

A PROPOSAL FOR ADAPTIVE REUSE OF SARPINCİK Lighthouse WITH AN ANALOGICAL APPROACH





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ABSTRACT. Redesign of cultural heritage buildings with contemporary approaches for reuse is an important issue within research, discussion and implementation of spatial design. Accordingly, the conservation courses, especially applied studios are increasing in spatial design education. Yaşar University Department of Interior Architecture and Environmental Design focuses on “Adaptive Reuse of Heritage Structures” in the 3rd and 4th grade studio courses. In the BEA | con (s) Project, the RITM team studied the adaptive reuse potential of Sarpincık Lighthouse during 2019-2020. Lighthouses have been navigational aids, visualized the intangible maritime routes, and symbolized political power since antiquity. In the 1980s, they were automated and demanned. Lighthouse complexes became obsolete, were abandoned and consequently deteriorated. Meanwhile, lighthouses in Turkey rented since 2007 lost their authenticity due to interventions lacking conservation-use balance. Hence, it is necessary to define the cultural values of lighthouses within maritime heritage. They should be handled with scientific, systematic studies and adaptive reuse strategies should be developed.

In this study, Sarpincık Lighthouse of İzmir Karaburun, built in 1938 and abandoned in 2010, is examined. The lighthouse consists of a light tower, a keeper’s residence and service buildings in a rural context. It is tied to centuries old maritime routes and a regional cultural route. The study aims to establish a conservation strategy for the physical structures while restoring the link to these routes and maintaining the lighthouse function. Hence, the lighthouse is evaluated within a proposed eco-village. Spatial interventions for conservation purposes are described as reuse and additional new structures. The lighthouse buildings are transformed into a common area serving the basic accommodation units to be established around. The interventions following an analogical approach, addressing a program of socialization, food and beverage functions for visitors, are intended to increase the value of existing structures without harming their authenticity.

Keywords: *Intervention, Conservation, Lighthouse, Maritime Heritage, Adaptive Reuse*

INTRODUCTION

The adaptive reuse of historical buildings is an important field in spatial design practice as much as the design of new buildings. The number and diversity of cultural heritage structures located in geographies such as Anatolia, which have been settled uninterrupted throughout history and have remained important in every period, increase the place and importance of such studies in spatial design practice.

Although there are accepted principal decisions regarding the approaches to protect and reuse historical buildings and environments, the intervention approach that each building needs is changing according to the differences such as the period it was built, the conditions effective in its design, the urban / rural context, etc. For this reason, it is necessary to analyze the authenticity and conservation problems of each structure and to

determine the intervention approach according to the results of these evaluations, considering the general principles defined in cultural heritage conservation.

Adaptive reuse of historical buildings, built many years ago, to meet the needs of contemporary daily life is possible in most cases by making a contemporary addition. However, with all interventions in the design of annexes, the existing context should be examined and the data obtained should be used in determining the new design strategy. In addition to being a physical object, the context also has intangible values, making the design problem more complex. When today's reuse and contemporary addition practices are examined, various approaches such as analogic, contrast, abstraction, interpretation, establishing relationships using reflective surfaces are observed. In this paper, conservation theory about intervention and new addition is reviewed and the analogical approach is discussed with the spatial interventional design proposal developed for Sarpıncık Lighthouse.

ANALOGICAL APPROACH IN ADAPTIVE REUSE

Conservation theory has been continuing its conceptual development since the 19th century, and the need to use historic structures that have lost their original function for beneficial social purposes without changing their authenticity is emphasized at every stage of the intellectual development that extends to the present day [1]. But since the contemporary intervention in the historical environment have to adapt for the dynamics of development on the one hand and respect the cultural heritage structures and environments on the other. So the intervention to be made becomes a complicated design problem.

According to contemporary conservation theory, structures can be protected with the help of economic resources created by re-functioning. Kuban [2] is of the opinion that the necessary changes and additions have to be made in order to meet the requirements of the new function in structures redesigned due to functional transformation, provided that they respect and emphasize historical data. According to him, the visual relation (size, space, color, texture, harmony, sensitivity to history) to be established between old and new is always subjective. This relationship can be a formal harmony, a sensitive harmony, a dynamic harmony that emphasizes contrast, or an attitude that rejects harmony. However, it should not be forgotten that the most important boundary condition is the dimensions and facades of the old building, since it is one of the basic components of the historical environment, and the new annexes should not go beyond the volumetry of the old building.

Although it is recommended to use historical buildings for beneficial social purposes, without changing the plan and decoration in Venice Charter [3], which is described as a turning point in the conservation of cultural heritage, when it is necessary, new additions, that do not harm the traditional position of historic building, its composition, balance and its relation with its surroundings is allowed, provided that new ones differ from the architectural composition and show their own period. In the international texts produced in the following years, [4] it is stated that it will be possible to protect cultural heritage buildings and environments [5] by giving an active role in contemporary societies and its interaction with the society provides cultural sustainability. [6] It is also stated that contemporary interventions, which are; compatible with historical context [7], mass [8], scale [9], rhythm [10], character [11], texture and material [12]; consciously using the materials and technology of their own period [13]; reversible [14]; respectful to the spirit

of the place [15] etc. offer the opportunity to enrich the social, functional and aesthetic character of the existing historic texture [16]. In line with the developing theoretical debates and principled decisions, the intervention approaches have been diversified as the historical, contextual and environmental characteristics of each sample have changed [17].

The relationship between the existing structure and the new design that interferes with it is a phenomenon that changes according to the context of the existing structure and the purpose of the new design. De Sola-Morales Rubió [18] emphasizes that the idea of design, which is formed by understanding all aspects of the existing structure, provides emphasis on different qualities and allows the approach that establishes the old-new relationship. According to him, important components of the current historical environment should be used as analogical signs of intervention. The current conditions form the basis of each analogy in terms of difference and similarity, and all meanings are built on this analogy. Thus, the tangible and intangible elements of the space are conserved and enriched with the new design, while the historical structure becomes an object that directly or indirectly shapes the new design. Worthington [19] defines the role of protection as the ability to manage and direct change, and states that the purpose of protection is to maintain the values of the past, and move them to the future and add new components to meet the needs of changing living conditions. As can be seen, the contemporary annexes made for adaptive reuse of cultural heritage structures, are accepted by international documents in which principal decisions are made and conservation theoreticians. Davies [20] states that the new design in the historical setting is polarized as extreme history and extreme modern approaches and diversified between the two like pastiche, traditional, subtle, modern, arrogant; The author emphasizes that the most appropriate intervention is the ‘Subtle’ approach, inspired from the past, by respecting the historical context which is universally accepted. In this approach, despite the historical reference and the use of traditional materials, the design skillfully demonstrates that it belongs to the present day.

As can be seen, interventional design in historical context is limited on the one hand by theoretical developments and on the other hand by tangible and intangible features of the historical context. The first necessity for all kind of approaches and strategies is to examine existing historical buildings and environments in detail and to determine the interventional design strategy according to the data obtained. Thus, it will be possible to produce creative solutions by preserving the continuity of the texture formed in historical process up to day. Within this regard, identification of lighthouses as an architectural typology and discussion of cultural values inherent to lighthouses is the first step for the adaptive reuse proposal of Sarpıncık Lighthouse.

LIGHTHOUSES AS AN ARCHITECTURAL TYPOLOGY, CULTURAL VALUES AND SARPINCİK LIGHTHOUSE

All around the world, the coasts had provided a habitat for human beings over the centuries, created a culture regardless of borders and produced maritime heritage. Lighthouses as lit navigational aids are an important component of this heritage. Turkey had been home to numerous lighthouses since antiquity, due to its location, being surrounded with seas on three sides and availability for seafaring. Today, Turkey has 459 navigational aids within its borders and all of them are owned by the state. [21] This

number includes lighthouses, light structures and beacons. Only 109 of these structures are considered as lighthouses from an architectural point of view. [22] 9 of these structures are dated to Roman period. The biggest group belongs to Ottoman period, constructed between 1855-1912. There are few lighthouses constructed during the Republican Period of Turkey after 1923. The lighthouses on the Mediterranean and Black Sea coast of Turkey are usually situated on mainland. However, the Aegean lighthouses of Turkey are mostly on islands or open sea. [23]

Starting from 1980s onwards, the Turkish lighthouses have been automated in relation to the developing technology. Consequently, the light keepers have been withdrawn from sites and recruited in central offices in early 2000s. The unmanned lighthouses have quickly deteriorated. Since 2006 lighthouses have been rented. [24] The rented lighthouses have been subject to several interventions for adaptive reuse purposes. 22 lighthouses out of the total 109 have been registered as cultural heritage for conservation.

Lighthouses are usually in the form of a building complex. Light tower, residence of the lightkeeper, depot, boathouse, rockethouse, service structures like cisterns, kilns constitute the lighthouse. The light tower bears the duty of leading the seafarers as a lit aid to navigation. The lightkeepers who control the light live in a house next to or near the light tower. Despite their tiny sizes, the residences of lightkeepers have all the requirements to lead a life in remote and difficult conditions. Fuel for the light, food for the lightkeepers, boats to access the lighthouse, salvage material, salvage boats and signal rockets to help wrecked vessels are all stored in service structures. [23]

Sarpıncık (Karaburun) Lighthouse in Izmir, Aegean coast of Turkey, had been designed by Lighthouse Authority (General Directorate of Coastal Safety today) in 1933 and the construction was finalized in 1938. [25] The lighthouse belongs to the second generation of lighthouses in Republican era, as a continuation to the first generation mostly constructed in 19th century. Sarpıncık Lighthouse is one of the initial attempts in regard to the “nationalization of transportation”, a decision accepted in the İzmir Economy Congress of 1923. It has similar characteristics with Artvin Hopa Lighthouse in Black Sea coast which started operating in 1935. Most probably these two lighthouses were the results of a standardized project. [26]

The lighthouse is located at the tip of Karaburun Peninsula, 97m above sea level. It is based near rural settlements. The lighthouse structures comprised of light tower, lightkeeper residence, depot and independent toilet are accessed by a beaten earth road. Though the structures are visible from the sea, due to the rocky and steep terrain, it is not possible to approach from this direction. The peninsula and the lighthouse are subject to prevailing winds and dense rain throughout the year. [27] (Fig.1)



Fig. 1. Map of Karaburun Peninsula with Sarpincik Lighthouse at the northern tip.(Google Earth, 2019)

In order to settle the lighthouse structures on the terrain, the steep slope is levelled to create an artificial terrace. The structures are laid on north-south line, regarding the prevailing wind and the eastern facades are hidden in the slope. The western facades face the sea above the rocky sloping terrain. (Fig.2) [28]



Fig. 2. Sarpincik Lighthouse from the eastern arrival path. (O.Basagac Archive, 2014)

The reinforced concrete, conical light tower is 13m high. [26] It is supported with buttresses. There is a light room on the upper terrace and a beacon on the rooftop. It has three windows and one entrance. The light keeper's residence is independent from the

light tower with dimensions of 7.67x5.06 m. The basement with a single door and window is supported with reinforced concrete curtain walls. The main living quarter of the lightkeeper's residence is situated on the ground floor, accessed by a single door. This level of the structure is rubble stone and brick masonry. There is a windtrap added to the front door in 2007. The ground level has five windows. The keeper's residence has a timber sloping roof, covered with terracotta tiles. The generator room is 4.45x3.50 m. It has a single entrance door and two windows. The slate stone masonry, independent toilet is a cylinder of 2m diameter, with a single door and an earth roof. The ruined old keeper's residence which had been used during the construction of the lighthouse station between 1933-1938 is situated 100m away from these structures. (Fig.3)



Fig. 3. Light tower of Sarpıncık Lighthouse (Basagac, 2019)

The buildings had been maintained annually. A depot had been constructed in 1980s, a thorough repair had been carried out in 2007 and the depot had been transformed into a generator room. [26] (Fig.4) Thus, continuous electricity had been provided. The beacon of the light tower had been operating on solar energy since 2007. When the central control system had started operating in 2010, the light keeper had been retreated from the site. As the keeper's residence had been unmanned, the structures had started deteriorating. The light tower and generator room are still operating. The site is a stopover for visitors who use the nearby beach. The lighthouse station is situated on the cultural route "Rota Yarımada" (Route Peninsula) which connects Efes with Karaburun. [29]



Fig. 4. *The depot (foreground) and the light keeper's residence (background).*(Basagac 2019)

Sarpıncık Lighthouse may be considered an interface between rural and modernist architecture. (Fig.5) The old keeper's residence and the independent toilet reflect the characteristics of rural Karaburun architecture. [30] The current keeper's residence is a transitional structure. The reinforced concrete light tower differs from the common construction techniques in this geography. This light tower rises up to 13m with a narrow base as opposed to the preceding 19th century light towers with massive masonry and large bases, limited to 7-8m height. Considered an engineering problem for its time, this tower may be compared to the contemporaneous parachute towers, like the one in İzmir Kültürpark.



Fig. 5. *The local slate masonry, independent toilet of Sarpıncık Lighthouse (O.Basagac Archive, 2014)*

From 1938 until 2010s Sarpıncık Lighthouse had been the only structure perceived from the sea on the northern tip of Karaburun Peninsula and its slender white silhouette had pointed the entrance of Izmir Bay. Approaching from the land side, the structure had always been hidden in the topography. The recently built wind energy stations have damaged Sarpıncık silhouette, regional scale and microclimate. (Fig. 6)



Fig. 6. Sarpıncık Lighthouse and the wind power stations in the background as seen from the sea (Koca Piri Reis Research Ship Archive, 2014)

The lighthouse had always been kept by the same family since its inauguration in 1938. This feature makes it an important representative of lightkeeping and the social relationship between lighthouses and their close environments. After the departure of the lightkeeper and his family in 2010, this tradition is interrupted.

The complex relationship between a lighthouse, its close and distant environment, service providers and users create the values [31] of lighthouses beyond the physical structures themselves. Lighthouses have a unique architecture emerging as a result of technology for a specific and continuous function; a navigational aid. And this function still continues today. The architecture of lighthouses has inspired arts and they have become symbols through the centuries. They are the markers of maritime routes and coastal landscapes/ seascapes. Lighthouses have led to the creation and nourishment of light keeping. They are important financial resources and have always been a testimony of political power.

Sarpıncık Lighthouse with its several structures has a strong symbolic value which has defined the coastal silhouette to this day. The cliff that Sarpıncık Lighthouse sits on, is home to Mediterranean seals with its coastal bedrock and caves. The structures of the lighthouse is an integral part of the natural and rural context of the region. This characteristic turns Sarpıncık Lighthouse into a well-known destination for mariners, researchers and local tourists alike.

The lighthouse is an important outcome and marker of the Aegean maritime routes that have developed over the centuries. Moreover, currently Sarpıncık Lighthouse has the potential to be integrated to the Yarımada Rota cultural route, utilized for hiking, archaeological/ cultural tourism, sea tourism and gastronomy-wine related activities.

Sarpıncık is one of the few lighthouses with a keeper's residence that has been constructed during the Turkish Republican Period. In this respect, it is a marker of the nationalization of transportation during the early years of the Turkish Republic. Besides

its authentic architectural features, it also reflects the cultural layers of the region. All of these cultural values of Sarpıncık Lighthouse had constituted the significance of this building complex and directed the principles regarding the conservation/ adaptive reuse proposals. These principles are defined as; refraining from damaging the coastal silhouette, protecting/ enhancing/ referencing the rural context, not overshadowing the existing structures, respecting the current building scale, setting up a relationship with Yarımada Rota cultural route and other larger scale cultural routes, keeping the light tower functional as an aid to navigation, thus maintaining the original function of the lighthouse in the new proposal.

A PROPOSAL FOR ADAPTIVE REUSE OF SARPINCİK LIGHTHOUSE WITH AN ANALOGICAL APPROACH

The RITM (Restoration, Intervention, Transformation, Modification) Research Team operating under Yaşar University, Faculty of Architecture, Department of Interior Architecture and Environmental Design conducts applied studio courses for 3rd and 4th year students as well as a graduate level workshop/ studio for investigating adaptive reuse potential and developing design proposals of cultural heritage, supported with several graduate and undergraduate theoretical courses on conservation and adaptive reuse of cultural heritage. The heritage structures to be studied in the studios are critically chosen representing diversity of historical periods and architectural typologies, employing distinct aesthetic vocabulary, utilizing varied construction systems and materials etc. Lighthouses as an architectural typology with the inherent cultural values, and Sarpıncık Lighthouse in particular, provide the necessary diversity sought for in studio studies.

The RITM Team, with the supervision of the authors of this paper, have conducted a Design Studio for 4th year students during the Fall Semester 2019-20. The applied studio aimed at the identification of adaptive reuse potential and design proposals for the conversion of Sarpıncık Lighthouse of Izmir Karaburun, as an Eco-Village for touristic and sustainable development purposes. The inherited but vanished tradition of vineyard keeping and wine making in Karaburun Peninsula had already been subject to revival attempts on a regional and local level. The remote location of the lighthouse settled amongst the decaying vineyards, the rural and natural context created the basis for the project.

The major goal of the adaptive reuse project was to convert the existing architectural elements composing Sarpıncık Lighthouse's site in Karaburun into an Eco-Village for the touristic promotion of the place and at the same time for the application of a sustainable development model based on autochthonous agricultural plantation, considering the project proposal as compatible with the re-introduction on the site of vineyards. The project proposed to utilize the existing architectural elements for social spaces of the Eco-Village, except the light tower which would be kept as an aid to navigation regarding the original function of the lighthouse, and it challenged students to design new lightweight structures aimed at encapsulating accommodation units for the guests of the Eco-Village in total immersion within the vineyards.

Within the theoretical framework, the studio studies first underlined the symbolic value of Sarpıncık Lighthouse as the major part of the coastal silhouette. The lighthouse signified the long history of the Aegean maritime routes and maritime links with several coastal countries. Keeping the original functional value of the lighthouse, in the operating light tower, was an important decision in this regard. With the significant architectural features and challenging miniscule scale, the lighthouse structures provided a strong base

for design in terms of layout, mass, scale and material. Reintegrating the structures in this remote location to the rural context was another concern. The growing economic potential with the foundation of Yarımada Rota cultural route enabled a scenario where the natural context could have been utilized for hikers, nature researchers interested in local fauna/flora of the lighthouse and sealovers interested in the nearby beach; the surrounding land of the lighthouse complex could have been utilized for vineyards and the lighthouse structures as cultural heritage could have been utilized for cultural tourism.

The public recognition of the lighthouse and its surroundings as a “place-to-be” or a “place-to-go”, where multiple experiences could be intertwined, from culture to leisure, from gastronomy to recreation, would contribute to the positive conservation of the place, with an enhanced identity.

The method used in the adaptive reuse project was the integration of conservative actions for the exterior materials and openings of the separate lighthouse structures, very light interior design interventions for the existing buildings and the introduction of new, small-scale additional structures compatible with the existing ones. Access to the site and particularly to the central area in-between the lighthouse structures played an important role in the design and integration of open spaces which would provide the social functions of the Eco-Village. Accommodation and the service spaces required for the Eco-Village were designed as small-scale independent units, distributed to the designated locations on the site, strategically defined to be hidden away into the topography, away from the lighthouse structures. This principle ensured that none of the new structures would compete with the existing lighthouse buildings nor destruct the coastal silhouette and perception of the lighthouse from the sea.

The newly introduced annex structures generally followed an “analogical” approach, as De Sola Morales defines [18], taking clues from the existing cultural heritage. Significant components of the cultural heritage were used as analogical signs of intervention. The current conditions formed the basis of each analogy in terms of difference and similarity, and all interpretation was built on this analogy. Thus, the tangible and intangible values of the space were conserved and enhanced with the new design, while the heritage structures became objects that directly or indirectly formed the new design. The characteristic of the annex structures introduced could also be defined as “Subtle”, with the term coined by Davies [20]. Between the two ends of new design in historical settings ranging from “extreme history” to “extreme modern” approaches, Davies underlines the “Subtle” approach as the most appropriate. The subtle approach is inspired from the past, respecting the historical context. Although it makes obvious references to the historical tissue and employs traditional materials, the design clearly presents itself as the manifestation of present day.

Within the several hypothesis simulated by the students, generally having an “analogical” or “subtle” approach, one of the proposals was evaluated in detail in this paper. The existing building complex was transformed into a common area within the scope of the Eco-Village established in the site (Fig. 7).



Fig. 7. Site Plan of the social area of the Eco-Village. The terrace and light-weight shelter above it integrates the operating light tower, dining area (former keeper's residence) and sales area(former depot) as well as the open-air social areas.

A terrace combining the three major components of the lighthouse complex as the light tower, keeper's residence and the depot was designed where the seaward facing facade transformed into an amphitheatre to allow the guests to benefit more from the landscape and a shelter to be protected from the climatic conditions on it. The amphitheatre, which allowed to rest and to observe landscape, was designed according to the natural slope of the topography (Fig. 8).



Fig. 8. A view to eco-village.

The new structure, playing with opacity and transparency, in a paradoxical combination, was designed to create a semi-open common area between the three existing structures, light tower, keeper's residence and the depot. Lightweight steel structure, inspired by the pitched roof form of the existing structures, was partially covered with metal roof cladding. (Fig.9). The new structure was positioned at a distance of 30 cm without touching the existing structures. Thus, it could be easily installed and removed if necessary without damaging the buildings. (Fig. 10)



Fig. 9. A view from the top of the light tower looking down towards the concrete terrace and steel shelter above.



Fig. 10. A view from the landscape looking towards social spaces of the Eco-Village.

On the floor of the common use area, the projection of the grid system forming the load bearing skeleton of the top cover was emphasized using two different shades of concrete (Fig. 11-12).



Fig. 11. A view from the common area and stairs.



Fig. 12. A view from the common area.

A glass observation point was created at the north tip of the common area, where the topography slope is steep. With this observation point, inspired by the light tower balcony in form and size, same observation experience from different levels was provided (Fig. 13-14).



Fig. 13. A view of the lighthouse tower from the glass observation point.



Fig. 14. A view of the landscape from the glass observation point.

The entrance to the building complex has also been redefined with the new semi-open structure. The entrance proposed between the light keeper's residence and the service building was connected directly to the semi-open common area that combined the existing lighthouse buildings (Fig. 15-16).



Fig. 15. A view from the road connected to the lighthouse.



Fig. 16. Entrance designed between the light keeper's residence and service building.

In the interior design of heritage buildings, local materials inspired by the context were used. Stone and timber were heavily involved in the design to create a warm and natural atmosphere. Generator room was designed as a place where service and sale of local wines are provided (Fig. 17). The ground floor of the light keeper's residence was transformed into a dining room and the basement to a kitchen (Fig. 18).



Fig. 17. Local wine service and sale space.



Fig. 18. Dining room (right).

The existing terrace, at the south of the light keeper's residence has also been turned into an area where guests can eat and spend time. Seating elements and fireplace were added. An environment where the view can be watched was created between the trees (Fig. 19).



Fig. 19. Open air seating areas.

The land around Sarpıncık Lighthouse was proposed to be arranged as a vineyard. The location of the vineyards were chosen away from the existing lighthouse buildings, on a lower level. The accommodation units, which were placed in the designated places of the vineyards, were arranged by the terracing of the sloping topography. The tiny units were designed with a maple coating on the steel structure (Fig. 20).



Fig. 20. Accommodation units, located away from the existing lighthouse structures, on a lower level.

CONCLUSION

Maritime heritage is formed over several millenia, as an outcome of human activities at/ by the sea, encompassing tangible and intangible aspects. Immovable (mainly spatial) features likes harbours, ports, warehouses, arsenals, shipyards, docks, fisheries, lighthouses and salvage buildings on the coasts together with movable features like maritime archives, tools, ships, submarines, wrecks, other vessels and underwater remains generate the tangible elements of maritime heritage. Traditional fishing, marine cuisine, ship building crafts, maritime building crafts and lighthouse keeping constitute the intangible aspects. This composition of diverse elements within maritime heritage carves out a large group under the general concept of cultural heritage. Lighthouses may be considered as the most significant symbols of maritime heritage around the world,

engraved in people's memories with their distinct physical characteristics. Being surrounded with seas on its three sides, Turkey boasts a rich reserve of lighthouses, thus maritime heritage, accumulated since antiquity. The majority of this reserve may be dated to 19th century, whereas ancient and 20th century lighthouses take up a small percentage. Regardless of their original date of construction, due to automation, today these lighthouses are mostly obsolete and unmanned, except the light towers maintained as functioning navigational aids. This condition had led the way to the lease of lighthouses in Turkey for refunctionalization after 2007, creating uncontrolled interventions which overlooked the conservation-use balance.

Sarpıncık Lighthouse in İzmir Karaburun, is a unique case within the adaptive reuse studies of maritime heritage in Turkey. Though it follows a long tradition of lighthouse construction, it presents a contemporary approach with its architectonic and material choice, presenting a bridge between rural and contemporary architecture. Being one of the few lighthouses constructed in the early days of the Turkish Republic in 1938, it has a strong identity and documentary value. The structures had been unmanned after 2010 and fallen into despair following this treatment. The central administrative decision to lease the lighthouse structures, the inclusion into the regional cultural route offered by the metropolitan municipality, the attempts of the local municipality to revive the decaying vineyards in the peninsula and the distinct natural context displaying endemic examples of flora/ fauna had drawn the boundaries to the adaptive reuse studies in the design studio. These studies also considered the regeneration of the lighthouse complex as an economical resource which would further enhance the conservation/ adaptive reuse/ maintenance process of this cultural heritage, while keeping the original function as an aid to navigation in the light tower.

The “BEA | con(s) Adaptive Reuse Proposals for Sarpıncık Lighthouse/ Eco-Village for Touristic and Sustainable Development Purposes Project”, implemented via several studies for identifying contemporary requirements in rural environments and determining re-use potentials of the lighthouse, challenged Studio participants to offer vast numbers of adaptation proposals while increasing the awareness towards reintegrating heritage buildings into contemporary life through the reconsideration of visual, functional, spatial, semantic relationships between the old and the new.

Regarding maritime heritage studies and lighthouses in particular, this article explores how contextual data and theoretical background impact design strategies, by analyzing different approaches adapted in the design studio in reference and comparison to contemporary attitudes in adaptive reuse practice. The study claims that a standard scientific definition cannot be designated for the transformation of cultural heritage regarding function- with the inherent tangible and intangible multi-layered values - and the related design decisions cannot be implemented following along the lines of formulated approaches. Instead, each case should be evaluated independently. For this reason, the project development stage included two separate groups of parameters related to conservation and design. Discussing the parameters related to design, adaptive reuse proposals developed within the studio were mostly shaped by employing methods such as analogical, interpretation, abstraction, referencing the original lighthouse structures, with a profound understanding of tangible and intangible values inherent in the lighthouse and the surrounding environment. This comprehensive understanding led to “subtle” interventions in the design stage. Discussing the parameters related to conservation, students have formed their designs in order to both emphasize the spatial character of the heritage structure and to increase its cultural, functional, economical relevance in

contemporary life in a rural context. The new building program was finalized to offer reuse solutions that aim operational continuity with the original function of the building as a navigational aid and cultural/ social/ economical regeneration as a central place for sustainable development in the rural life of the city.

Put forward by De Sola-Morales Rubi6 [18], Davies [20] and several international documents [3-17], any attempt of conservation, adaptive reuse or conversion necessitates a thorough understanding of the existing environmental context (historical, cultural, social and spatial), to define the significance of cultural heritage in question, which would then shape the nature of intervention, such as contrast or similarity, as well as the strategy to establish the old-new relationship. The actual context, directly or indirectly, gives birth to the new design.

In the recent years, with the alarming rates of the diminishing finite resources of the world, adaptive reuse of cultural heritage buildings has become a necessity rather than a luxurious design problem to be enjoyed once in a while. Though designing for the refunctionalization of heritage buildings might be considered as restrictive by many, it has the potential to open up new design alleys via its challenging nature and is in fact similar to design practices materialized in empty spaces from scratch. However, offering solutions to complex design problems specifically on cultural heritage requires a certain level of expertise. The sensitivity for such design problems should be cultivated in an environment where this expertise may be provided for guidance of young designers. Hence, adaptive reuse studies should be promoted in architectural education to introduce scientific and systematic methods. In return, these studies will enable newly graduated designers to realize functional and spatial transformation projects of cultural heritage with professionalism by implementing the discussed methods. The Studio process illustrated here, intentionally pulling interior architecture students out of their comfort zone, targeted at raising debates of architectural discourses on conservation and interventional design, and at the same time encouraged students on the completion of design exercises by equipping them with crucial skills for the rehabilitation of our unique cultural heritage.

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