construction process with the increase of commercial and housing

usages should be prevented. It was taken as a fundamental factor in the plan decisions in the scope of culture tourism of the design of this area as an archeological park, archeological artworks such as the theater, west and south city walls, Atlıkapı, bridge, aqueducts, bathhouse ruins, and Necropolis area, and in addition traditional settlement, Ottoman Era graveyard, temples and mosques, and the things required by the legal statue of the area should be evaluated together.

Table 3. SWOT analysis for the research area

Strengths	Weaknesses
<ul style="list-style-type: none">- Designation status of archeological site in the research area and 1st degree archeological site status has been determined,- Some traditional dwellings were registered as immovable cultural asset in addition to archeological ruins such as theater, city walls, and bridges,- Presence of Düzce University to contribute to performance of scientific researches about the history of the region that is close to the research area and archeological site, and to the development of the area,- Continuation of scientific excavation studies at the theater and its surrounding,- Having transportation and functional connections with other tourism centers in the region,- The area has a suitable climate since it is close to the sea shore,- Kocaeli Regional Committee Directorship of Conservation of Cultural Assets has reached a decision by embracing the research area and its surrounding of Konuralp Municipality for the protection and development of the area,- Civil initiative studies for the introduction of the research area- Designation status of the archeological site within the project area limits as 1st degree, 2nd degree and 3rd degree archeological sites- Registered traditional dwellings provide information about Konuralp's domestic architecture,- Traditional settlements and their gardens situated in the area are evaluated as an important potential in terms of reflecting traditional garden identity.- There is a strong axis within the research area at the east-west direction.- There are sign boards at the roads going to the other archeological ruins in the environment especially.- There are unique patterns at Atlıkapı Street, Cihan Street and the theater located in the research area.	<ul style="list-style-type: none">- Failure to implementation a "Zoning Plan for Protection Purpose" of the research area,- Development pressure in the area by the presence of Düzce University and forming pressure on the research area,- Pressure of unqualified multi floor new constructions in terms of aesthetics and technically in the city center and archeological site losing their unique property among these buildings,- Failure to carry out maintenance and conservation studies of the archeological assets and traditional settlements,- Low standard of trading usages directed to tourism,- Inadequacy of accommodation services- Inadequacy of social and technical infrastructure in the area,- There are problems about the drop off and pick up areas of tour busses and lack of parking lots.
	Opportunities <ul style="list-style-type: none">- Indwellers have a city awareness and potential to support the development,- Acceptance of Konuralp Ancient city theater as a crucial cultural asset of Western Black Sea and making investments in this context,- Presence of a potential for various tourism usage purpose in the research area,- A cultural tourism potential generated by architectural, artistic and historical values,
	<hr/> <ul style="list-style-type: none">- Ecologic tourism potential brought by agricultural production abilities in urban settlement that are provided by the climate and vegetation of the region,- Presence of the socio-economic revival potential of the area brought by its economic value,- The projects that will develop as planned in the research area supports the introduction of the region throughout Konuralp and its development socio-economically,- The archeological park project that will be carried out in the area will set an example among the archeological sites in other regions,- Konuralp is connected to Düzce as a district rather than a region status connected to the center and this is determined as the area receiving more investment support financially.
	Threats <ul style="list-style-type: none">- The new buildings pressure on the archeological site,- The presence of possibility of actualization of large scale tourism investments in the area contradicting the physical and socio-economic structure.

EXTERNAL

Table 3 continued

INTERNAL	<u>In Terms of Archaeological Sites and Archeological Assets:</u>
	- Practical problems on implementation of “Zoning Plan for Protection and Conservation Plan“for whole archaeological site.
	- It was determined that there is new constructions in the 3rd degree archeological site according to the temporary structuring conditions.
	- Atıkapı (door) and Southern City walls are not situated within the borders of 1st degree archeological site. Therefore, city wall building in this area is used as a foundation or reliance wall in the housings.
	-The ruins found during infrastructure works are not under protection and they are left at the roadsides.
	-There is no registration about the “holy well (hagiasma)” situated in the research area and therefore it was determined that this building was not under protection.
	- There are not informing signboards about the archeological assets.
	-There is no protection and restoration study carried out in the archeological site.
	<u>In terms of accessibility:</u>
	-Although the traffic circulation system was built according to the zoning plan, there are irregularities on road widths on the same axis.
	- There is no defined and organized entrance for the research area. The entrance to the area is provided at the east direction.
	- There is no defined parking lot in the area. The empty field on Çarşıci Avenue and the area in front of the antique theater is used as a parking lot. The street is preferred as a park at the area.
	- The roads and squares at the area have lost their function.
	- There are pavements in a certain arrangement along the access line, and the laying is worn out.
	- The sign boards situated at the roads going to the culture assets are neglected. There are no informing signboards about the archeological buildings.
	- The unique stone fitted streets are not protected, and some of them are fitted with asphalt or locked cobble.
	- There is no defined pedestrian line in the research area.
	<u>In terms of dwellings:</u>
	- An increase was occurred in the reinforced concrete housing construction in comparison to the previous years as a result of the development pressures.
	- Dense development regions (Çarşıci Avenue, Cumhuriyet Avenue) are not harmonized with the historical pattern.
	- The historic traditional settlement are neglected and they cause visual pollution. Moreover, incompatible additions are made to some of these buildings.
- Registered vernacular architecture examples look neglected and need restoration studies.	
<u>In terms of commercial buildings:</u>	
-Multi-storey buildings used both for housing in the research area are incompatible with the historical pattern.	
- Unqualified façade arrangements in trading buildings diminish visual quality in terms of environment.	
- Service units such as accommodation and food-beverage units are insufficient.	
- When the characteristics of the commercial buildings are evaluated, there is no trading building to sell products special to Konuralp Antique City and local products.	
<u>In terms of public buildings and public open spaces:</u>	
- It was determined that the squares situated in the area have weak connections with the archeological assets and other areas.	
- It was determined that park fitting components in the district park that are shown as public open spaces are inadequate.	
- The studies that are performed in the scope of façade arrangement of the Ottoman Bath situated in the area ruin the uniqueness of the building.	
- Konuralp Museum that is situated in the area cannot form a unity with the area due to its position.	
- Landscape design of the existing square has a weak public open area characteristic in terms of utilization.	

Archaeological Site Analysis and the Determination of Reliability Degress

The restitution studies for historical buildings need to be carried out scientifically to explain the unique design of the architectural component, and to explain the changes in the building during the historical process. In the scope of the restitution research of Konuralp Archeological Site, during the determination process of the components or sections that are changed in later periods demolished partially or completely and are added. To determine the situations of the archeological assets in the historical process were evaluated the comparative studies, air photographs, maps, written and visual documents such as observations included in the notes of travelers, and oral resources. Different reliability levels were determined according to the obtained data, presence of archeological remains (Table 4-5).

Based on these findings, table of reliability levels was formed and included in Table 4. According to the scoring made according to the findings obtained as a result of the upper and sub scale analysis studies, the highest score was determined to be 38 (100%), and the lowest score was 12 (30%). Accordingly;

- 1st level: the construction situated in the section of 100%-84%;
- 2nd level: the construction situated in the section of 83%-64%;
- 3rd level: the construction situated in the section of 63%-31%;
- 4th level: the construction situated in the section of 30% and lower section are determined to be reliable in order to offer a restoration proposal for the construction of the archaeological site.

In this section of the research, based on the data obtained in the scope of site analysis studies carried out in Konuralp ancient city, interviews carried out with the individuals living in the research area and the data on the historical development of the area and by evaluating the obtained findings, suggestions were made for protection and sustaining socio-cultural continuity of the unique characteristics of Landscape Design Suggestion for Prusias ad Hypium Archeological Park scale was proposed (Figure 5).

Sub regions where historical city pattern is protected for the archeological park project were determined and suggestions were developed in sub scale for these regions.



Figure 4. Registered, religious and cultural buildings located in Prusias ad Hypium (Konuralp)

The findings obtained for the selection of sub regions and determinations of the current situations were evaluated and the reliability situation of the research area was

determined and design decisions were developed according to the reliability levels.

Table 4. Reliability Level Scoring Table

RELIABILITY LEVEL SCORING TABLE	
Archeological Sites	Score
1st Degree Archeological Site* (the areas with structuring prohibition, and with no intervention to be made other than scientific excavations)	10
2nd Degree Archeological Site* (the areas with structuring prohibition but their protection and utilization conditions are determined by protection committees)	8
3rd Degree Archeological Site* (archeological areas able to permit new arrangements according to protection-usage decisions)	4

* The High Council of Cultural and Natural Assets Protection of Turkey classified archeological sites according to their significance and characteristics with the Resolution dated 05.11.1999. Furthermore, protection terms applicable to these sites were determined.

Findings on Structural Situation	
Traces Coming From the Building	10
Written Resources and Documents	8
Visual Resources/Photographs, Plans-Maps	6
Oral Resources (obtained from experts and local people)	4
Qualified new buildings (compatibles with temporary structuring conditions)	2
Unqualified new buildings (not compatible with temporary structuring conditions and creating visual pollution)	0

* Qualified and unqualified building in 2nd.and 3rd. Degree were built according to the temporary construction conditions of Kocaeli Regional Committee Directorate of Protection of Cultural Assets of Turkey. Therefore is not given "0" point in reliability degrees

Table 5. Archeological Site Reliability Levels

Archaeological assets	Classification of Archaeological sites			Location (Dist/Road)	Trace(from buil.	Written Resource	Visual Resources		Oral Res.	Qualified new build.	Reliability Level
	1st Deg	2 nd Deg	3rd Deg				Photo	Plan/map			
Theater (Theatron)	✓			Dist..Cifte pinarlar Ave.Hurriyet	✓	✓	✓	✓	✓		1
Theater (Skene)	✓			Dist..Cifte pinarlar Ave.Hurriyet	✓	✓	✓	✓	✓		1
Theater (Orchestra)	✓			Dist..Cifte pinarlar Ave.Hurriyet	✓				✓		2
Athkapı and Southern city walls		✓		Dist..Cifte pinarlar St.Athkapı	✓	✓	✓		✓		1
Western city walls	✓			Dist..Terzihaliler	✓	✓	✓		✓		1

Table 5 continued

	Classification of Archaeological sites			Location (Dist/Road)	Trace(from buil.	Written Resource	Visua l Resources Photo	Oral Res. Plan/map	Qualif ied new build.	Reliabili ty Level	Locatio n (Dist/Road)
	1st Deg	2 nd Deg	3rd Deg								
<u>Archaeolog ical assets</u>											
Roman Bridge	✓			Dist..Terzi aliler	✓	✓			✓		1
Aqueducts ruins		✓		Dist..Cifte pinarlar Ave.Carsii ci	✓	✓	✓		✓		1
Baths(Ther mae)		✓		Dist..Cifte pinarlar St.Kaleler	✓				✓		2
Necropolis	✓			Dist..Tepe cik	✓	✓			✓		1
Holy well (Hagiasma)			✓	Dist..Cifte pinarlar Ave.Hurri yet	✓				✓		2
<u>Vernacular Structures</u>											
Traditional houses/ unregistere d		✓		Dist..Cifte pinarlar	✓		✓		✓		2
Traditional houses/ unregistere d			✓	Dist.Terzia liler	✓		✓		✓		3
Traditional houses/ registered/p arcel of 1825-1826		✓		Dist..Cifte pinarlar St.Kaleler	✓	✓	✓		✓		1
Traditional houses/ registered/p arcel of 2252		✓		Dist..Cifte pinarlar Ave.Konur alp	✓	✓	✓		✓		1
Traditional houses/ registered/p arcel of 1738-1745		✓		Dist..Cifte pinarlar St.Basol	✓	✓	✓		✓		1
<u>Religious-cultural structures (registered)</u>											
Teke Mosque		✓		Dist..Cifte pinarlar Ave.Konur alp	✓	✓	✓		✓		1
Konuralp Mosque		✓		Dist..Cifte pinarlar Ave.Hurri yet	✓	✓	✓		✓		2
Turkisch Bath			✓	Dist..Cifte pinarlar St.Hamam	✓				✓		3

Table 5 continued

	Classification of Archaeological sites			Location (Dist/Road)	Trace(from buil.	Written Resource	Visual Resources	Oral Res.	Qualified new build.	Reliability Level	Location (Dist/Road)
	1st Deg	2 nd Deg	3rd Deg								
<u>Archaeological assets</u>							Photo	Plan/map			
Ottomon cemetery			✓	Dist..Cifte pinarlar St.Ali Hamza	✓	✓	✓	✓	✓		1
<u>Buildings and environs /after 1950 year</u>											
qualified buildings*		✓	✓	Dist..Cifte pinarlar						✓	3
unqualified buildings*		✓	✓	Dist..Cifte pinarlar Ave.Carsiici							4

* Qualified and unqualified building in 2nd.and 3rd. Degree were built according to the temporary construction conditions of Kocaeli Regional Committee Directorship of Protection of Cultural Assets of Turkey. Therefore is not given "0" point in reability degrees

Table 6. Intervention areas and intervention method diagram

Reliability Levels	Intervention Areas Location /District-Avenue-Street)			Intervention method	Priority actions
	Dist.Ciftepinarlar	Dist.Tepecik	Dist.Terzialiler		
	Ave.Hurriyet (theater,scene, orchestra) Ave.Carsiici (aqueduct ruins) St. Atlıkapı (Atlıkapı, southern city walls) St.Kaleler (registered vernacular structures) St. AliHamza (Ottoman cemetery)	Necropolis	St.Hamam Sok (western city walls) Roman Bridge		-Continuation and start of scientific excavation studies at the archaeological assets, Solving problems archaeological site ratings (Giving te 1 st . Degree Archaeological Site status for St. Atlıkapı
2.Degree	St.Cihan (traditional house) St. Sevinak, St.Basol, St. Hurriyet, (unregistered traditional house) St.Hurriyet (holy well (hagiasma)			Preservation-rehabilitation	Removal of incompatible additions which distorts unique pattern Registration of traditional dwellings
3.Degree	St.Cihan (unique way texture) Ave.Carsiici (Konuralp square) St.Hamam Sokak (Turkisch Bath) St.Hurriyet			Revitalization	Re-function of the abandoned building

Table 6 continued

Reliability Levels	Intervention Areas Location /District-Avenue-Street)	Intervention method	Priority actions
4.Degree	Unqualified new buildings (not compatible with temporary structuring conditions and creating visual pollution)	Renovation	Renovation of unqualified structures for the protection of traditional city pattern.

Conclusion

An archeological park landscape design project has been proposed to emphasize the importance of Konuralp Ancient City (*Prusias ad Hypium*) and to protect and re-functioning of cultural heritage in a healthy, livable and aesthetic environment. During the project preparation, the targets have been determined for any type of physical-spatial arrangements based on the qualification of archeological site, and the necessities determined in the research area were considered and it was aimed that historical environment quality will be improved by environmentally compatible designs. Decisions were made suggesting an integrated approach to strengthen the relationship between the history and present in the entire city in this target scope in the archeological park project suggested for the ancient city (Figure 5). In this context, the intervention areas and intervention methods have been determined as a result of the analysis and synthesis studies conducted in the macro and micro scale in the archeological site in the scope of Konuralp Archeological Park Landscape Design Project (Table 6).

The excavation studies must be extended and maintained. The excavation areas are the most important parts of the archeological park where the visitors can establish behavioral and emotional relationships. Continuation of the excavation process is an important criteria to follow up the changes on site during the excavation process, and to improve the legibility and perceptibility of the archeological park. Therefore, the first design criteria of the archeological park is enabling the visitors to witness the development of this process as the excavation studies continue. It is suggested that excavation studies should start the

surroundings of Atlıkapı and Southern city walls, Western city walls, Roman Bridge, bathhouse area, aqueducts and Necropolis among the other archeological ruins. It is also suggested that scientific excavation studies are carried out around the Ottoman Era Cemetery to reveal its multilayer building and cultural values.

Pedestrian roads must be established. It was suggested that Çarşıiçi Avenue, where D-100 (Düzce-Akçakoca) Highway connects to the city and it is considered to be the archeological park's entrance point is pedestrianized to strengthen the relationships of all cultural heritage areas with each other and to facilitate the perception and relation of the visitors. Moreover, it is considered that there is the intensification potential of the excavation studies on this line and the southern city walls integrated with Atlıkapı monumental building is interrelating this line through the road. The intense vehicle traffic on Çarşıiçi Avenue should be carried out over Hamamaltı Street which is situated on the South side of the avenue.

A defined city entrance must be established. It is observed that the area does not have a defined entrance and the area that is used as the entrance today is not integrated with the city in the scope of the site analysis studies. According to Dörner (1949) was the the city entry located through the Western City walls in Bithynia Kingdom. Therefore, the entrance of the city is through this point. It is suggested that the area, which is reserved as a median at the entrance and where there is a deserted building, is evaluated as the visitor meeting point.

A parking lot area must be established. There is a parking lot problem as determined in the area analysis and site analysis studies.

Moreover, it is also set that vehicle traffic affects the archeological buildings unfavorably. For this purpose, it is suggested that the vacant area at the north of the archeological park entrance is used as a parking lot to fulfill the needs of the visitors.

A new landscape design must be carried out for Konuralp square and its near environs. The existing square plays an effective role in the formation of social building which is the knot point of the city and in the awareness gaining of urbanity, and it is aimed that this square is integrated with the city and the identity of the square is emphasized. There are unqualified commercial buildings surrounding the square, where Konuralp Central Mosque and Konuralp Bey Masjid is located, and these usages affect the environment aesthetically in a negative way. Therefore, these units are removed and small sale units to sell souvenir, food and beverage, and local products are established in their places. Furthermore, the city museum which has great significance for the archeological park should move to this area and an information center is established to give tourism-guidance services in this area due to the proximity of the area to the archeological remains situated across from the existing square.

Improvement of traditional dwellings is mandatory. Due to the site analysis studies; there are only three traditional dwellings that are registered. However, there are dwellings worth registering in the area. But it was observed that the dwellings are neglected and that no conservation studies were carried out in these buildings. For this purpose, it is aimed that restoration studies has to be carried out for the traditional dwellings to integrate their unique texture. There are no accommodation units within the study area. Therefore, traditional dwellings should be used for accommodation purposes.

The relationships between the archeologic sites must be strengthened. "Archeotour" is planned in the scope of Konuralp Archeological Park Project to make the archeological ruins meaningful and for the visitors to perceive and use it in a limited

level. Archeotour is defined along Kemerkasım Village line where aqueduct building ruins are located at the east of the city situated out of the study area, and Tepecik Necropolis which is announced as 1st degree archeological site at the west section of the city. The ancient city enables sight-seeing of all archeological buildings along the tour line of approximately 8,5 km. Sitting areas are placed along the tour line at certain intervals and resting areas are provided. The regions where Konuralp Ancient City's archeological buildings are dense and the regions which contain monumental buildings that are threatened by modern living are determined as the focus points of the archeological park. The focus regions of the archeological park were determined as;

- The ancient theater and its surrounding, which forms the core of the city within the historical process and still existing today, although partially, and where the historical texture dominates;
- Atlıkapı, which is characterized as the main entrance gate of the city and opens to the theater, and Atlıkapı Street, where the southern city walls are located;
- Hürriyet Avenue, which opens to the antique theater at the east and contains housings and buildings densely; and these regions were examined in sub scale in detail and design decisions and suggestions were offered.

The theater and its near environs: The antique theater and its near environs are registered as a 1st degree site based on the decree of the High Commission of Real Estate, Ancient Arts and Monuments in 1978. The only study about the theater plan, section and elevation is included in the book of De Barnardi Ferrero (1970), titled *Teatri Classici in Asia Minore*. In Ferrero's book, survey and restitution studies of Prusias ad Hypium antique theater by architect E. Guillaume are included. In the book dated 1970, the state of the theater during that period is documented. A survey study of the antique theater was carried out in the

scientific research project to determine the current state of the theater building and to document its change in time. The plan and sections of the current state of the “orchestra” and “scene” sections of the theater building in addition to the cavea section were drawn. The data obtained by the survey study were compared with the drawings of E. Guillaume. In this scope; it is observed that the majority of the seats in the “cavea” area of the theater remained under ground or are moved to another area or ruined.

According to the site analysis studies, the relationship of the theater that is the focal point of the archaeological park with its surrounding and theater usage of local people was observed so that antique theater and its environs was designed in detail. In the scope of the suggested archeological park projects;

- Due to the scene of the theater’s upper point (anelamma), it is used in an uncontrolled manner by the local people and visitors. It is subject to vandalism threat as a result of the unfunctional and inadequate illumination fixings in the area, Therefore, an observation platform was built in this area to protect the current anelamma wall, to leave it as a reserve area to the future periods and scientific research and excavation studies. Composite wooden material is suggested for the pedestrian road. Besides, sitting units and information panels at certain intervals on the platform are suggested.

- The concrete stairs built by Konuralp Municipality in the past to connect the “orchestra” area of the theater with the “cavea” are not in harmony with the theater’s texture. In order to protect the current connection line in the archeological park project but not to hinder future excavation studies, it is suggested that it is covered with movable material.

- A walking trail is designed as a result of revealing the “diazoma” section of the theater. In addition, in order to achieve safety at this location, railing is considered and it is suggested that diazoma ground is covered by a raised platform. In order not to harm the unique texture by interventions, a raised platform is designed not to have direct contact with the ground (Figure 5).

- It was observed that the south side of the stage building of the theater is used by local people during August-October months to dry filberts and paddy. In other periods, it is used as a parking lot with the influence of Konuralp Central Mosque and due to the lack of a parking lot in the close surrounding. Based on these data, small scale timber units were designed for local product sale for the residents in this area to dry their products and to market them according to their habits (Figure 5).

- Information signs are suggested in the regions where excavation studies are conducted. According to the reliability degrees obtained from oral meetings during site analysis studies, on the other hand that virtual reconstructions of the tunnels is made which reach Yılanlıkapı-Aslanlıkapı and Selametkapı and are asserted to be present at the “orchestra” area of the theater, and to be presented to visitors.

Atlıkapı and southern city walls: In the scope of Konuralp Archeological Park, street improvement is proposed at Atlıkapı Street where the monumental building is located, which is characterized as the entry of the city at the South of the antique theater. In the scope of street improvement, it is proposed that;

- The unique stone pavement under the asphalt that is determined during site studies come into prominence;
- Restoration and cleaning studies of Atlıkapı monumental building and the city walls extending at the east-west direction of the door are performed;
- Restoration studies of the traditional housings situated at both sides of the street are carried out;
- The vacant area at the west of the street is publicized and this area is arranged as a sitting-relaxation area;
- Street furniture in the area such as informing and directioning are positioned.

Vernacular Architecture: It is offered in the scope of site analysis studies that restoration studies of the building which is a crucial part of local culture are performed for

which late Republic Era Protection studies are not carried out, and its integration to the modern environment.

In the present study, “**archeological park**” concept was scrutinized as a cultural heritage protection method for sustainable development, and application of this model in Konuralp Ancient city was offered. Archeological parks are used as a cultural heritage protection and management method during the recent years, and this is an approach to enable re-interpretation of urban archaeological sites. Archeological park management model special to this sub region must be developed in order to protect cultural values that the archeologic area and its close environs have and to protect archeological landscape and in order to direct research, protection, usage and planning processes involving sustainability of the area and the archaeological site. It is necessary that a collaboration and unity environment must be provided in order to protect Konuralp Archaeological Site as a whole which is offered for carrying out archeological park studies, in order to keep it alive with its residents and enable people’s participation, and to restoration of historical texture with the contribution and support of central and local managements, and to develop its sub building and to improve life quality. In order to protect this environment, it is necessary that site management policies are determined based on collaboration to be formed with public-private-local-civil synergy and with international institutions for the protection and keeping alive of the historical and cultural heritage area.

The top priority in the site management scope should be to raise awareness for embracement primarily by the host society and to act together in the protection studies to enable sustainability of the archeological park and to protect the cultural heritage that they have. Since Archeological Park concept has a key characteristic for sustainable development, it must be a planning and design study to be performed together with many professional disciplines in the multidisciplinary platform as an approach and application area to be evaluated not only in micro scale but also in the national level.

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Figure 5. Landscape Design Suggestion for Prusias ad Hypium (Konuralp) Archaeological Park