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MASTER THESIS

**THE ENHANCEMENT OF CASTLE RUINS WITH
CONTEMPORARY ADDITIONS AS AN ADAPTIVE
REUSE INTERVENTIONS**

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ABSTRACT

THE ENHANCEMENT OF CASTLE RUINS WITH CONTEMPORARY ADDITIONS AS AN ADAPTIVE REUSE INTEVENTIONS

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Structures that can no longer fulfill their original function due to various reasons should not be sacrificed even if they are subject to severe wear and become a ruin. This recovery can be achieved by giving the structure in question a new function that serves today. These interventions, implemented under the name of adaptive reuse, have brought along some consensuses and disagreements among the people working in the field of conservation, which can be called methods, strategies, approaches or principles. While these ideas sometimes contain a general understanding of design, at some specific points they have become some classifications that direct or limit the form and dose of the intervention.

Castles, which are ancient defensive structures, cannot preserve their original function today and are being destroyed by natural and human factors. Conservation examples of these structures, which have a high historical document quality and high potential to be visited, are rarely encountered today. However, the ruined castle structures, with their locations and picturesque features, are structures that have the potential to be re-functionalized even in the simplest ruins. Today, there are examples of contemporary interventions that have managed to evaluate this potential, preserve the ruined texture and value of the building, respect its historical layers and enable it to participate in today's life.

In this study, the emergence of ideas that can be considered theoretically important in the context of conservation and re-functioning, their relations with each other, and the concepts of protection and adaptive reuse are examined in terms of ruined castle structures. Adaptive reuse projects, which were designed and implemented recently

with contemporary architectural additions on abandoned ruined castle structures, aimed to make the ruined structure a visitable center and attracted the attention of architectural circles thanks to the right approaches, were examined within the framework of the strategies and approaches. Finally, in the light of these compiled examples and approaches, adaptive reuse suggestions developed for the ruins of Selçuk Keçi Castle (Turkey) are presented to increase the acceptance rate in the society by basing the validity of the conservation interventions realized with contemporary additions on these theoretical foundations and example projects, and also to create a guide for similar adaptive reuse projects that can be prepared in the future.

Keywords: adaptive reuse, conservation, ruin, castle, Keçi Castle

ÖZ

BİR YENİDEN İŞLEVLENDİRME MÜDAHALESİ OLARAK KALE HARABELERİNİN ÇAĞDAŞ EKLENTİLERLE İYİLEŞTİRİLMESİ

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Ocak 2022

Çeşitli nedenlerden ötürü artık özgün işlevini yerine getiremeyen yapılar ileri derecede yıpranmaya maruz kalsalar ve artık bir harabe halini alsalar dahi gözden çıkarılmamalıdır. Bu geri kazanımı sağlamak söz konusu yapıya günümüze hizmet eden yeni bir işlev kazandırmakla sağlanabilir. Yeniden işlevlendirme adı altında uygulanan bu müdahaleler, koruma alanında çalışmalara mensup kişiler arasında yöntem, strateji, yaklaşım ya da ilke olarak adlandırılabilir bazı fikir birliklerini ve fikir ayrılıklarını beraberinde getirmiştir. Bu fikirler bazen genel bir tasarım anlayışı içerirken, bazı özel noktalarda da müdahalenin biçimini ve dozunu yönlendiren veya sınırlayan bazı sınıflandırmalar halini almıştır.

Antik savunma yapıları olan kaleler, günümüzde orijinal işlevini koruyamamakta, doğal ve beşerî faktörler tarafından tahrip edilmektedir. Tarihi belge niteliği ve ziyaret edilme potansiyeli yüksek olan bu yapıların koruma örneklerine günümüzde çok az rastlanmaktadır. Ancak harabe halindeki kale yapıları, konumları, pitoresk özellikleri ile en basit kalıntılarda dahi yeniden işlevlendirilme potansiyeline sahip yapılardır. Günümüzde bu potansiyeli değerlendirmeyi başarmış, yapının harabe dokusunu ve değerini koruyan, tarihi katmanlarına saygı duyan ve günümüz yaşantısına katılmasını sağlayan çağdaş müdahale örnekleri bulunmaktadır.

Bu çalışmada, koruma ve yeniden işlevlendirme bağlamında teorik olarak önemli sayılabilecek fikirlerin ortaya çıkışı, birbirleriyle ilişkileri anlatılmış, koruma ve yeniden işlevlendirme kavramları harabe kale yapıları özelinde incelenmiştir. Yakın dönemde tasarlanmış, terk edilmiş harabe kale yapıları üzerinde çağdaş mimari eklentiler ile uygulanmış ve harabe yapıyı ziyaret edilebilir bir merkez haline

getirmeyi amaçlamış ve doğru yaklaşımlar sayesinde mimarlık çevrelerinin ilgisini çekmiş yeniden işlevlendirilme projeleri bahsi geçen strateji ve yaklaşımlar çerçevesinde incelenmiştir. Son olarak derlenen bu örnekler ve yaklaşımlar ışığında Selçuk Keçi Kalesi (Türkiye) harabeleri için geliştirilen yeniden işlevlendirme önerileri sunulmuştur.

Anahtar Kelimeler: yeniden işlevlendirme, koruma, harabe, kale, Keçi Kalesi



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Talat Taylan Küçükali
İzmir, 2022

TEXT OF OATH

I declare and honestly confirm that my study, titled “THE ENHANCEMENT OF CASTLE RUINS WITH CONTEMPORARY ADDITIONS AS AN ADAPTIVE REUSE INTEVENTIONS” and presented as a Master’s Thesis, has been written without applying to any assistance inconsistent with scientific ethics and traditions. I declare, to the best of my knowledge and belief, that all content and ideas drawn directly or indirectly from external sources are indicated in the text and listed in the list of references.

Talat Taylan Küçükali

30.12.2021

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ABBREVIATIONS

UNESCO United Nations Educational, Scientific and Cultural Organization

ICOMOS International Council on Monuments and Sites



CHAPTER 1

INTRODUCTION

When a literature review on the concept of conservation is made, it is seen that the concept of conservation is primarily shaped by restoration and reconstruction in society. The instinct of protection of human beings leads people to preserve the existing or to make repairs in order to restore the damaged. The fact that approaches such as restoration and reconstruction are more accepted is due to this tendency of human beings. For this reason, people, especially those who do not belong to the professions related to the concept of conservation, may see the protection practices carried out outside of these approaches as wrong, even disrespectful to the existing structure and harming cultural heritage values, and this causes public reactions to the conservation interventions. Even though the protection of cultural heritage assets is the job of professionals related to the concept of conservation, it is a matter of concern to the whole public. No matter how designed and implemented a conservation project is in the light of the theoretical truths about conservation, unless it is accepted by the public, it moves away from contributing to the structure it aims to protect.

Adaptive reuse applications with modern additions to the existing structure are more difficult to accept by the public and even by professionals compared to restoration and reconstruction applications. If the building which is aimed to be protected as adaptive reuse project, is a ruin or an archaeological remains, this sensitivity of the public increases even more. In this study, theoretical information on conservation and adaptive reuse has been compiled and evaluated through the views of theorists and some international regulations, examples of currently implemented projects on the castle ruins with contemporary additions have been presented, and a new proposal project has been prepared in the light of these. In this way, it is aimed to increase the acceptance rate in the society by basing the validity of the conservation interventions realized with contemporary additions on these theoretical foundations and example projects, and also to create a guide for similar adaptive reuse projects that can be prepared in the future.

Man-made assets built throughout history may lose their original function or form over time, depending on various conditions, but regardless of the function or form they have achieved today, each artifact has a certain value as cultural heritage. In order to preserve the heritage value, some architectural interventions can be made so that the building retains its physical existence and can be reused today in an environmental, historical or functional context.

A whole transformation initiative that began in Europe after the Second World War accelerated the theoretical consideration of the concept of conservation and the interventions carried out under the name of restoration, which were directly related to the personal decisions of the designers, began to be discussed.

With the transformation of humanity's tendency towards conservation into the concept of preservation in today's sense and considering that the conservation of cultural heritage is a project, planning and implementation process, one assumes that the first professional group directly involved is the field of architecture/planning. Especially over old buildings with cultural heritage value.

It is difficult to talk about strict and fixed rules about architectural preservation approaches. For this reason, the protection of cultural heritage assets has been the subject of discussions on international platforms for many years. As a result of these discussions, some definitions emerged and the first principles of protection were formed. These are the documents and related theoretical frameworks that emerged as a result of international studies and meetings, especially in the 20th century. Great works of art and simple cultural values with cultural value are included in the Venice Charter among the values to be preserved from the past to the present, which have the characteristics of cultural heritage (The Venice Charter, 1964). Remains of cultural heritage buildings can take different shapes and sizes: a neglected garden, a partially demolished building, an abandoned mine, and even a ghost town can be classified as heritage ruins. Archaeological sites can be considered the final stage of transformation into a ruin. Although archaeological sites are excluded from this classification, ruined structures can also be placed in the same value category as archaeological sites (Australian Heritage Council, 2013).

Although the general structural characteristics of castle ruins are common, they are defensive structures that have different characteristics depending on their geographical

location and historical period. Geography, social structure, economic values and historical period determine the physical and functional characteristics of the castle (Özçetin, 2016). The fact that the structures of the castle typology are not built today because nowadays it has completely lost its function as there is no need for defense. Over time, it has worn out, partially disappeared and has become unusable. Reconstruction applications to be made on these structures are not meaningful. However, we cannot ignore their existence. Since they are a part of historical continuity and social memory, interventions to make them a part of today's life have become inevitable. These structures, which provide information about the social structure and historical events, as well as the characteristics of the period in which they were built and the geography in which they are located, have a high documentary value. For this reason, the preservation of castle structures, even in ruins, is of great importance for the preservation of cultural heritage. UNESCO has divided cultural heritage values into two categories: tangible and intangible. Tangible values are divided into three categories: movable, immovable and underwater heritage (UNESCO, 2017). In this study, ruined castle structures that can be included in the category of archaeological sites under the title of immovable cultural heritage are discussed. Adaptive reuse interventions carried out on the ruined castle structures were examined through the existing examples, and in addition, an adaptive reuse proposal was presented for Selçuk Keçi Castle.

1.1. Aim of the Thesis

In this study, which deals with the approaches of adaptive reuse of the concept of protection through contemporary architectural interventions, the ruined castle buildings are evaluated under the titles of the current state of the building, architectural features, processes related to preservation, historical and cultural heritage value, ruin value with existing examples.

The adaptive reuse interventions carried out were examined considering some objectives and criteria such as defining the environment where the existing building is located, understanding the relationship of its original function with this environment. Determination of the structural features (circulation scheme, exterior features, interior spaces and uses of space) and the levels of protection before the adaptive reuse interventions carried out. Making decisions on the adaptive reuse of the

building's conservation approaches within the framework of its legal status and international legislation. Determining interventions for adaptive reuse and accordingly, architectural intervention suggestions were made for the adaptive reuse of the ruined Keçi Castle located in İzmir Selçuk district and for this purpose.

The main concern of this study is that adaptive reuse methods have difficulties in seeing a response in the context of protection in the society. When the protection of historical buildings comes to the fore, the restoration and reconstruction practices that the society is accustomed to are widely accepted, but nowadays it may become a necessity to re-function some buildings in order to protect them. Especially, adaptive reuse practices that include contemporary addition interventions are not easy to be adopted by the society, and even these practices may create the impression of wrong, disrespectful, amateur approaches in people at first glance. The reason for this is that methods such as restoration and reconstruction have been used for many years. This study deals with the adaptive reuse interventions made with contemporary additions specific to the castle ruins, to seek answers to questions such as;

- What is the place of adaptive reuse in conservation theory?
- How does an adaptive reuse project provide conservation of a building?
- Why should castle ruins be re-functionalized?
- How should contemporary additions relate to the ruins?

and to explain that adaptive reuse interventions with contemporary additions are correct and valid approaches in the context of conservation, thus ensuring that they are more easily accepted by the society and serving as a guide for similar studies and projects that can be done in the future.

1.2. Limitations of the Thesis

This study is limited to the evaluation of the adaptively reused castle ruins in terms of the impact of contemporary additions and conservation interventions on the preservation of the original values. Other conservation plans studied together with the selected structures and their surroundings were excluded. Concepts and approaches related to the adaptive reuse of castle ruins were compiled from international

conventions and regulations on the protection of cultural heritage. In the selection of examples, the decisive criteria were that the building corresponds to the castle typology, that it has the characteristics of a ruin and cultural heritage value, that it is within the borders of Europe and that the adaptive reuse project implemented includes contemporary additions and that the conversion represents a direct added value for the building. Except for the Keçi Castle, which was presented as a proposal project, it was not possible to visit and experience the other examples on site. Since it was not possible to meet with the designers directly, the documents related to the sample projects were obtained from open sources.

1.3. Methodology and Structure

This study follows a three-phase research methodology that includes a literature review, case studies, and a proposal of interventional design project that presents the intervention approaches examined and adopted. The literature review has helped to explain, theoretically and contextually, the adaptive reuse interventions and ruined castle structures that are the subject of this thesis, and to highlight the approaches that have been established and adopted by international communities. In the case study part, the adaptive reuse interventions carried out on the castle ruins by various architectural firms, which were reviewed in the literature review and found in the approaches used, together with the castle ruins themselves and the new function they brought with them. In the part of the proposal project, an adaptive reuse project proposal has been developed for the İzmir Selçuk Keçi Castle, which is similar to the castle ruins and with an innovative and creative approach that goes beyond traditional approaches, in line with conservation theory discussed in the examined examples and is currently in ruins.

The second part comprises the literature review part of the thesis. It explains the emergence of the concept of protection, the approaches discussed in this process and some related international documents. Then, the inclusion of the adaptive reuse method in the preservation concept and the intervention approaches put forward by theorists are mentioned. Finally, adaptive reuse intervention approaches, which are reduced to ruined buildings by Michael Davies, are explained.

In the third chapter, under the main title of Ruined Castles, the typology of the castle

is examined in terms of its architectural features and then the concept of ruin value is explained. Subsequently, the examples of Szatmáry Castle (Hungary), Castelo Novo Castle (Portugal), Tossa de Montbui Castle (Spain), Pombal Castle (Portugal), Doria Castle (Italy) and Morella Castle (Spain) were examined on the basis of certain criteria and the examination was documented with a table.

In the fourth chapter, an adaptive reuse project proposal prepared for the remains of İzmir Selçuk Keçi Castle is presented.



CHAPTER 2

ADAPTIVE REUSE WITH CONTEMPORARY ADDITIONS ON CASTLE RUINS

Especially since the 1960s, the pace of work on urban protection has accelerated, and since these dates, the issue of new construction in the historical texture has been discussed on the international platform, sometimes as a part of urban conservation and management, and sometimes as an agenda item; It has been effective in the formation of recommendations and guiding principles on this subject. When all the recommendations and guiding documents produced in the field of conservation are examined, it is seen that, from the beginning, the urban and architectural structure of each period should reflect its own period, with the principle that imitation is absolutely opposed, the integrity of the texture and the preservation of the existing values. It is seen that creativity and differentiation are supported within the framework of the principle of sustainability. In addition, the view that establishing a harmonious relationship with the context can be achieved not only with the physical features of the building, but also with the direct participation of the users in the process has started to be defended in recent years. (Altınöz, 2010) .

Conservation, which is the subject of planning on an urban scale, can be considered a singular structure in the ruins, which are generally disconnected from the urban fabric and are in the form of a singular structure. Castle structures, which are generally outside of modern cities and in ruins due to their functions in the period they were built, can be shown as an example of this focus. Although they can be excluded from urban-scale planning, the principles of conservation and adaptive reuse continue to be valid for these structures. The discussions, recommendations, guiding principles and design approaches have been analyzed under the sub-titles of this section, specific to the ruined castle structures. In the light of the approaches interiorized, the validity of interventions other than restoration and reconstruction has been supported by the views and approaches of the theorists on the subject. This section is intended to serve as a guide for the examples studied and the proposal project developed.

2.1. The Theory of Conservation

The evaluation and interpretation of the values created in previous eras forms the basis for the development of existing civilizations by preserving the foundations of their cultures. Even though the values created in the past are the universal foundations of today, their qualities should be evaluated and preserved (Kuban D. , 1975) . The concept of conservation is defined in the most general sense as a defense mechanism developed against a dangerous situation. From a social point of view, it describes the work of passing on to future generations affected by industrialization, urbanization, and the intellectual environment the memories that give societies identity and personality, the values that make civilization enduring (Ekinci, 2005). In terms of architecture, this means making the necessary provisions for the survival of historic or artistic structures, natural values, or parts of the city, in this sense, identifying, evaluating, repairing, conservating, restoring, and reconstructing historic values (Fitch, 1990) (Hasol, 1995). Considering that the conservation of cultural heritage is a project, planning and implementation process, one assumes that the first professional group directly involved is the field of architecture/planning.

Nowadays, contemporary conservation approaches see cultural assets not only as architectural artifacts, but as a unity with their environment and history, and design conservation interventions in this holistic way. This is because no building can be considered standing alone. Every architectural product is part of a whole, whether the building's surroundings are vacant land, agricultural land, or a residential area. This view has led to a broadening of the definition of cultural property and increased the importance of environmental studies (Asatekin, 2004). The first mandatory restrictions and requirements for conservation in the field of architecture were established in the protection of building facades and reuse purposes. This understanding of preservation, where various responsibilities for protection are imposed on the user through participatory policies, is defined as "passive preservation."

Today, there is a need for revitalization and active use practices to save historic areas from extinction economically, socially, and physically. For this reason, passive protection policies have been abandoned and "active protection" has come to the fore (Appleyard, 1981). Although the history of conservation practices goes back a long way, it was not until the 19th century that they were carried out using scientific methods. With the following years, as a result of the changes in the social, cultural and

economic structure after the Second World War, there was an intense process of reconstruction. In this process, the values belonging to the cultural heritage were endangered and began to disappear rapidly. In this period of unprecedented destruction and loss after the war, the Venice Charter was a turning point in conservation theory (Şahin, 2013). Apart from the fact that there are no strict and fixed rules for architectural conservation approaches, the protection of cultural and natural properties has been the subject of debates for centuries, and their definition and conservation principles have changed over time. It produces documents and related theoretical frameworks that have emerged as a result of international studies and meetings held, particularly in the 20th century. Rural and urban settlements that have experienced history under the Venice Charter, great works of art and simple cultural values with cultural value are among the values that are preserved from the past to the present and have the characteristics of cultural heritage (The Venice Charter, 1964).

Big cities, because of their millennia of history, consist of layers from different eras. In such cities, in addition to the coexistence of old and new, the adaptation of historic buildings to contemporary purposes can be observed. However, a city in which no new buildings have been constructed and the old buildings must retain their original function will have difficulty keeping up with the times. Otherwise, a city where old buildings are destroyed, and everything is rebuilt will lose its history and spirit. Therefore, in order to keep a place alive, it is necessary to effectively reuse historic buildings and ensure that new buildings establish a relationship with the historic environment in which they are located (Buhler, et al., 2013). The buildings reflect the traces of the socio-cultural and economic structure of the time to which they belong. Time, accepted as the fourth dimension after the volumetric dimension of buildings, plays an important role in changing the function and physical condition of the building (Douglas, 2002). The fact that a structurally standing building cannot be used for its original purpose for functional, environmental and economic reasons makes it necessary to reassess it with a different function (Aydın & Yıldız, 2010). Discussions on the adaptation of cultural heritage to contemporary living conditions focus on architectural conservation and adaptive reuse. While one topic of discussion focuses on how conservation should be realized, another focuses on how the building should be functional (Yüceer, 2010).

In the past, architectural monuments were usually preserved for religious, national, and ideological reasons, and necessary maintenance, repair, and restoration were carried out as long as their function was maintained. Today, even modest buildings without monumental features are given protection (Ahunbay, 2011). In recent times, the concept of conservation of intangible heritage, rural heritage, industrial heritage, underwater heritage, heritage education, performance areas, etc. has become more developed and specialized. Attempts have been made to define a set of principles and methods for conservation. One of them is the preservation of the ruinous condition of buildings that have been severely damaged. Sustainability of these buildings can be achieved by reviving the dilapidated condition of the buildings through contemporary additions. There are also examples of preserving the existing dilapidated condition by cutting its links to the present (Madran & Özgönül, 1999).

The Burra Charter, published in Australia in 2011, is believed to be the first guide on ruins published by a government. The purpose of this guide is to identify structures that have been ruined and to indicate the best response approach. Accordingly, the guide also references previously published regulations on ruins. The Burra Charter defines the heritage value of a site, taking into account key factors such as available resources and legal requirements. It does not provide a precise approach to how these values can be conserved and mentions that they can come in all shapes and sizes (The Burra Charter, 1999).

When a place is abandoned due to lack of function or due to natural disasters, it can become a ruin and is an important cultural heritage site, even though it is unlikely that it will be able to perform its original function again. It is necessary to protect the values of these structures and ensure that they are preserved for future generations. For this reason, they should be provided with new functions, revitalized and offer them a new life. In the context of revitalization, the Australian State report mentioned that there are different intervention approaches for heritage remains such as;

- Coming alive again,
- Returning it to its former state,
- Simply maintain,
- Letting nature take its course,

- When removal is inevitable.

Each approach involves specific types of conservation measures and different levels of intervention. A decision as to which approach to take must be guided by careful consideration of the significance of the place and analysis of its social, economic and environmental setting (Australian Heritage Council, 2013).

2.2. The Theory and Practice of Adaptive Reuse

The concept of adaptive reuse, which can be counted among contemporary conservation methods, deals with structures that have lost their original function over time and have been damaged due to various factors during or after abandonment, using certain principles and approaches. Although there are no definite rules and methods under this concept, some general assumptions and principles about adaptive reuse can be found in the literature.

The pioneer of the subject in history is Viollet le Duc (1814-1879), an architect, engineer, decorator and architectural historian who grew up in the scientific environment of the 19th century and first showed a common interest in the concepts of conservation and adaptive reuse. He made attempts to subject the architects, who made random interventions according to their personal opinions, to some acceptances. Believing that there should be stylistic unity in restoration, Duc rejected all repair work that was not of its own time. On the other hand, the views of the painter and art critic John Ruskin created a critical environment for Viollet le Duc's concern to achieve "unity of style." During this period, Ruskin strongly opposed the replacement of buildings with repairs and advocated the artwork or structures should be preserved in their current form. According to Ruskin, any interventions made under the name of restoration were considered disrespectful to the work. Ruskin, who refused to remove the repair attachments adopted by Viollet le Duc and to make designs in accordance with the so-called original style, with the concern of style integrity, argued that no intervention other than maintenance should be made to the structure. Ruskin defends this view in his work *The Seven Lamps of Architecture* with the following words: "If you take good care of your monuments, there will be no need for restoration. Adaptive reuse, with the theories developed in parallel with the two opposing views advocated

by Viollet le Duc and Ruskin, has become an area of architectural activity at least as important as the production of new buildings (Ahunbay, 2011).

These two opposing views show that additional effort will always be required, albeit by different methods, to ensure the preservation of unused structures that are no longer functional. Conservation, however, can be made autonomous by bringing these structures into daily life, that is, into human use, according to the needs of the time. In other words, abandoned, unused structures that cannot survive with us need to be maintained. The most effective way to eliminate this neediness is to make this structure a living organism again. In other words, by giving the building a new function, which may or may not be the same as its original function, and by incorporating this heritage value, which has survived from the past to the present, into our daily lives and making it a living organism once again, the building becomes a useful place once more, eliminating the state of abandonment and contributing to its preservation.

It is essential that our historical and cultural values are properly assessed and that a process is maintained whereby future generations can be inspired by our experiences. Based on this idea, the only way to give meaning to structures is to make them "living beings". This aim should be to give the structure in question a functional content, to make it useful to society, so that society can live in it and the environment can benefit from it (Altınoluk, 1998).

Renovation - Adaptive Reuse: In order for a historic building to be preserved, it ensures that these buildings maintain their old functions by meeting modern needs and comfort conditions or find new uses for new users and provide the necessary spaces and services in these buildings. It is considered the most economical way to protect a historic building. Adaptive Reuse may require radical interventions from time to time, especially in the interior. However, it is important that the interventions are reversible (Fitch, 1990). According to Doğan Kuban (2000), adaptive reuse differs from traditional types of intervention because it incorporates the existing building into a natural architectural design process. In reuse, the building is both preserved and functionally altered.

After mentioning the general approaches, discussions and recommendations on the concept of conservation, recent studies on adaptive reuse such as "Rereadings" by

Graeme Brooker and Sally Stone and "Old Buildings New Forms" by Françoise Astorg Bollack can be mentioned in order to form a basis for practical studies. Michael Davies' "New Life for Old Ruins", on the other hand, examines adaptive reuse approaches in terms of completely ruined buildings. By presenting references from the works of these theorists, it was possible to make a reading on the examples and to prepare a proposal project.

Brooker and Stone consider the existing structure as a guide that contains the specifications for the new design. According to them, thanks to the strong connection between the existing structure and the new element inspired by it, both can continue to exist in a strong and independent way while maintaining their own character (Brooker & Stone, 2004). On the other hand, the new structure, which resembles the existing structure in size, proportion, scale, rhythm, and structural composition, emerges in some cases as a kind of interpretation of the past. For this reason, a relationship should be established between the old and the new structure that enhances their identity states that design in the historical environment is polarized and split into extreme historical and ultra-modern approaches (Karabağ & Demir, 2020). He emphasizes that the most appropriate intervention is to draw inspiration from the past while respecting the historical context. Since the contextual features of each example and the purpose of the new design are different, contemporary examples of intervention should be examined in the context of theoretical discussions and policy decisions. In intervention, it is possible to achieve both a dynamic harmony that emphasizes opposition and an attitude that rejects harmony. In either case, however, creativity should be limited to the data that remains of the old structure. The intervention should not dominate the historical structure, should not go beyond its volume and should not make it an appendix (Kuban,2000).

In a point of view, adaptive reuse is preservation of a unique building, strengthens the link between the past and the present. With this in mind, the effects of passing time, war, migration, etc., are addressed. The preservation and reuse of traces on buildings that have been destroyed and sometimes partially destroyed for various reasons is a new topic that has recently been on the agenda of architectural practice. It is very important to protect the traces on the building in order to read the history of a rebuilt structure. But no matter how worn out it is, measures must be taken to ensure that it is

not reinforced and further worn out (Brooker & Stone, 2004). In these applications, the compatibility of the newly defined function with the existing structure should be considered. Moreover, the correct definition of the function to be redefined is of great importance for the cultural value of the building. It is not possible to describe valid, fixed rules and methods for the approach to intervene in an existing structure, since typology, existing condition, historical context and level of protection may vary during re-functionalization. For this reason, it is suggested that more general principles be described for redesign and reuse projects, and that a different analysis be conducted for each design problem and the intervention be developed based on this information (Karabağ & Demir, 2020).

When the examples of the refunctioning of the buildings are examined, different approaches and strategies that vary between simple repairs and complete reconstruction of the ruin are seen. While applying these methods, it has been emphasized that keeping the building or structures as they are, no matter how worn out, is important for understanding the history of that place (Brooker & Stone, 2016). Based on the extent of integration between the existing building and the new additions, Brooker and Stone examine reuse strategies under the headings of installation, insertion and intervention (Figure 2.1).

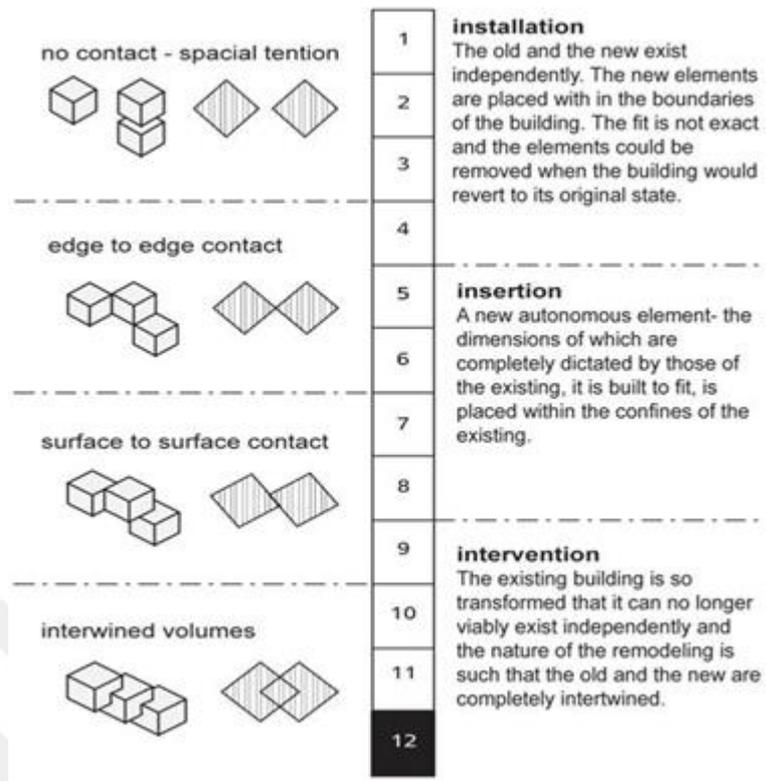


Figure 2.1. The extent of remodeling an existing building, including the three strategies/categories, four diagrams illustrating physical application, and a numerical scale linking the two measures. (Fisher-Gewirtzman, 2016)

An installation may be defined as a new addition that is placed on the building itself or to an environmental element of the building without establishing any structural relationship with the building. This structure need not be abandoned or in ruins. Installations can also be performed independently of adaptive reuse interventions. This addition may be located within, adjacent to, or in a specific portion of the building and it is usually an object that may have aesthetic or artistic value in its own right but is expected to provide a contextual or functional relationship to the existing structure. The installation usually aims to raise awareness of the existing structure while using the space as an exhibition area for itself. Installations are usually temporary, but permanent installations are also quite common (Figure 2.2).

The character of an installation created by a designer or artist is often shaped by their passions or styles. There are often a number of related objects, concepts and ideas that embody the character of the creator. The objects are often of limited size and often have a limited life span, such as an exhibition, and have no structural relationship to the existing building. They can be placed in the building as well as in a way that maximizes their usefulness. They can be used to organize and display a space or

creating an order. The existing materials, the structure, the quality of the space, the history, the context - all of these can directly accelerate or bring forth the design of the newly installed elements. (Brooker & Stone, 2004).



Figure 2.2. Example of Installation: Rusty steel tower over Roman ruins. Retrieved from <https://www.dezeen.com/2013/11/25/rusty-steel-tower-over-roman-ruins-marte-marte-architects/> in December, 2021

In the insertion strategy, the new structure is generally expected to define a new function for all or a specific part of the existing structure. Although it differs from the existing structure in material and texture, it is read together with the existing structure with its schematic and functional aspects. In doing so, it does not place its own character in front of the existing structure or get lost in it. The new structure establishes a relationship of scale, proportion and dimension with the existing structure. Moreover, it is inevitable to establish a structural relationship with the building. It mimics the layout of the building and is concerned about staying within the boundaries of the building. Therefore, it should look like it is "injected" into the structure. Insertion method can also be a new insertion that replaces a previously existing element in the original structure as a function (Figure 2.3).

The form of the host building needs to be strong enough to host the addition of a new object. It is also important that the host building retain its original integrity. While the original character of the building is necessary, it is important to recognize the discrimination between the existing building and the addition. Similarly, the insertion

should be strong enough to blend easily into or around the building. For a successful dialogue to occur, the two components must speak equally loudly, albeit in different languages (Brooker & Stone, 2004).



Figure 2.3. Example of Insertion: Pi des Catalá Tower. The original stone staircase and doorway has been replaced with a steel structure. Retrieved from <https://www.designboom.com/architecture/maria-castello-martinez-pi-des-catala-tower-restoration-formentera-spain>

In the Intervention method, the main instrument of the designer is the existing structure. In this approach, the design takes almost every data from the original structure itself. The item that is wanted to be shown, glorified, and exhibited is the original structure. As in the Insertion and Installation approaches, there is no restriction on the contact of the old with the new. In this method, the old and the new are expected to be intertwined. A direct intervention on the existing structure may represent a completion, a repair, or even just a clean-up operation. It is not just a method based on addition or building; the mentioned intervention can even be a demolition operation in line with the designer's readings. The dose of contrast is slightly lower in the material selection of the new additions. While making selections closer to the materials that make up the original structure, care should still be taken to ensure that the old and the new are distinguishable at first glance (Figure 2.4).

Intervention is a process that uncovers the potential or suppressed meaning of a

particular place. It only really works when the architectural dimension of the changes is entirely focused on the existing building. The architect views the building as a narrative, a story to be discovered and retold, and unveils and reactivates the space through a process of revelation, explanation and interpretation. The original building provides the impetus for the redesign. In order to impose some degree of control or order, the building may need to be simplified so that a new view or understanding can emerge. The analysis and reading of the original building can often be both constructive and destructive. The architect scratches, removes, clarifies, dissolves to reveal new or hidden meanings. (Brooker & Stone, 2004).



Figure 2.4. Example of Intervention Method. Matrera Castle by Carquero Arquitectura. Retrieved from <https://www.dezeen.com/2016/10/03/carquero-arquitectura-matrera-castle-contemporary-restoration-cadiz-spain-architizer-awards/> in December, 2021.

These procedures, categorized as installation, insertion, and intervention, can serve as a guide that the designer should carefully consider in an adaptive reuse project. It is important to design the relationship that these add-ons will establish with the existing structure, as well as the design of the new additions. Françoise Astorg Bollack exhausts these relationships in five different groups. While doing this review, she makes similar points with Brooker & Stone. While making this grouping in his book, *Old Buildings, New Forms*, Bollack is primarily concerned with how the new addition is positioned within the existing structure. These applications, which she calls insertions, parasites, juxtapositions, weavings, and wraps, allow the designer to more easily read the original structure and obtain more fluid data for designing the

contemporary addition while preparing an adaptive reuse project of an existing structure (Figure 2.5).

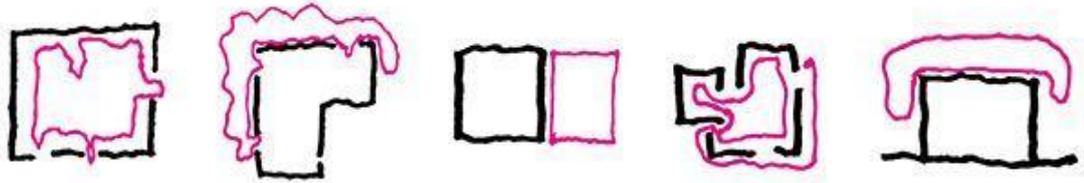


Figure 2.5. In her book *Old Buildings, New Forms*, Bollack divides adaptive reuse projects into five categories, and illustrates each with a diagram (from left to right): insertions, parasites, juxtapositions, weavings, and wraps (Hurley, 2013)

The strategies defined in Bollack's book can be mentioned as follows: This strategy, which is consistent with Brooker and Stone's definition of insertion, states that the new additional building, located in the area bounded by the volume of the existing building, may have a tendency to infiltrate the cavities of the building's voids in some places. It may have a separate operating program within itself, or it may introduce a new function into the existing structure while protecting its own identity. In the new complementary structure, that can be easily read, the material used and the color differ (Figure 2.3).

Parasites; Bollack likens the new attachment to a parasite in this strategy. Since the new structure adds physical and semantic value to the old structure, the parasite also benefits the organism. The host is both the host of the parasite and a symbiotic relationship from which the parasite benefits. In this architectural intervention, the new addition can be attached to any part of the existing building. This addition, which is not concerned about the boundaries of the building, can appear as a mass placed on the roof of the building or as a protrusion from its facade to the street. As with most other strategies, the material is easily distinguishable from the material of the original building, and usually this new addition can be removed if desired without damaging the original building (Figure 2.6).



Figure 2.6. Example of Parasites. Church of Saint Francis' by David Closes.
Retrieved from <https://www.dezeen.com/2012/07/26/convent-de-sant-francesc-by-david-closes/> in December, 2021

Juxtapositions; In this approach, the additional building is located next to the old buildings, but is not dependent on the old building. It does not make physical contact with the original structure, but takes references from it such as boundaries, axes, scale, volume. It shows an almost completely discrete structural feature. In applications where this approach is adopted, the aim is to make a functional contribution to the old structure and its environment. While the original structure is fully legible, it is distinguished from the new structure by a clear boundary (Figure 2.7).



Figure 2.7. Example of Juxtapositions. Housing units/studios by l'escout Architectures & Atelier Gigogne. Retrieved from <https://archello.com/project/housing-unitsstudios-for-artists-cheval-noir> in December, 2021

Weavings; in this method new and permanent interventions applied by the architect inside or outside the original texture of the building. Often the distinctions and connections between the old and the new are not clear. The architect intervenes heavily in the building by preserving and highlighting some of the features of the old building, or by removing those elements that he or she deems inappropriate to the existing texture. This is similar to Brooker and Stone's definition of intervention (Bollack, 2013) (Figure 2.8).



Figure 2.8. Example of Wraps. Kalø Tower by MAP Architects. Retrieved from <http://www.maparchitects.dk/portfolio/item/kalo-slotsruin-visitor-access/> in December, 2021

Wraps; In this operation, the new addition may stand on the old building or surround the building like a shell. In the parasite method, the additional building is used as a separate room and is interwoven with the building. Although there is no such commitment with the wrap method, it is usually created with a focus on protecting the building as a top cover or a wall. In some examples, it may be similar to the installation method (Figure 2.9).



Figure 2.9. Example of Wraps. The Tate Modern by Herzog & de Meuron.
Retrieved from <https://www.archdaily.com/429700/ad-classics-the-tate-modern-herzog-and-de-meuron> in December, 2021

The strategies presented by Brooker, Stone, and Bollack can be applied to all reuse projects. They cover all structures that are to be adaptive reused without making classifications such as historic value, cultural value, degree of weathering/demolition level, typology, scale, age, or function. In addition to these approaches, which can also be used in old buildings with cultural heritage value, in ruins, or to contemporary structures, Michael Davies has reduced adaptive reuse strategies to ruin structures in his article named *New Life for Old Ruins*. In this article, Davies divides interventions in the existing structure into three classes: Building inside the ruin, building on the ruin, and building over the ruin (Figure 2.10).

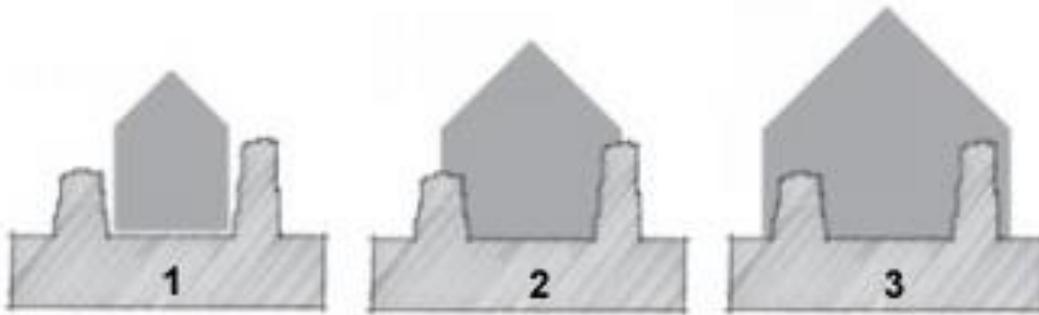


Figure 2.10. The diagram of Davies' strategies. (from left to right.) Building inside the ruin, building on the ruin and building over the ruin. (Davies, 2011)

In the "building within the ruin" method, the ruin is more visible than in other methods. The new addition is within the interior boundaries drawn by the ruin, does not establish a structural relationship with the ruin, and uses the area defined by the ruin as an environment for itself. This is consistent with the insertion method mentioned by Brooker, Stone, and Bollack. In the final product, both the ruin and the new addition completely preserve their characteristic features and contribute to each other. The ruin state and ruin value of the existing structure are preserved and visible (Figure 2.11).



Figure 2.11. Example of Building inside the ruin. Ruin Studio by Lily Jencks Studio + Nathanael Dorent Architecture. Retrieved from <https://www.archdaily.com/881994/ruin-studio-lily-jencks-studio-plus-nathanael-dorent-architecture> in December, 2021

The method in which the new structure is settled in the ruin in the same way, but this time it makes physical contact with the ruins, is discussed under the title of "building

on the ruin". The new addition follows the borders drawn by the ruin here, but this time it does not stay indoors and can extend itself to the exterior of the ruin. However, it does not go beyond the massive limits of the ruin. It establishes a direct relationship with the ruins structurally, even uses the remains as a carrier for itself and covers the entire interior. Looking at the final product, the ruin is visible from both sides, but it is no longer possible to read it separately from the new addition. At the same time, the new addition to the ruin is a complementary element. The ruin of the existing structure is easily visible but is now part of the new extension (Figure 2.12).



Figure 2.12. Example of Building on the ruin. Santa María de Vilanova de la Barca by AleaOlea architecture & landscape. Retrieved from <https://www.archdaily.com/803620/santa-maria-de-vilanova-de-la-barca-aleaolea-architecture-and-landscape> in December, 2021

The "building over the ruin" method usually appears in the form of a cover or shell. Davies defines this method as "The simplest and least destructive solution." The new addition covers the existing structure. It goes beyond the limits of the ruin. It is larger in mass and volume than the existing structure and is positioned to enclose it. The ruin now continues to live in the interior of the existing building. It restricts or completely cuts off the ruin's connection to the outside world. This protects the ruin from weather-related erosion. The existing building retains the features and value of the ruin but is no longer visible from the outside (Figure 2.13).



Figure 2.13. Example of Building over the ruin. Derelict Church by Ferran Vizoso. Retrieved from <https://www.designboom.com/architecture/ferran-vizoso-architecture-frames-a-derelict-church/> in December, 2021

The place of adaptive reuse in the concept of conservation has gained importance due to the fact that today's usage needs differ from the past. Transforming existing spaces in order to create spaces that will serve today's functions contributes both to the social and cultural needs of the society and to the preservation of the existing structure. While giving a new function to the existing structure, it is not possible to ignore the intangible and tangible values of the building. Therefore, the re-functioning of buildings with historical document value, especially ruined buildings, is a process that needs to be carried out in two layers. The priority among these layers is that the new design complies with the principles of the concept of conservation. In the light of the theorist views, which include approaches, principles and assumptions about the concept of conservation and adaptive reuse, an evaluation table has been created in order to evaluate the refunctioning work that has been implemented or will be implemented in general terms. (Table 2.1.) (Karabağ N. E., 2020) This table has been utilized from the Criteria Table produced and developed by Assist. Prof. (PhD) Nağme Ebru Karabağ within the scope of the INAR 3360 coded course of Yaşar University, Faculty of Architecture, Department of Interior Architecture and Environmental Design. This table questions some criteria regarding the characteristics of the interventions and is intended to help determine whether the interventions are theoretically compatible with the concept of conservation and theorist views on adaptive reuse.

Table 2.1. Criteria for the added value of interventions.

CRITERIA		
1	THE INTERVENTION	Does it reflect the material, technology and design understanding of its period?
2		Does it preserve the integrity of the texture, and does it create a creative and different value by maintaining the existing values?
3		Is it reversible? Can it be removed when necessary without damaging the structure?
4		Does it contribute to the enrichment of the space socially, functionally or aesthetically by adapting to the context?
5		Is it appropriate and respectful of the form, proportion, mass, scale, rhythm, character, texture and material of historical buildings?
6		Can it keep the tangible and intangible values of the original structure alive?

CHAPTER 3

RUIN CASTLES AND ADAPTIVELY REUSED EXAMPLES

In this section, the castle structures are examined in terms of their emergence process, their development throughout history, their original purpose of use and architectural typological features. Although the castle structures do not have a use value today, it is important that they continue to exist due to the historical document value and cultural heritage value they carry. Castle structures are mostly in ruins today, this weathered and damaged state creates a concept called "ruin value". This concept is a priority concept to be protected in the context of cultural heritage value. In addition, in this section, the values of the ruined buildings and especially the ruined castle buildings are associated with the context of cultural heritage values. Finally, concepts such as "cultural heritage" and "ruin value" that need to be protected are associated with the conservation approach and principles obtained in the literature review section, and the existing castle structures projects that are refunctionalized with contemporary additions are evaluated.

3.1. Castle Structures and Architectural Features

Since the earliest times of history, people have felt the need to surround the place where they live with walls in order to protect themselves, their families and their food. For this purpose, in Mesopotamia, one of the oldest settlements, it is seen that simple castles consisting of mud-brick walls with a height of about 4 meters and half-round towers protruding at the corners were built (Batmaz, 1997).

Site selection and arrangement in castles is very important. Presence of natural protection places, obstacles and water resources in the environment, ability to defend with limited strength and escape possibilities when necessary, and ability to withstand long-term are the leading factors (Parlak, 2010).

Castles are defensive structures built for a military purpose. They were built at strategically important points so that they could fulfill their defensive purpose. It is possible to come across a castle on trade routes, bridgeheads, ports, straits between

mountains, islands, sea straits and capes. Conditions such as that the castle can be easily defended with a small number of forces, that the people inside can go out, when necessary, that it has the means to provide water and food to withstand long-term sieges, that one or more of its sides are safe with natural obstacles have been taken into consideration (Eyice, 1974). These structures, which ensure the security of settlements, have become symbols of historical cities. In history, capturing a castle in a region meant acquiring that city. This is how it is understood who owns those lands. For these reasons, castle defense has been one of the policies that countries attach importance to. Castle architecture also developed in parallel with this (Wiener, 1998).

Castle structures, which were built on dominant points due to their original functions, have lost this dominance together with their functions today. This dominance feature, which served military purposes in its own time, has turned into a picturesque value today. Castles, which no longer have any military function, are still suitable points for visitor experiences such as observation and cruise. Today, when a castle ruin is reached, an important view experience can be obtained thanks to its location next to the ancient, historical and ruin value of the building itself. Therefore, it is important in the context of adaptive reuse to ensure the visitability of the ruined castle structures and to evaluate the dominance position it has held for many years. The necessity of preserving the castle structures as well as ensuring that they serve today as usable structures is clearly seen.

Castle architecture has managed to preserve its general characteristics throughout history. In ancient times, people surrounded their houses with walls to protect them first against animals and then against other human communities. After this development, the first examples of castles were formed with the construction of fortification walls around the house communities (Ödekan, 1997).

The fact that the walls, which were built to protect and defend the cities, started to form more defined spaces over time and gained a holistic form, made the castles a building type. The plans of the castles, which shape their architecture according to the topography, may vary according to the availability of the land and the materials in the region. Castles, which are not built according to a certain plan scheme, can be built in different sizes according to their purposes.

The architectural elements used vary from region to region. For this reason, even though each castle has common architectural elements, they have a unique architectural form in themselves. For security reasons, castle structures are built with more than one layer. The outermost part is the part defined as the "outer castle". The outer castle is the first part of the castle where defense takes place actively. This part is surrounded by strong outer walls. The settlements where the civilian population and military units lived were mostly formed in this part. The part where the last defense takes place is the part of the castle called the "Inner Castle". Citadels have a lower surface area than other parts of the castles. In order for the balls thrown from the inner castle to not damage other parts of the castle during the defense, the inner castles were built higher. There is also the existence of castles that do not have outer walls, which only have the characteristics of an inner castle. In the spatial arrangement of the castles, there are ditches, towers, gates protected by towers, cisterns and warehouses in the courtyards. Most of the time, residential areas and religious buildings can be found adjacent to the castle or in the courtyard of the castle. (Yıldız, 2013)

3.2. Ruins in the Context of Ruin Heritage

The concept of today's cultural heritage is a result of the process related to the development, values and needs of contemporary society. The great destruction caused by the world wars and the great industrial development since the 1950s have made people realize that their lives are closely related to the environment in which they live and work. Cultural heritage consists of different types of properties related to various environments; they include not only important monuments, historical sites and gardens, but also the man-made environment as a whole. Cultural heritage resources can be associated with different values depending on the context and therefore their handling may differ from case to case (Jokilehto, 1999).

Emre Madran (Madran, 1978) mentions some values such as historical value, artistic value, antiquity value, viewing and picturesque value and usage value in order to consider an object or building as cultural heritage. Any object that belongs to the past has historical value. The important thing here is that the object was made in the past and is therefore old. This is an objective value. On the other hand, as far as artistic value is concerned, this value has the same character as the judging criteria of art history in general. Here the object is acquired by such factors as the reflection of the

characteristics of its epoch, the determination of a school, the material image of a movement, and the reflection of the professional discipline and understanding of the artist. It is a semi-objective value.

The value of antiquity has a more emotional quality and plays an important role in architectural monuments. What is important here is the physical aging, in other words, the aging of the material. It is a value related to the appearance of the object or the visual perception by humans. When evaluating a monument, it is important to understand why and in what ways. These are the factors that prepare the impression value, the "descended appearance," picturesque value, which can be determined by the eye and related to both the surroundings and the object itself.

The current usage value of a building is an important criterion because it facilitates the problem of maintenance. This value changes according to the social, cultural, economic and political life of the society in which the building is now located and the needs that arise from it. One of the most important aspects of a rehabilitation program, namely "giving the building a function", is closely related to its use value. In addition to the values that monuments derive from their individual characteristics, these values have increased when they are considered together with their surroundings, and their accuracy and importance are now accepted. So much so that even the surroundings and settlements are considered to have heritage value. The concept of preservation is saved from a single structure and transformed into the protection of the whole environment.

The most important input for a designer in the conservation of ruins is the cultural value of the building. It is possible to say that all the buildings that are in ruins today have cultural heritage value. The concept of "ruin value", which emerged due to the cultural value of the ruined buildings, has caused the conservation interventions to be considered a cultural activity rather than a technical intervention. Since the level of demolition and weariness of the ruined buildings is very high, the value that should be preserved here is not the architectural value or the structural property of the building, but the cultural values it carries. Considering the ruined buildings from this point of view within the concept of cultural heritage has led to the emergence of the concept of "ruin value".

The approach of seeing the conservation interventions as a cultural activity, which

developed together with the concept of "ruin value" mentioned for the building, which was handled as a plain ruin without undergoing any conservation intervention, should continue to be adopted in the design of the refunctioning of this ruin. According to this approach, it was emphasized that the cultural existence of the building should be given importance rather than its structural existence. For this reason, in the adaptive reuse project, the protected value is primarily the cultural value, and then the building itself due to this protection.

A new design not only establishes a physical relationship with the existing one, but also establishes a spatial and visual relationship. Providing a respectful physical, spatial, functional and visual association with the existing should be one of the main principles of new interventions (Rubió, 1996) .

The main purpose is not to present the architectural elements of the building to the visitors as in restoration and reconstruction applications, but to present the building itself and its location to the experience of the visitors by highlighting the cultural, historical, artistic, ancient and picturesque values that the building carries. Castle structures do not have a use value today, but their picturesque value is quite high due to the locations they are located in. When the examples that have been implemented today are examined, it is seen that adaptive reuse projects are generally designed by focusing on this value.

Ruin Heritage is defined as a place that is too old to be used, abandoned, partially demolished, no longer maintained, and unable to regain its original function. The Burra Convention (Australian ICOMOS Charter for Places of Cultural Significance) defines place as: land, area, landscape, building, site, group of buildings or other structures and their constituent parts, contents, areas and appearances. (The Burra Charter, The Burra Charter: ICOMOS Charter for Places of Cultural Significance., 2013) . The legacy of a ruin can therefore come in all shapes and sizes: a neglected garden, a half-collapsed building, a termite-infested woodlot, an overgrown mine site, or even an entire ghost town. While an archaeological site can be considered the final step in "destruction," such sites are outside the scope of this guide, but a ruin and an archaeological site can be one and the same.

Ruins are defined as places that can no longer fulfill their original function and are unlikely to fulfill that function in the future. This loss of function may be due to

common causes such as technological changes, the decline of an industry, the depletion of a resource, the abandonment of a settlement, cultural changes, or damage to the building by a natural disaster. While many buildings can easily be given new functions for a variety of uses, some are unusable, so they are more likely to be abandoned or removed. The worse the condition of a building, the less likely it is to be used for a new purpose. Not all ruins stay that way forever, some are brought back to life as active, usable and new places.

The term 'ruin' implies that the fabric of a place is in a dilapidated state. The deterioration of the physical condition or state of the place often occurs after its use has ceased or been abandoned. The status of a legacy of ruins can change dramatically. Deterioration in status need not be synonymous with loss of heritage value. Remains can retain important heritage value through archaeological research, interpretation, or ongoing community connections (Australian Heritage Council, 2013).

3.3. Case Studies

Castle structures today are in ruins and need preservation interventions. Strengthening interventions, which are carried out in order to prevent the building from losing its structural integrity, are common. The castle structure may have been partially destroyed in ruins. While the interventions carried out to prevent demolition in the building in this condition are accepted today, reconstruction interventions, which mean rebuilding the destroyed part in a way that reflects the same as the original building, are interpreted as imitating the original structure and are not seen as a correct practice by the professional circles. The reason for this is to ensure the preservation of the "ruin value" that these partially destroyed, damaged, worn out structures, which are in ruins, gained due to these negativities.

Interventions made with contemporary additions accept every deterioration in the ruined structure as included in the structure itself and avoid any repair work other than to prevent the continuation of this deterioration. A designer who adopts this approach is not interested in eliminating these deteriorations, on the contrary, they see these deteriorations as a historical trace that needs to be exhibited and develops designs focused on ensuring that it is displayed together with the rest of the building. At the same time, since the contemporary addition elements also have the characteristics of an exhibitable object, the ruined building provides an opportunity for the contemporary

additions to exhibit themselves, just as the contemporary additions serve to exhibit the ruined building itself. This mutual relationship is conceptually similar to the "Parasites" method, one of the five refunctioning methods mentioned by Astorg Bollack in her book *Old Buildings, New Forms*. It may be correct to associate this relationship between contemporary additions and the existing ruined building with the "Parasites" method, but contemporary interventions and the structural relationship with the existing building also should be planned by considering Michael Davies's adaptive reuse principles specific to the ruined buildings.

In this section, examples of castle ruin structures selected from various European cities, designed and re-functionalized by distinguished architectural offices contemporary addition interventions are presented. The presented examples were examined in the light of the refunctioning principles, approaches and methods described in the literature review section.

3.3.1. Szatmáry Palace / Castle (Tettye Ruins)



Figure 3.1. Stage unit and seating elements placed with reference to the lost wall of the building, serving the Summer Theater in its new function. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021

Location: Pécs, Hungary

Previous Function: Castle/Palace

Built: 16th Century

New Function: Visitable Castle Ruins / Park

Remodeled: 2011

Architect: MARP Architecture Office

Intervention Strategy: Weavings

3.3.1.1. Description of the Existing Structure

The ruins of Szathmáry Palace are one of Hungary's most valuable, preserved monuments. The palace is located in the city of Pécs which is one of the oldest settlements in the southwestern part of Hungary with a long history. It is known that it was first built in the early 16th century by Bishop György Szathmáry (1457-1524) as a summer residence of his own. The building, which was built with natural stones specific to the region, consists of an inner courtyard and two floors. Archaeological excavations have revealed that the U-shaped structure, arranged around a courtyard that opens towards the south, towards the city, was rebuilt several times after the first construction of the inner courtyard.

During the long occupation of Hungary by the Ottoman Empire from the middle of the 16th century, a Turkish dervish monastery was probably located in the palace. It is estimated that the southeast tower, which still has not undergone any intervention, was built during this period. After the end of the Ottoman captivity, the building was left idle for a long time and its condition was damaged during this time. At the beginning of the 20th century, a part of the building was demolished, but with the preservation interventions, some openings were strengthened with arches to provide a sense of ruin aesthetics.

Until recently, the ruin was used as background decor for a summer theater. Despite its long history and being well-preserved, the building did not receive the historical and architectural value it deserves until the adaptive reuse project was implemented.

3.3.1.2. Description of the Adaptive Reuse Project

In 2010, Pécs was awarded the title of European Capital of Culture along with Essen and Istanbul, a project was developed focusing on the regeneration of common areas,

including Tettye Park. With this project there was an opportunity to recontextualize the ruin and view the park as a whole complex in its new function. The building is located in a park in the northeastern part of the city, in the Tettye Valley, where the dense historical urban fabric meets nature. Located at a very central point of the city, the ruins offer visitors the opportunity to watch the city view from an elevated position.

Szathmáry Palace consists mostly of ruins that do not mean much alone. Therefore, it can be said that the architectural reality of the ruins continues to exist through the spatial relations created by the wall remains. Despite this, it is seen that the building is exposed to a serious erosion caused by natural and human causes. The volume of the ruins in the southeast corner is so large that it is difficult to envision the entire original structure. Tettye Park's reconstruction program has essentially led to the redefinition of the ruin as an accentual landscape element and architectural monument (Archdaily, 2012a).

3.3.1.3. Preservation Precisions

The main purpose of the designers when describing their interventions was to avoid overshadowing the ruin value brought by the layers of the structure and the complexity of the ruins. Therefore, the team's first approach was to accept the existence of layers, regardless of how long it took them to form or develop. At the same time, it was to be aware that the new intervention to be implemented could positively or negatively affect the qualities and meanings of the ruin.

3.3.1.4. Design of the Adaptive Reuse

The area defined as the interior space in the original structure softened the transition between the landscape and the building in the new function, making it a part of the public spaces of the park (Figure 3.8). Thus, with the adaptive reuse intervention of the castle, the ruins also gained the quality of a public space (Figure 3.9). The open-air performances of the summer theater established in this area helped to further emphasize this feature.

3.3.1.5. Design of Contemporary Intervention Elements

In the design phase of the architectural interventions, the collective floor plan and

partial spatial reconstruction of the ruins were carried out together with the conservation committee, based on the scientific results of the archaeological excavations. One of the contemporary additions is an L-shaped piece of steel structure that includes a watchtower and stairs leading to it (Figure 3.5) (Figure 3.6), referring to the completely destroyed part on the southeast side, which also serves theater use (Figure 3.2) (Figure 3.3).

Although this piece is a completely new product, it can be read as a monument that represents a mass that existed in its original structure but could not survive. At this point, this adaptive reuse intervention does not constitute a formal reconstruction, which was not the aim, and there is insufficient data for a truly meaningful reconstruction. For this reason, it is important to note that it does not imitate the original mass exactly. Instead, the aim was to create a mass that strengthens the building character of the site of the old wall, reminds of the existence of ruins and serves as a frame for the cityscape when viewed from the inside. As part of the re-functionalization intervention, the floor surfaces of the exterior walls of the building were redefined with reference to the former use of the spaces: While the inner courtyard was transformed into a green lawn area, the areas where the other old interior spaces were located were covered with a mineral rubble surface layer, which is also composed of stone granulations belonging to the region. In the old interior of the West wing of the ruin, the stage was defined by a new floor covering (Figure 3.7), slightly rising above the surface level, to serve the summer theater in use today (Archdaily, 2012a) (Figure 3.1).

3.3.1.6. Technical Features

While the original period remains of the building were not interfered with, erosions that could occur with the retaining walls built with stones belonging to the region, which are very similar to the remains of the ruin, were prevented. It can be said that the new additions do not have a direct physical relationship with the existing ruins. The L-shaped corner insert is structurally designed to stand on its own. It does not have any consideration carrying any complementary features. The circulation scheme was defined with corten material by following the traces of the original structure. Seating units that do not give any reference to the original structure but serve the theater

function of the building were placed within the area bounded by the ruin, and these units were also covered with corten material (Figure 3.4).

3.3.1.7. Schematic Descriptions and Photos of Intervention



Figure 3.2. Site plan of Szatmáry Palace. Retrieved from Google Earth in February, 2022

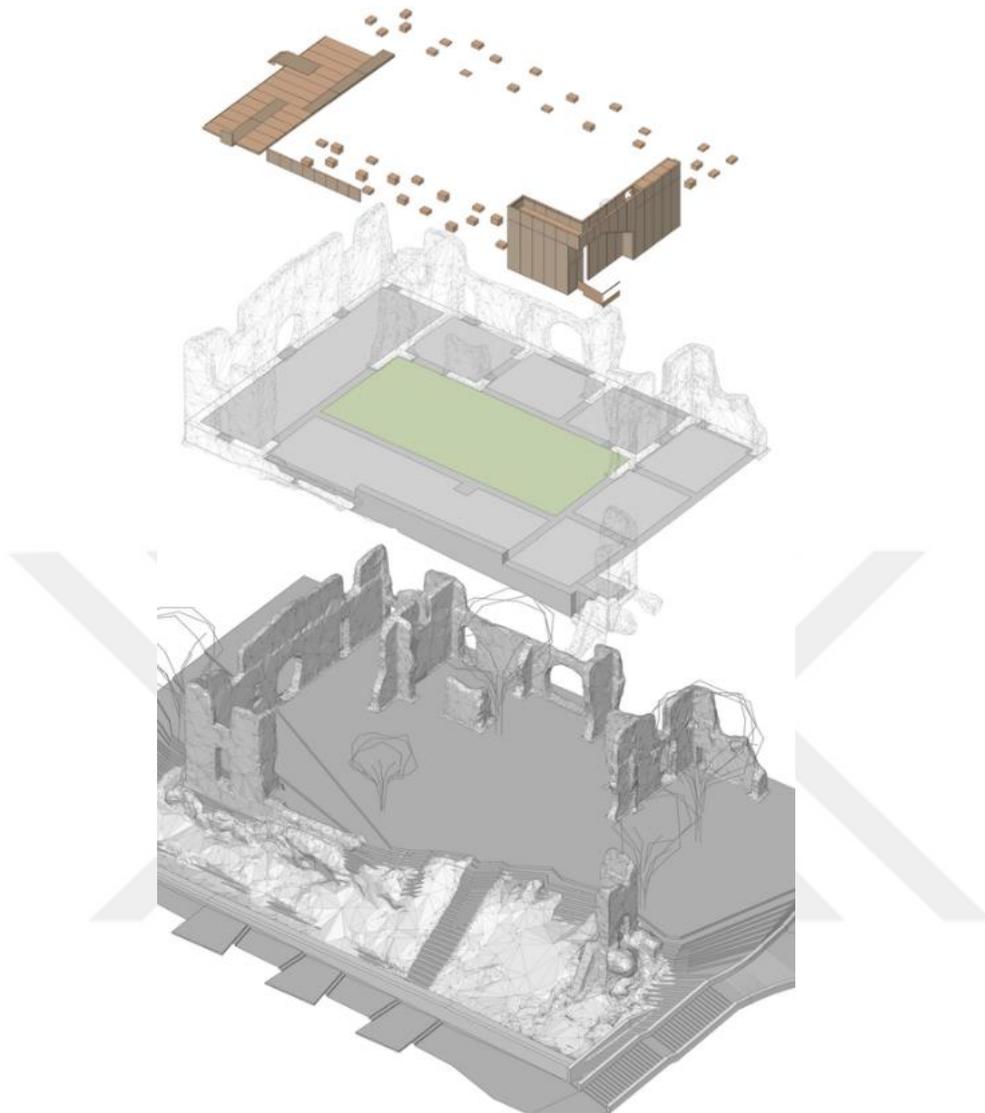


Figure 3.3. A diagram showing the existing ruin structure and adaptive reuse interventions in two layers. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021

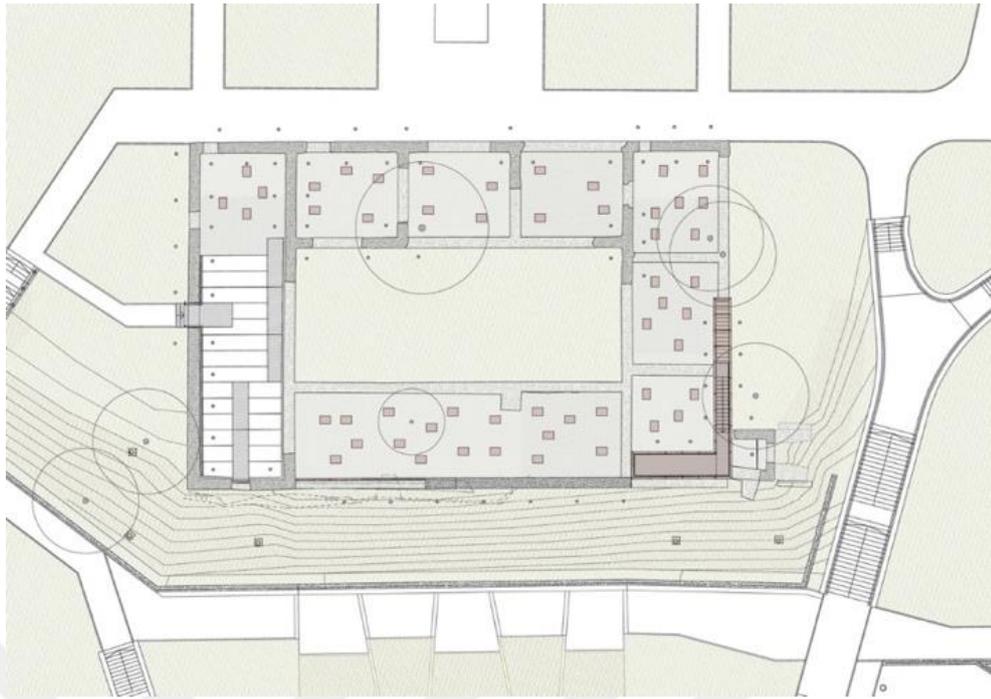


Figure 3.4. Technical drawing showing the existing ruins, contemporary additions and circulation areas. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021



Figure 3.5. A perspective showing the navigational function of the contemporary extension with reference to the disappearing wall of the building. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.



Figure 3.6. Stairway entrance and ruins of contemporary addition placed with reference to the disappearing wall of the building. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.

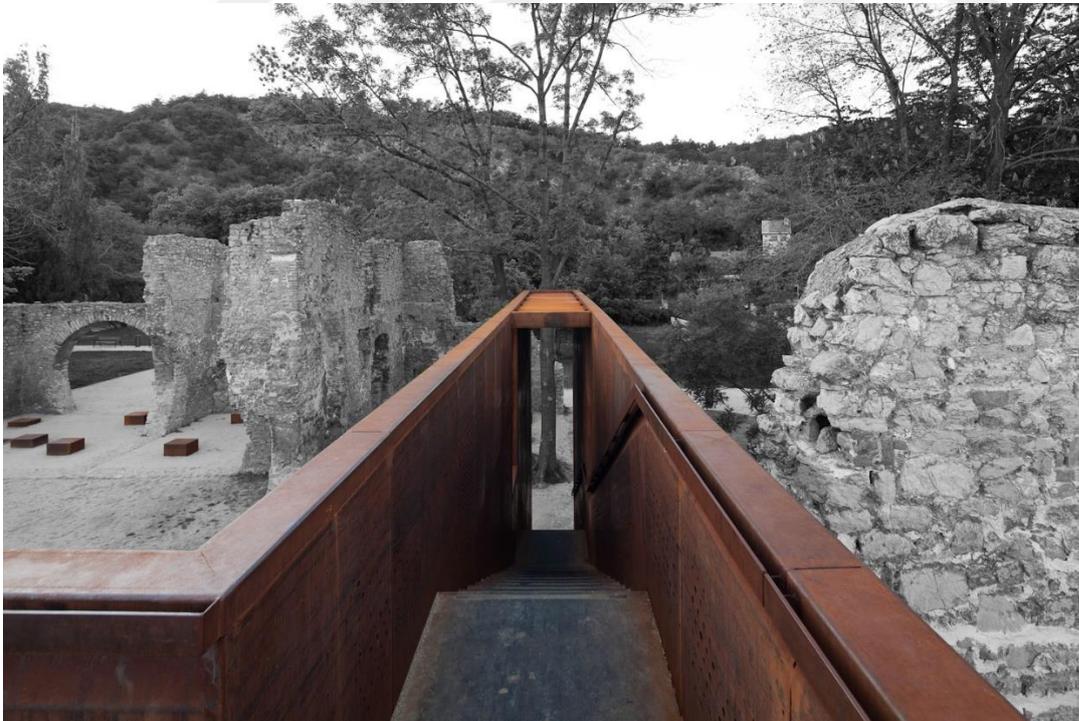


Figure 3.7. The circulation area of the contemporary addition applied with reference to the disappearing wall of the building. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.



Figure 3.8. Floor covering that refers to the part found in the original structure as the interior. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.



Figure 3.9. A general view of the park and the castle, which has been converted along with it. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.



Figure 3.10. A view of the castle and the park in which it is situated. Retrieved from <https://www.archdaily.com/272346/szatmary-palace-marp> in October, 2021 and edited by the author.

3.3.2. Castelo Novo Castle



Figure 3.11. The largely destroyed tower of the castle and the contemporary staircase and the ‘steel box’ additions. Retrieved from <https://www.archdaily.com/230727/castelo-novo-castle-comoco> in November, 2021

Location: Fundão, Portugal

Previous Function: Castle

Built: 12nd Century

New Function: Visitable Castle Ruins

Remodeled: 2008

Architect: COMOCO Architecture Office

Intervention Strategy: Weavings / Insertion

3.3.2.1. Description of the Existing Structure

This structure, which also gave its name to the village where it is located, is located in the village of Castelo Novo, located in the rugged terrain of eastern Portugal, close to the Spanish border. The ruined castle perched on top of a hill is a well-known tourist attraction, but until recently it lacked suitable visitor facilities (Slessor, 2010).

The construction of Castelo Novo Castle was completed in the 12th century during the reign of King D. Sancho I (1185-1211). Looking at the later construction-repair date of the building; King D. Dinis made some attempts to strengthen the castle at the end of the 14th century, it was also seen that the castle underwent some protection interventions during the reign of King D. Manuel I, around 1510. The castle, which lost its condition with the great earthquake in 1755, was destroyed and abandoned after losing its function (oGuia, 2008).

Although only a square-shaped tower has survived from the original structure, data proving that there was a castle structure with even a bell tower in it were obtained from three separate archaeological excavations between 2002 and 2004. In the process from the 17th century when it was abandoned until its re-use today, no traces of re-use are encountered, except for some conservation works carried out in the 20th century (A.H.P, 2008).

3.3.2.2. Description of the Adaptive Reuse Project

The COMOCO Architecture team that undertook the project was asked to make a permanent intervention to create a visitation center that would protect Castelo Novo Castle and its surroundings, and that people would enjoy visiting. To respond to these demands, the design solution created an organic “body” without rigid boundaries, which operates independently of existing structures but uses them as support (Archdaily, 2012b) (Figure 3.11) (Figure 3.12).

3.3.2.3. Preservation Precisions

The main purpose of the designers was to make the building accessible, which is losing its condition day by day and has access problems in terms of visitation. Thanks to the cultural value gained with the accessibility brought by the adaptive reuse project, the new function gained by the ruined castle has made a direct contribution to the conservation by removing the abandoned state of the building and its surroundings. In addition, the main concern of the settlement plan was not to make any structural interventions to the ruins of the existing building during the interventions and to be positioned within the spaces allowed by the building. (Archdaily, 2012b)

3.3.2.4. Design of the Adaptive Reuse

With the newly added pedestrian path, it is aimed to ensure that the visitors can visit the archaeological finds, mostly from the ruins of the castle itself, without damaging it. This path leads to the Main Tower, inside which is placed a "steel box" used as a multimedia room (Figure 3.10). This box also allows the creation of a platform where visitors can enjoy the panoramic view. Thus, Castelo Novo Castle has become a touristic spot that can be visited, circulated and used as an observation point. (Archdaily, 2012b)

3.3.2.5. Design of the Contemporary Intervention Elements

The contemporary addition, called the "body"(Figure 3.13) , was conceived as an abstract object with no definite purpose, but with continuity. This extension, which can show different features depending on the part it is in, serves as a volume that defines the boundaries of the church square, while it turns into a pavement layer with ramps and stairs that form a pedestrian path on the ground inside the castle walls (Figure 3.15). The entire structure is made using lightweight metal materials that allow new additions to be clearly distinguished from existing structures.

3.3.2.6. Technical Features

The original period remains of the building have not been interfered with. While the new additions have minimal physical contact with the ruins, they do not structurally divide, subtract or complete them. They fill the voids that appear only with the ruined feature of the building, with the volumes he creates by making contemporary interventions in order to create new functions. The two volumes called "Body" and "Steel Box" can stand on their own without the need for the existing structure. Both structures are covered with steel and corten material, while the openings of the annexes are covered with glass. The "Steel Box" intervention placed in the Main Tower shows installation features due to its complete disconnection from the building in terms of function and structure. (Figure 3.14).

3.3.2.7. Schematic Descriptions and Photos of Interventions



Figure 3.12. Site Plan of Castelo Novo Castle. Retrieved from Google Earth in February, 2022

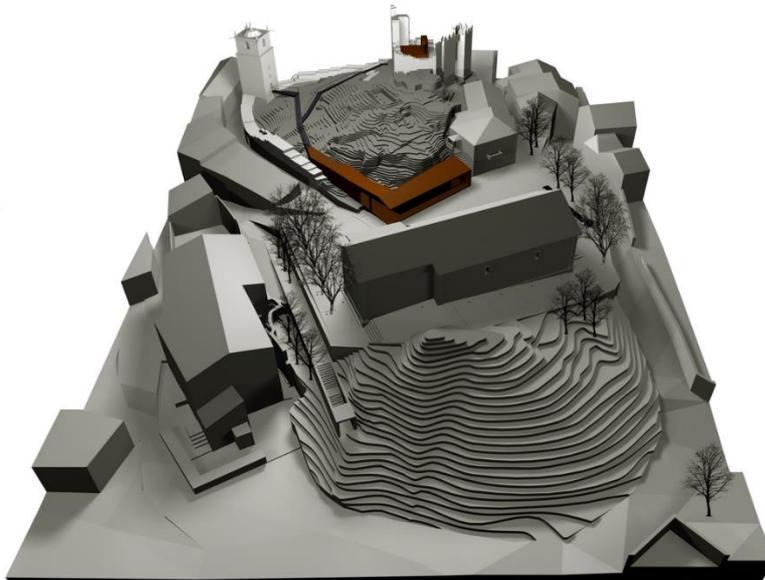


Figure 3.13. 3D model showing the building's surroundings. Retrieved from from <https://www.archdaily.com/230727/castelo-novo-castle-comoco> in November, 2021

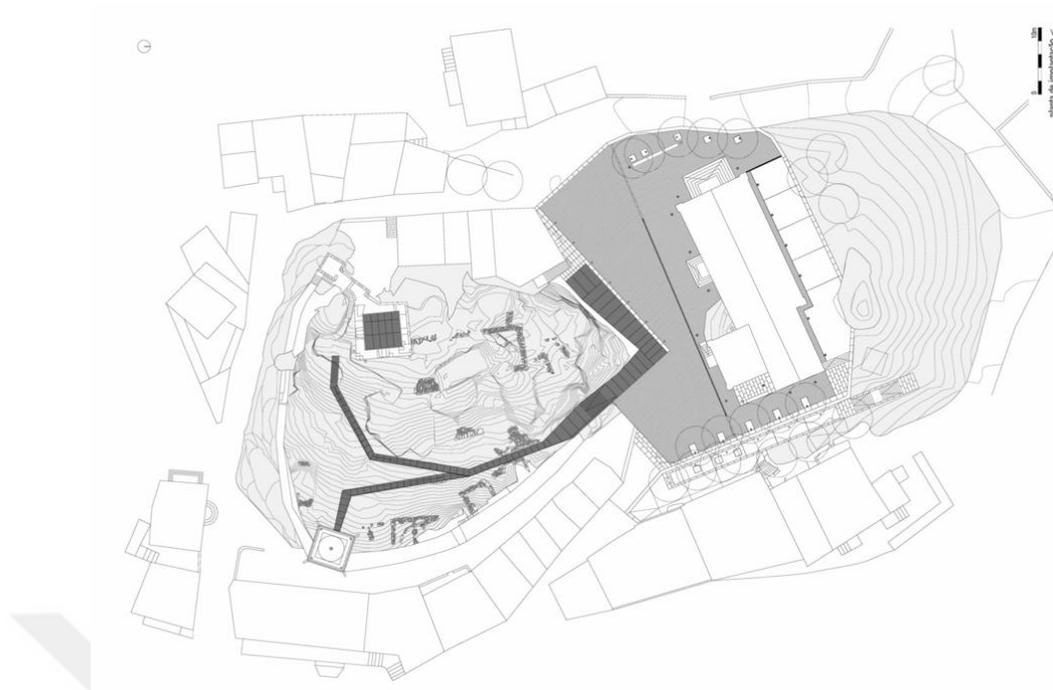


Figure 3.13. Technical drawing showing the current building's surroundings, ruins and contemporary additions. Retrieved from <https://www.archdaily.com/230727/castelo-novo-castle-comoco> in November, 2021



Figure 3.14. "Body" addition that includes a multimedia center. Retrieved from in November, 2021 and edited by the author.



Figure 3.15. Partially preserved ruins of the tower. (left) “steel box” contemporary addition (right) Retrieved from <https://www.archdaily.com/230727/castelo-novo-castle-comoco> in November, 2021 and edited by the author.

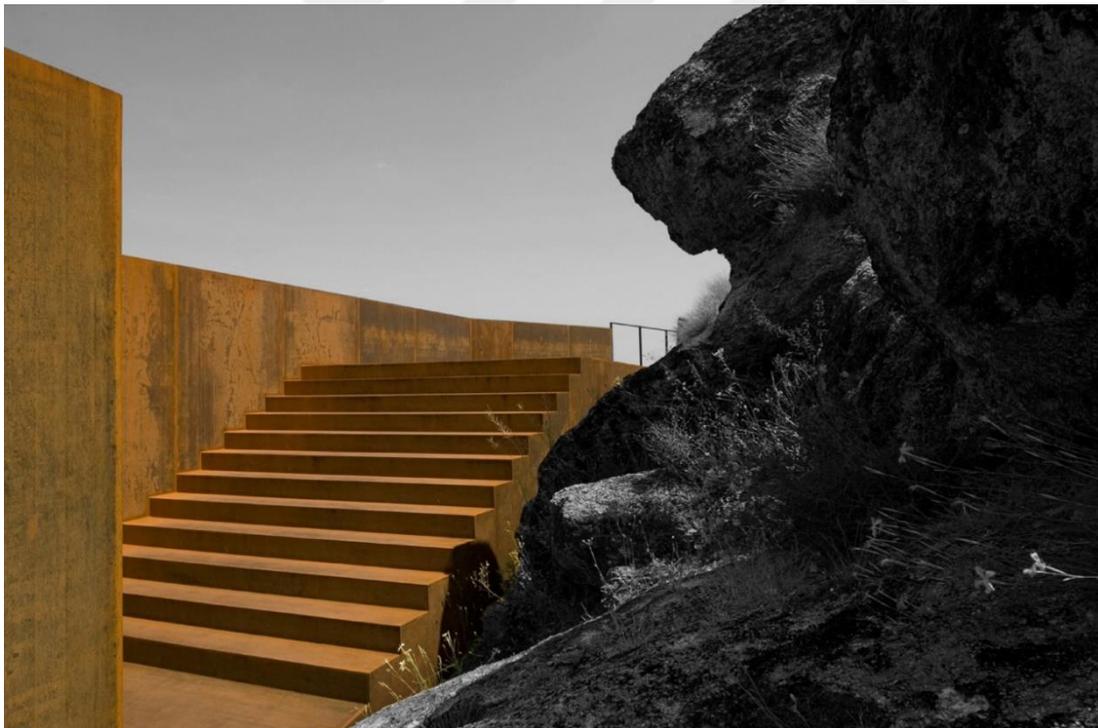


Figure 3.16. Corten staircase extension that provides circulation over the topography of the castle. Retrieved from <https://www.archdaily.com/230727/castelo-novo-castle-comoco> in November, 2021 and edited by the author.

3.3.3. The Tossa de Montbui Castle



Figure 3.17. Contemporary staircase addition depicting the form of the ruined edge of the castle. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021

Location: Igualada, Spain

Previous Function: Castle

Built: 10th Century

New Function: Visitable Castle Ruins / Viewpoint

Remodeled: 2020

Architect: Meritxell Inaraja Architecture Office

Intervention Strategy: Insertion

3.3.3.1. Description of the Existing Structure

Tossa de Montbui Fortress is located in the southwest of the city of Igualada, at an altitude of 620 meters above sea level, at a strategic point where other fortresses in the region were controlled and used for military defense since the Middle Ages (Figure 3.18). His name is first encountered in a document from 960. For this reason, it is thought to have been built in the middle of the 10th century. From the 12th to the 14th

centuries, the castle was named after the Viscounts of Cardona, who held the dominance of the castle. The castle was home to many different owners throughout the 19th century until it was purchased by the rector of Santa Margarida de Montbui in 1956. The building, which was abandoned for many years, suffered serious deterioration during this time. Since 1967, the Society of the Friends of Tossa and the Mountain Board (Asociación de Amigos de la Tossa y el Patronato de la Montaña) have carried out different interior arrangements and restoration interventions (Archdaily, 2021).

3.3.3.2. Description of the Adaptive Reuse Project

The building is a rectangular structure in a north-south direction, with rounded edges and walls about two meters thick, 9.50 meters wide and 14.50 meters long, built using stones extracted from the same area and calcareous lime mortar. The eastern part has two floors and is approximately 10 m high, while the western part is three meters longer due to the uneven terrain. The interior consists of two floors and a basement. Access to the interior is from the east façade and the applied contemporary extension allows access to the first floor (Archdaily, 2021).

3.3.3.3. Preservation Precisions

The building, as it has reached today, was in a state in need of protection and reinforcement. Wanting to reference the surveillance/monitoring function of the original building and even reintroducing this function to the building, the design team envisioned constructing a concrete staircase placed on the ruins. In order to this construction be possible, it was decided that some restoration and strengthening works should be done first. Since the newly installed staircase has the task of completing a missing part of the building, this staircase was built with exposed white concrete, which is very close to the color of the stones that make up the existing building. With this material selection, it was aimed to bring the old and the new as close as possible, while avoiding the new intervention to imitate the existing structure. This explains why the staircase extension is not made of the stones that make up the existing building, but of a separate material that is similar in texture and color only.

3.3.3.4. Design of the Adaptive Reuse

It is understood from the historical studies that there is a roof plate on the first floor of the original building. On the other hand, by examining similar typologies, it is deduced that the staircase providing access between the floors was previously inside the western wall and is now demolished. The staircase extension providing access to the first-floor references this. Prior to the intervention, objectives such as reinforcing the existing walls and making the highest part of the tower accessible by taking historical materials as reference and regaining the panoramic view, which is an important feature of the original structure, were determined. The surviving remains of the original building and the data obtained from historical research played a direct role in determining these targets (Archdaily, 2021) (Figure 3.20).

3.3.3.5. Design of Contemporary Intervention Elements

The level corresponding to the original roof is reached by stairs formed from the west wall, reinvigorating the idea of a possible original staircase thought to be contained within the walls in this original structure. The curved shape of the outer edge of the mass housing the staircase and the exposed concrete material aim to respect the incomplete or destroyed appearance of the structure and the ruined value of the remains (Figure 3.16) (Figure 3.17). An approach similar to the approach of bringing the same function of the part reached by the stairs in the original building to the present day with a contemporary intervention has also been adopted in the construction of a small balcony section in the northern part of the building, which corresponds to the original level of the main floor of the tower (Archdaily, Restoration of Castell de la Tossa , 2021) (Figure 3.19) (Figure 3.21).

3.3.3.6. Technical Features

The original period remains of the building had to be intervened in the direction of some strengthening works. The new addition follows the boundaries of the existing structure with the existing structure and is located in a position to imitate the original structure at a certain dose. The openings in the original design of the existing building were ignored and considered walls, since the remains of the openings on the west façade were very weak. However, since the openings on the other façades are relatively better preserved, they have been preserved in their current form. Concrete

staircase structure was applied with wooden formwork technique. Today's ground floor level of the building is covered with a stone material that is close in texture and color to the stones used in the original building and to the concrete staircase structure, preventing erosion that may occur in the castle due to weather conditions and a circulation area has been defined.

3.3.3.1. Schematic Descriptions and Photos of Interventions



Figure 3.18. Site Plan of The Tossa de Montbui Castle. Retrieved from Google Earth in February, 2022

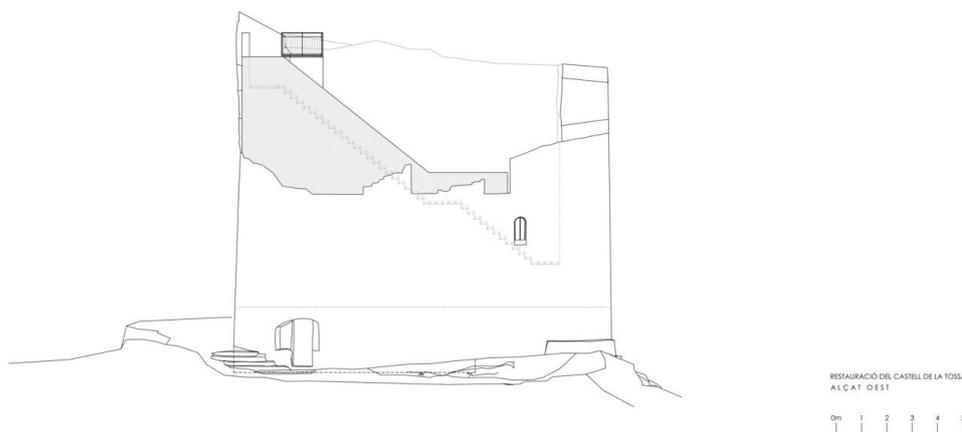


Figure 3.19. Technical drawing showing the modern stair addition, which is the shape of the destroyed castle edge. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021



Figure 3.20. The surroundings of the castle and the complementary contemporary addition. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021 and edited by the author.



Figure 3.21. The relatively preserved facade of the castle and the contemporary viewpoint point addition. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021 and edited by the author.



Figure 3.22. Top view of the interior of the castle with the contemporary additions. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021 and edited by the author.

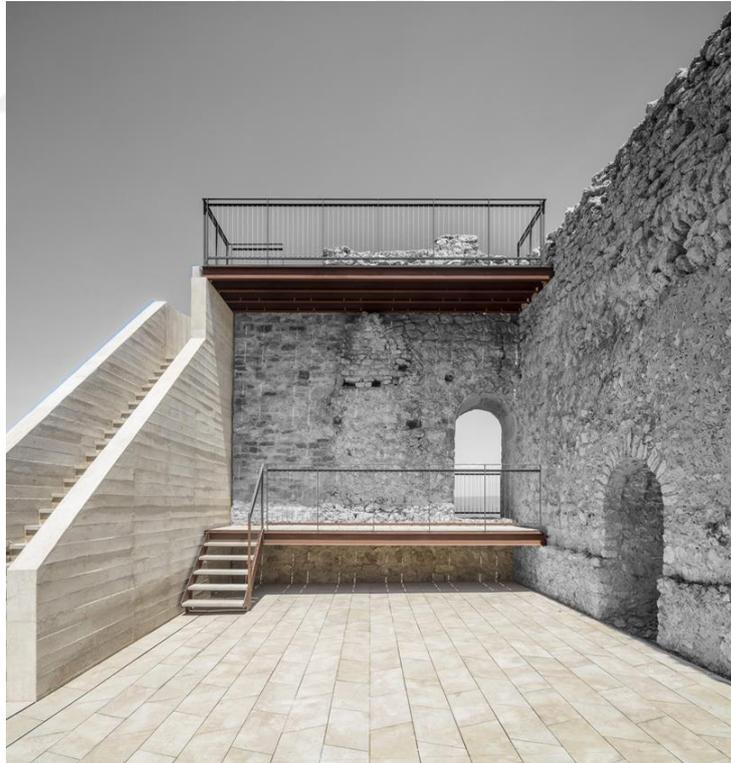


Figure 3.23. Staircase, flooring and viewing platforms additions. Retrieved from <https://www.archdaily.com/951752/restoration-of-castell-de-la-tossa-meritxell-inaraja> in November, 2021 and edited by the author.

3.3.4. Pombal Castle



Figure 3.24. An interior angle showing the additions to the watchtower and wards. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021

Location: Pombal, Portugal

Previous Function: Castle

Built: 16th Century

New Function: Visitable Castle Ruins

Remodeled: 2014

Architect: COMOCO Architecture Office

Intervention Strategy: Insertion / Parasite

3.3.4.1. Description of the Existing Structure

Located in Pombal, Portugal, the castle is perched on top of a hill overlooking the Arunca River Valley. The building, which is estimated to have been built in the 16th century, has been occupied since the Roman Empire period and has assumed many spatial and social roles. Over time it has grown from a small provincial community to

a regional military defense structure, and today it is a tourist visitor center and a defining tool for the region (Archdaily, 2019).

3.3.4.2. Description of the Adaptive Reuse Project

The intervention under the Pombal hill remodeling project included requirements such as landscaping and the design of a visitor center for the ward of the castle, including the revitalization of facilities already established at the Torre de Menagem (the castle's watchtower) (Archdaily, 2019) (Figure 3.22) (Figure 3.23).

3.3.4.3. Preservation Precisions

The most important issue for the design team was to define the richness of the multi-layered history of the castle, a design strategy that could find its place among the many works that fill the space, which are neither ostentatious nor subdued. The COMOCO Architects team explained their approach to the project as “These works, most of which were abandoned in the past and have survived to the present day only as ruins, are parts of the collective memory that we want to preserve and furthermore develop. This was the impulse that determined the basic principles that guide our design approach.”

3.3.4.4. Design of Adaptive Reuse

Architectural interventions to the castle included the design of a volume to be placed in the wards, a viewing balcony to be positioned on the watchtower, and steel stairs to access this balcony. The balcony intervention aims to carry the original function of the tower to the present day. The intervention of the steel stairs, which will provide access to the balcony (Figure 3.28), provides the accessibility of the tower directly to the storey, while indirectly contributing to the visit ability of the castle. Among the contemporary interventions that had to be designed in the castle, the most focused piece was the new volume, which would include the visitor center (Figure 3.24) (Figure 3.26). This volume offers three spaces: a reception for visitors, a multimedia room to view the virtual history of the castle, and a storage area (Figure 3.27). As the ward area of the fort was filled with many original buildings remains, a new volume to be placed on that spot meant an inevitable confrontation with the existing elements that defined that area. In any case, this was the impetus to develop the main idea of the project (Archdaily, 2019).

3.3.4.5. Design of Contemporary Intervention Elements

A simple design strategy was pursued for the landscaping of the wards of the castle and the revitalization of the castle's watchtower. As with the original building, the existing sidewalks were restored with cobblestones made of limestone, and the remaining gaps were filled with pebbles. Secondly, the balustrades were redesigned using corten steel (Figure 3.25). The rooms of the tower, which were used as exhibition spaces, were rearranged and their furniture was designed. The design team decided to treat the new volume as an object that had to embody uncertainty: on the one hand, it had to blend seamlessly with the existing elements in the ward of the castle, and on the other, it had to be a striking new addition to the existing structure. In the team's words, "We sought creative dialogues with the 'as found' state, trying to leverage the new structure to still activate spatial experiences."

3.3.4.6. Technical Features

The volume in the wards, which can be called the main intervention, was covered with a stone material that resembles the original material of the building in terms of texture and feel, considering its relationship with the existing remains. It does not settle at the original level where the existing ruins were located, but at the current level. Despite this, it is not in competition with the existing remains, but is seen as a volume that can be easily understood as a new intervention. While the workspace of the volume is used for the specified functions, it is possible to go above the volume with the staircase part integrated with the volume. On this level, there are basic railings designed from steel material. The balcony intervention, together with the steel staircase, can be called a parasitic intervention to the watchtower since it is positioned as attached to the exterior of the existing building. It represents a volume that has no equivalent in its original structure. Structurally, it does not give any reference to the original structure. However, in terms of function, it aims to present the observation / monitoring function of the watchtower of the building to the visitors who visit the castle today.

3.3.4.7. Schematic Descriptions and Photos of Interventions



Figure 3.25. Site Plan of Pombal Castle. Retrieved from Google Earth in February, 2022

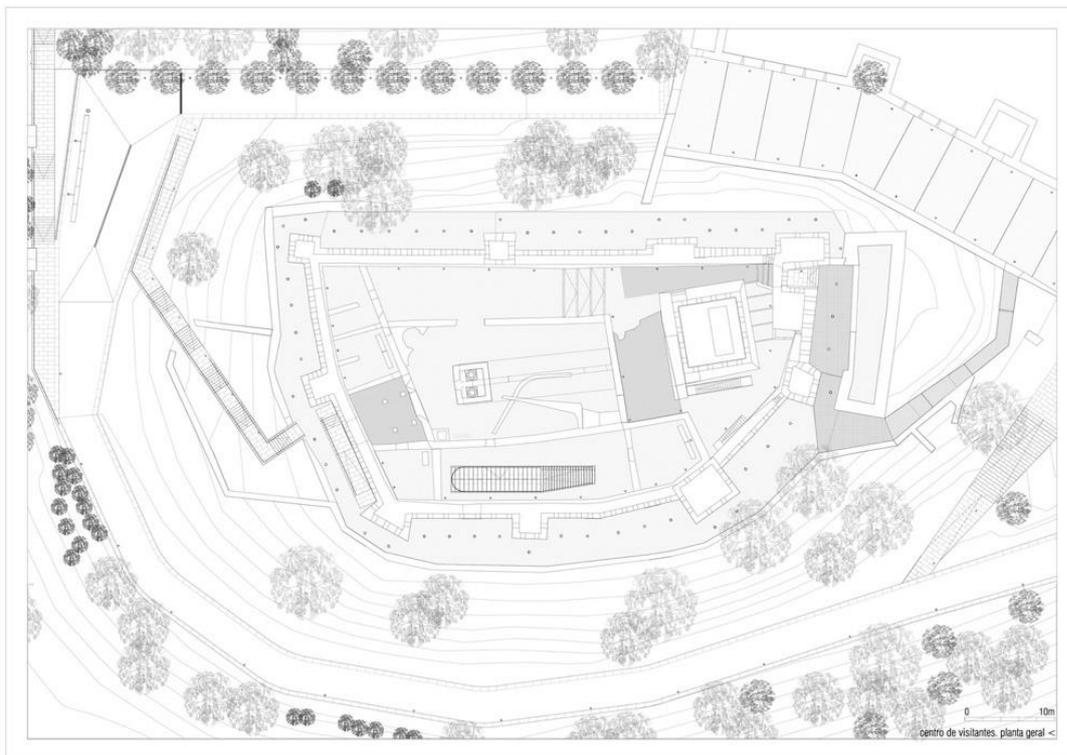


Figure 3.26. Technical drawing showing the current building's surroundings, ruins and contemporary additions. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021



Figure 3.27. The new volume placed in the Wards section and its relationship with the ruins. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021 and edited by the author.

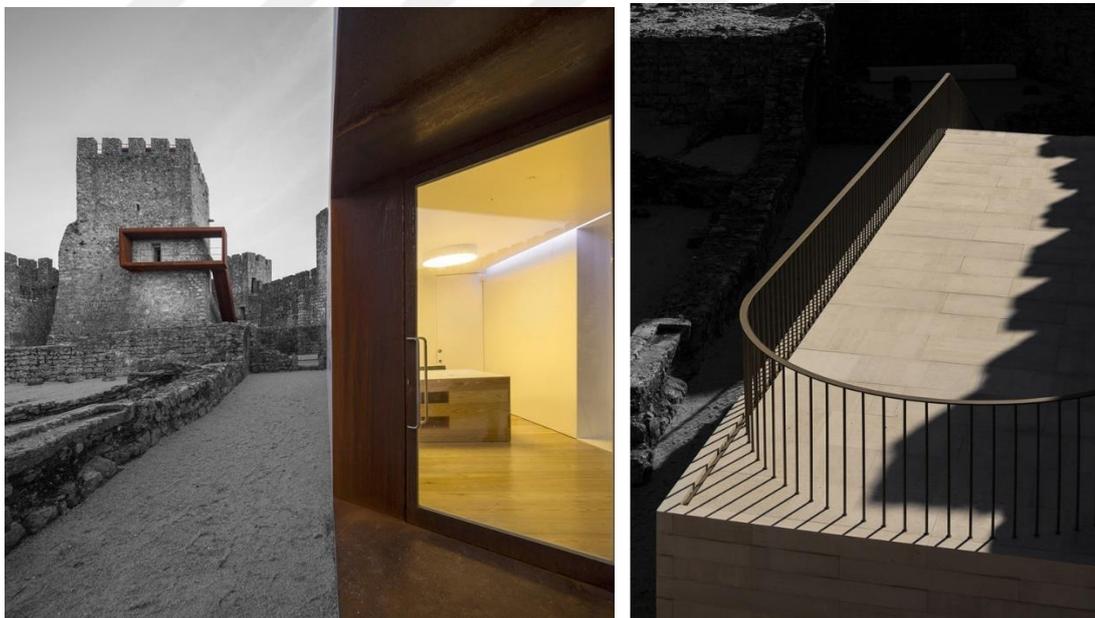


Figure 3.28. The watchtower of the castle from ground level of the castle. (left), Metal railings of the new volume added to the Wards section. (right) Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021 and edited by the author.



Figure 3.29. The new volume placed in the Wards section and its relationship with the ruins. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021 and edited by the author.



Figure 3.30. The interior of the new volume added to the Wards section. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021



Figure 3.31. Contemporary staircase addition to the watchtower. Retrieved from <https://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos> in December, 2021 and edited by the author.

3.3.5. Doria Castle



Figure 3.32. Contemporary staircase extension located in the place of the destroyed wall of the castle. Retrieved from <https://www.archdaily.com/934655/restoration-of-castello-dei-doria-a-dolceacqua-ld-plus-sr-architetti> in December, 2021

Location: Dolceacqua, Italy

Previous Function: Castle

Built: 12nd Century

New Function: Visitable Castle Ruins

Remodeled: 2015

Architect: LD+SR Architecture Office

Intervention Strategy: Insertion / Parasite

3.3.5.1. Description of the Existing Structure

It is known that the construction of the castle, located in the Dolceacqua region of Italy, was completed in 1117. It was in ruins and had very limited access until the adaptive reuse project completed in 2015 by the LD+SR Architecture Office. This building, located on a hill named St. Matthew, provided an important panoramic view to its user in its original use, thanks to its position dominating the region. The castle, which was built for defense purposes, has been used for many years as a structure that can serve its function well thanks to its location and multi-storey structure. The main facade of the castle, which is known to have functioned as a church in the 15th century, is stone-textured and has two towers towards the ends. There are openings showing that the main building consists of 3 floors, while the towers have openings showing that it consists of 5 floors. The castle, which had a symmetrical structure before it was partially destroyed, has undergone restoration interventions throughout its history, but underwent many changes in the 20th century and was damaged during the 2nd World War. These damages caused the castle to turn into a ruin and lose its cultural and touristic value (Archdaily, 2020) (Figure 3.30).

3.3.5.2. Description of the Adaptive Reuse Project

After extensive restoration interventions carried out since the early 90s, between 2012 and 2015, a project scope that includes the restoration and reinforcement of certain parts of the main outer walls of the Castle, the restoration of the main open spaces surrounding the castle, the establishment of a circulation system that directs the visitors to explore different points of perception of the landscapes surrounding the structure has been determined. The project aims to allow visitors to explore and travel through the different phases of the building, which were created in several parts of the building that survived the bombardment of World War II and the ensuing fires (Archdaily, 2020).

3.3.5.3. Preservation Precisions

Restoration and reinforcement of the largely deteriorated walls was substantially completed with the interventions implemented in 2015. In order to serve the new function, the metal stairs and passages that were built appear as elements of the existing structure (Figure 3.29). It has the appearance of completing the partially cut

or ruined parts and spaces by volume. These elements are always perceived as new additions, the intervention can be removed at any time and the original building can continue to be exhibited in its old state, and it is always in harmony with the existing structure.

3.3.5.4. Design of Adaptive Reuse

While determining the interventions, the primary goal was to transform the ruined castle structure into a visitable complex. The castle, which is located at a point that dominates the environment, contains many different sections and levels within itself (Figure 3.31). For this reason, it was expected that the new interventions, which were planned to contribute to the accessibility of the castle, would also allow visitors to wander between the different layers of the castle. Considering all these requirements, it has been seen those new additions consisting of stairs and bridges, which are expected to define new circulation areas for the castle, are necessary (Figure 3.32) (Figure 3.33).

3.3.5.5. Design of Contemporary Intervention Elements

Almost all of the new attachments are made of steel material. As a complement, wooden materials are found in the flooring of the walkways. Perforated metal sheet plates, which have a dividing function and provide a semi-permeable structure for objects such as doors and railings, are used. These materials, which have the same texture and structure as the main structural material of the new additions, ensure that all the new interventions can be read together with the linguistic unity they provide (Archdaily, 2020).

3.3.5.6. Technical Features

The most important feature of the modern additions that allow climbing and circulation in the existing structure is that they can be disassembled without damaging the original structure. In order to achieve this, new plugins do not make direct contact with the existing structure but touch the existing structure with connection points. At this point, the existing structure does not act as any carrier for new additions.

3.3.5.7. Schematic Descriptions and Photos of Interventions



Figure 3.33. Site plan of Doria Castle. Retrieved from Google Earth in February, 2022



Figure 3.34. Technical drawing showing the current building's surroundings, ruins and contemporary additions. Retrieved from <https://www.archdaily.com/934655/restoration-of-castello-dei-doria-a-dolceacqua-ld-plus-sr-architetti> in December, 2021



Figure 3.35. The relationship of the castle with the city and the role of the contemporary staircase extension in accessibility. Retrieved from <https://www.archdaily.com/934655/restoration-of-castello-dei-doria-a-dolceacqua-ld-plus-sr-architetti> in December, 2021 and edited by the author.



Figure 3.36. Metal staircase addition that allows circulation between the different levels of the castle. Retrieved from <https://www.archdaily.com/934655/restoration-of-castello-dei-doria-a-dolceacqua-ld-plus-sr-architetti> in December, 2021 and edited by the author.



Figure 3.37. Metal details of the contemporary staircase addition. Retrieved from <https://www.archdaily.com/934655/restoration-of-castello-dei-doria-a-dolceacqua-ld-plus-sr-architetti> in December, 2021 and edited by the author.

3.3.6. Castle of Morella



Figure 3.38. General view with contemporary concrete insert. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021

Location: Morella, Spain

Previous Function: Castle

Built: 12nd Century

New Function: Visitable Castle Ruins

Remodeled: 2021

Architect: Carquero Architecture Office

Intervention Strategy: Insertion / Parasite

3.3.6.1. Description of the Existing Structure

Perched on top of a mountain in the middle of a valley, the castle blends into the contours of the terrain and offers a wide view from all sides: both the town of Morella and the area of Els Ports were a Muslim stronghold until 1232, when Blasco de Alagón conquered the Aragonese kingdom. The current castle, which was in ruins until the adaptive reuse project intervened in 2021, was built on the ruins of previous castles.

The first fort in Morella was built by the Iberians, then the Romans, Goths and Arabs made changes. The walls surrounding the castle were mostly built in the 13th century or later. It has witnessed many wars due to its strategic location and the political structure of its geography. Various changes were made to the castle, which operated until the 19th century. Consisting of a three-level complex, the building's first level is the entrance, while the second level is the level where the artillery batteries are placed. The third level, which is the highest level, contains the castle itself. (Figure 3.34) (Figure 3.35)

3.3.6.2. Description of the Adaptive Reuse Project

In line with the approach determined for the intervention, it was based on preserving the existing ruin texture by avoiding the reinterpretation of the original structure. Partially destroyed remains were cleared. Conservation and reinforcement works have been applied to the ruins that are at risk of collapse. Interventions were implemented to prevent erosion caused by rainwater. The entrance and seating areas were designed with a very low sloped ramp section that sits in a mass (Figure 3.36). Some installations were made describing the partially damaged openings of the castle such as doors and windows (Figure 3.38). Thanks to the reinforcements of the structure, its existence has been ensured. With other interventions regarding circulation, it was aimed to make the castle suitable for visitor access.

3.3.6.3. Preservation Precisions

First of all, there were sections of the building that were heavily damaged and in critical condition. Damaged sections have been subject to cleaning interventions rather than repairs. Repair and reinforcement works have been carried out in parts that are at risk of collapse. If these reinforcement works require a new addition, this material is produced with lime concrete, which has a texture suitable for the texture of the existing structure, as in other new additions. Partial completion placements have been applied in the ruined parts, but this completion process can be defined not as rebuilding the destroyed part, but as framing the damage with a new addition. Therefore, the reconstruction of the building was avoided as much as possible, and care was taken to preserve the ruined value of the building in its current state.

3.3.6.4. Design of Adaptive Reuse

The main work in the area of the crenellated wall, which is approximately 70 meters long and approximately 14 meters high at risk of collapse, has focused on structural consolidation, cleaning and restoration. Four buttresses were placed on the outside of the walls, reinforcing the foundation and sealing and reinforcing the cracks (Figure 3.39). In order to collect rainwater, which is the main cause of erosion on the castle walls, a system of canals and pipes was arranged that diverted the waters to a pre-existing open pool. Access to the Tower of Sant Francesc was provided by the construction of the roof in the Wall-walks annex and the improvement of the stairs. All the walls have been restored, including the ramp and its annex. In the area of Pardala Tower, the entire fill was emptied to its original level in order to provide waterproofing and systematize water collection.

3.3.6.5. Design of Contemporary Intervention Elements

For the necessary additional structural elements, tones and textures integrate with the rest of the existing remains and harmonious materials such as lime concrete, stainless steel and fiberglass are used. Likewise, stainless steel has been used for the necessary additional functional elements such as doors, observation points, and a surface that integrates with the rest of the intervention has been achieved.

3.3.6.6. Technical Features

In the material selection of the new additions, attention was paid to ensure that the structure and texture of the material did not contradict the existing structure. At the same time, this new material should not be in a structure that imitates the existing structure. Visitors should have no trouble distinguishing between new and old. For this reason, metal is preferred for lightweight constructions such as balustrades, stairs and complementary inserts. All of these practices are reversible interventions. We can call the interventions applied with lime concrete as relatively heavier interventions. Although these interventions are partially reversible, it is useful to consider them as a whole complex with the existing structure now.

3.3.6.7. Schematic Description and Photos of Interventions

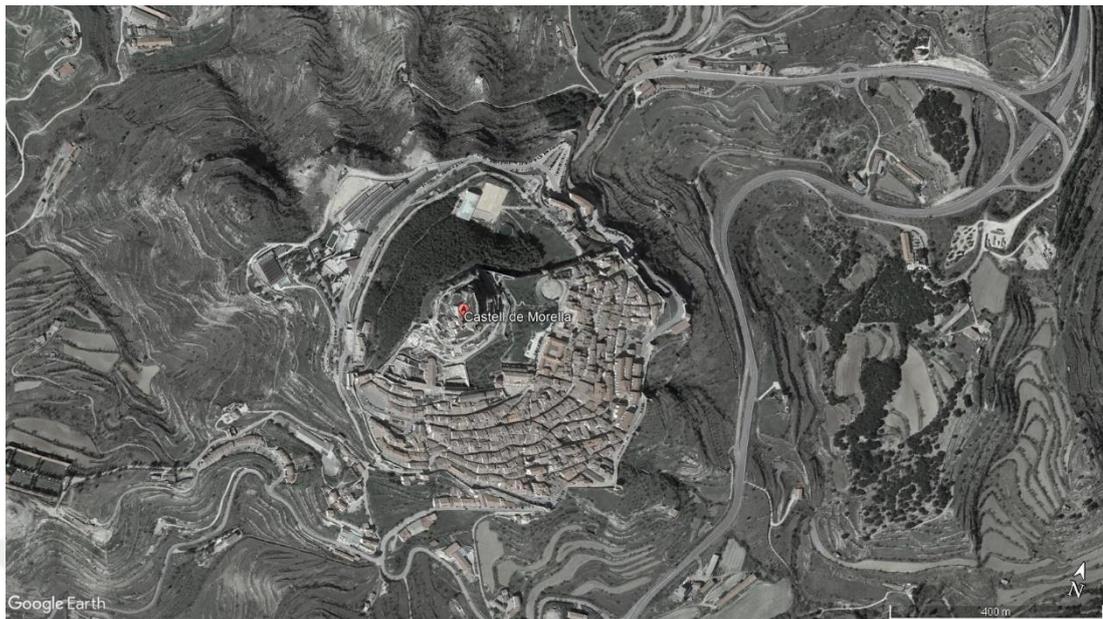


Figure 3.39. Site Plan of Castle of Morella. Retrieved from Google Earth in February, 2022 and edited by the author.



Figure 3.40. Technical drawing showing the current building's surroundings, ruins and contemporary additions. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021 and edited by the author.



Figure 3.41. Seating units. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021 and edited by the author.



Figure 3.42. Contemporary concrete addition mass. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021 and edited by the author.



Figure 3.43. Contemporary frame inserts that define openings in the original structure. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021 and edited by the author.



Figure 3.44. Four buttresses were placed on the outside of the walls. Retrieved from <https://www.archdaily.com/967724/castle-of-morella-restoration-carquero-arquitectura> in December, 2021 and edited by the author.

3.4. Comparison and Evaluation of the Examples

The concept of conservation has always been the subject of architecture and design circles as a controversial concept since its emergence. National laws on the protection of cultural heritage properties have set out some rules in the context of the necessity of preserving these structures, but it has often not been possible to draw strict rules in terms of design approaches and principles of conservation. Today, some published national and international regulations have taken some decisions on these approaches and principles and drawn some frameworks for designers, but these are only described as "recommendations". Therefore, it is possible to encounter many different or parallel views on the preservation and adaptive reuse of historical buildings such as ruins, which have cultural heritage value. In the literature review section, those adopted from these views were compiled and examined.

In order to increase the flexibility of the general acceptances in the society about the adaptive reuse of the ruined castle structures by using contemporary additions and to serve as a guide for future studies on this subject, two separate tables have been prepared in order to be able to evaluate the samples examined in general terms at the same time. In line with the international documents, theorist views, approaches and principles compiled in the literature review section, these tables are aimed to obtain data that the designers can ask themselves and the existing structure during the design phase of adaptive reuse interventions, and that will contribute to the progress of the design. Table 3.1. has been prepared to show the current state of the ruined castle structure. General information such as the location of the castle, date of construction, level of demolition, original and new function and accessibility level have been compiled. In Table 3.2. some criteria were determined in order to see the characteristics of the adaptive reuse interventions applied and their contributions to the existing structure, and each sample was evaluated with these criteria.

Table 3.1. Assessment of the current state of the building and summary of the interventions.

		1	2	3	4	5	6	7	
		Szatmáry Palace Budapest / Hungary	Castelo Novo Castle Fundao, Portugal	The Tossa de Montbui Castle Igualada, Spain	Pombal Castle Pombal / Portugal	Doria Castle Dolceacqua / Italy	Castle of Morella Morella / Spain	Keçi Kalesi Castle Selçuk / Turkey	
1	E X I S T I N G S T R U C T U R E	What is the original function of the building?	Castle / Palace	Castle	Castle	Castle	Castle	Castle	
2		What is the summary of the new interventions implemented?	Contemporary Reconstruction / Seating units / Summer Theater	Access Road / Viewpoints	Contemporary Extension / Viewpoint / Access Units	Access Road / Viewpoints / Contemporary New Block	Access Road / Viewpoints / Contemporary Partially Reconstruction	Access Road / Seating Units/ Partial Contemporary Reinforcement	Contemporary Partially Reconstruction / Access Road / Seating Units
3		What is the newly adopted reuse proposal?	Visitable Castle/Palace Ruins/Park	Visitable Castle Ruins	Visitable Castle Ruins	Visitable Castle Ruins	Visitable Castle Ruins	Visitable Castle Ruins	Visitable Castle Ruins
4		What is the Conservation / Destruction level of the building?	Partially Destroyed	Partially Preserved	Partially Preserved	Partially Preserved	Partially Preserved	Partially Preserved	Partially Preserved
5		What is the period when the original building was first built.	16th Century	12nd Century	10th Century	12nd Century	12nd Century	12nd Century	13rd Century

6	E X I S T I N G S T R U C T U R E	What is the location feature? (Rural/Urban)	Rural	Rural	Rural	Rural	Rural	Rural	Rural
7		What is the layout feature of the building? (Singular Structure / A Complex)	Singular Structure	A Complex	Singular Structure	Singular Structure	Singular Structure	A Complex	Singular Structure
8		What is the level of accessibility before the intervention? (Accessible/Partially Accessible/Inaccessible)	Accessible	Limited Accessibility	Limited Accessibility	Limited Accessibility	Limited Accessibility	Limited Accessibility	Limited Accessibility
9		What is the level of accessibility after the intervention? (Accessible/Partially Accessible/Inaccessible)	Accessible	Accessible	Accessible	Accessible	Accessible	Accessible	Accessible
10		What are the environmental elements of the building?	Recreation area	Archaeological Site	A singular structure on a hill dominating the countryside	City	Rural Settlement	Rural Settlement	Rural

Table 3.2. Criteria for the added value of interventions.

CRITERIA		1	2	3	4	5	6	7	
		Szatmáry Palace Budapest, Hungary	Castelo Novo Castle Fundao, Portugal	The Tossa de Montbui Castle Igualada/Spain	Pombal Castle Pombal, Portugal	Doria Castle Dolceacqua, ,Italy	Castle of Morella Morella, Spain	Keçi Kalesi Castle Selçuk , Turkey	
1	T H E I N T E R V E N T I O N	Does it reflect the material, technology and design understanding of its period?	O	X	X	X	X	X	
2		Does it preserve the integrity of the texture, and does it create a creative and different value by maintaining the existing values?	✓	✓	✓	✓	✓	✓	✓
3		Is it reversible? Can it be removed when necessary without damaging the structure?	✓	✓	O	O	✓	X	✓
4		Does it contribute to the enrichment of the space socially, functionally or aesthetically by adapting to the context?	✓	✓	✓	✓	✓	✓	✓
5		Is it appropriate and respectful of the form, proportion, mass, scale, rhythm, character, texture and material of historical buildings?	✓	✓	✓	✓	✓	✓	✓
6		Can it keep the tangible and intangible values of the original structure alive?	✓	✓	✓	✓	✓	✓	✓

CHAPTER 4
AN ADAPTIVE REUSE PROPOSAL FOR THE REMAINS OF IZMIR
SELÇUK KEÇİ CASTLE

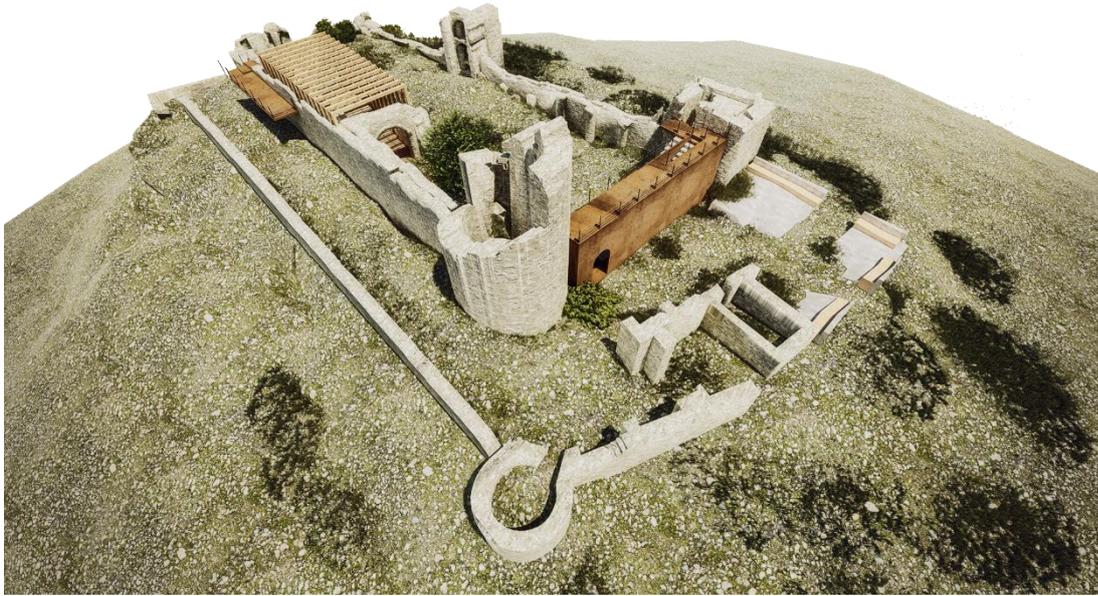


Figure 4.1. Overview after adaptive reuse proposal for Keçi Castle.

Location: İzmir/Turkey

Previous Function: Castle

Built: 12th Century

New Function: Visitable Castle Ruins

Remodeled: 2021

Intervention Strategy: Insertion, Parasite

This project was handled within the scope of the INAR 512 coded studio course of the Yaşar University Interior Architecture graduate program (2018) and it was planned to be developed as the content of the thesis.

4.1. Description of the Existing Structure

Keçi Castle is located in the Belevi region in the Selçuk district of İzmir on the top of Alaman Mountain, whose ancient name is Gallesion, at an altitude of 300 meters. It is located on a strategically important road connection from Smyrna to Sardis and Ephesus in ancient times (Tok, 2016). It was an important part of the region's defense network at a point where the protection of important roads in the center of Selçuk and the attack on Ayasuluk Castle could be anticipated and reported (Öztürker, 2016). It is not known exactly what the castle was called during the Byzantine period. In the records of travelers who passed through Ephesus at the beginning of the 18th century, the name "Goat Castle" appears. The British explorer and traveler F.M. W. Arundell writes that the castle was called "Dervish Castle", "Goat Castle", "Soley Bey Castle" and "Kızılhisar" in his works. The name goat castle comes from the fact that the castle is located on a steep terrain that can only be climbed by goats.



Figure 4.2. The current ruined state of the goat castle. (West-East Direction).

Retrieved from

https://www.youtube.com/watch?v=3Zo0U_CYzHo&ab_channel=SezginKAD%C4%B0RO%C4%9ELU in December, 2021 and edited by the author.

The exact date of the construction of the castle is not known. Remains from the 4th century BC were found in an area at an altitude of about 100 meters on the paths leading to the castle. These remains confirm that they were part of the defense network between Ephesus-Sardis-Smyrna. The fact that the location of the castle is included in the Byzantine defense network and that it was built in the "irregular frame"

construction method indicates that it was built between the 12th and 13th centuries (Figure 4.2). It is estimated that it was built in the 12th century by the Komnenos and reinforced and renewed in the 13th century by the Laskaris. The castle consists of an irregular rectangular citadel and an outer castle that frames the citadel from the west and north. Since the south and east sides of the hill are steep cliffs, there is no external wall structure in these directions. The entrance to the castle is on the west side of the outer wall. The inner castle was built on a rectangular ground plan in 4 directions. The entrance of the castle was opened by a door in the western and northern directions, but the wall on the western facade completely collapsed in 2005 as a result of a series of earthquakes (Figure 4.3) (Tok, 2016).

Today, in addition to its historical and cultural quality, the castle, which is used for various climbing activities, has the potential to be an alternative tourist destination which is located in an area with high historical and cultural heritage value and important points in terms of international tourism, such as the Ancient City of Ephesus, the Temple of Artemis, the Church of the Virgin Mary, and the Church of St. John the Baptist. Therefore, it has a high tourism potential. The main purpose of adaptive reuse projects in ruined castle structures is to bring the ruins to today's life through tourism and thus to protect the existing structure. The main reason for choosing the Keçi Castle as the proposal project is this reuse potential. This structure, which has been idle and in ruins for a long time, continues to be damaged by recent earthquakes. This need for protection of the building was also evaluated as a selection criterion. The fact that the level of collapse of the building is at a level that will allow the addition of contemporary additions and that the building is at a more accessible point in order to carry out research and examination studies due to its location are also evaluated as two other criteria.



Figure 4.3. The outer fortress wall and the recently demolished inner fortress west side wall. Retrieved from https://www.youtube.com/watch?v=LjVmvPEExtY&ab_channel=D%C4%B0N%C3%87ERSERTKAYA in December, 2021 and edited by the author.

4.2. Description of the Adaptive Reuse Project

The castle, which is in ruins today, has the potential to offer a picturesque experience in terms of location and altitude. For this reason, the new function was defined as an experience area that would enhance the perception of visiting the interior of the castle after ascending to the castle. In creating this experience area, interventions were made with reference to the original form of the building, with the aim that visitors first reach the castle and then perceive the structure and the environment in which they find themselves, without interfering as much as possible with the existing structure and compromising its ruinous state.(Figure 4.1) (Figure 4.5)

4.3. Preservation Precisions

No reconstruction-like interventions are planned on the existing structure, except for cleaning the remains of the completely destroyed parts of the structure and some reinforcement works. All intervention approaches were determined in light of the principles outlined by Brooker & Stone, Davies, and Bollack in Chapter 2. All contemporary additions in and on the castle were constructed using lightweight construction and can be removed as needed without damaging the existing structure. The concrete seating units, which are a heavier intervention compared to the other additions, were constructed mainly in the outer part of the castle where there are no

remains of the original building.

Keçi Castle is a place of interest where visitors can climb and get picturesque impressions, even though it is in a state of plain ruin where no interventions have been made for adaptive reuse. The proposed interventions are planned with the aim of intensifying, increasing and preserving this function. (Figure 4.4)

4.4. Design of the Adaptive Reuse

Based on the traces of the outer castle walls, which were completely destroyed on the western facade of the castle, seating units with similar characteristics in shape and volume were placed on the original walls. Since the castle structure itself and the interior of the castle are for visiting and observation functions, the outer castle area was considered more suitable to fulfill functions such as resting and waiting. The sloping and polygonal shape of the concrete mass that defines the seating area represents the demolition of the outer castle wall and its blending with the topography, but at the same time shows its existence today. Considering that the entrance to the castle was from the same facade of the original structure and that this is the first facade encountered when reaching the castle, this area defines a welcoming space. (Figure 4.6)

The western wall of the inner castle structure is the first facade wall that was completely destroyed. Due to this destruction, the castle lost its closure and protective function. Even though it does not really make any real sense today. A steel box was built on this facade, representing the recently demolished western wall. Inside this steel extension is a concrete staircase built to climb over the new addition. This staircase breaks through the inner facade of the wall and protrudes outward, allowing circulation in two directions. When the restitution projects of the building and the photographs taken before the west wall was demolished are examined, it is seen that the entrance to the castle is from the west wall. For this reason, in the new addition, access to the interior of the castle was provided through the openings on both the interior and exterior of the steel box addition. There is no light source inside the steel box addition, with the exception of the stairwell and entrance openings. This design creates a semi-dark circulation area inside the steel box addition. This is a strong reference to life in the castle structures. The archer openings seen in the restitution projects show that the west facade wall is in a structure that can be climbed over. In this context, the goal is

to experience the new addition by walking over it. This new addition does not make any structural contact with the existing building. It is placed in the space left by a wall that has completely collapsed and no longer exists, to represent it. (Figure 4.6) (Figure 4.7)

When the interior defined by the castle is reached, almost no remains can be found, except for the remains of an arch from the part where the soldiers' wards were located that also stated in the restitution project. This interior space, known as the ward, is defined by the wooden flooring covering the area where the place is located and a permeable wooden top cover that can be called a pergola. This wooden structure, which touches the northern interior of the castle, appears from the outside as a mass that indicates that there is an interior space there, while at the same time forming a corridor through which visitors can circulate. (Figure 4.9) (Figure 4.10) (Figure 4.11)

There is a remnant of a staircase belonging to the original building, which is partly destroyed, located at the eastern end of the pergola addition that defines the ward. Metal steps have been placed on this staircase, which shows that it is possible to climb over the northern facade of the inner castle, both to attract the attention of the visitors and to protect the remnants. This contemporary addition tells visitors that these stairs are climbable. However, the circulation area on the fortification wall at the point reached by the stairs has not survived today. For this reason, a balcony extension was designed, parasitically located on the exterior of the northern wall of the inner castle. Thanks to this addition, the remnant of the staircase that has survived to the present day has regained its original function in a similar way and a viewing area has been created from which visitors can experience the location and altitude of the castle. (Figure 4.10) (Figure 4.12)

4.5. Technical Features

The seating units on the west side of the outer castle were placed on the traces of the outer tower walls so that they draw the same frame. While constructing the mass representing the outer castle walls, a concrete material that is similar in color and texture to the natural stones that make up the building was preferred. There are wooden units placed on this mass to provide a seating function. Thanks to the wooden material, which does not accumulate heat as much as metal or concrete, visitors can use the seating units even on hot days. The polygonal shape, which provides for the integration

of the concrete mass defining the seating area with the terrain, was achieved by using the molding method.

The addition, called the steel box, was built entirely of Corten panels, with the exception of the concrete staircase. This addition, which has no contact with the existing structure, is able to stand on its own. The concrete staircase and the steel box, which is attached to the inner wall of the annex, support each other. In the circulation areas of the annex, light steel cable railings were preferred to ensure the safety of visitors and to represent the openings of the archers.

Since the upper cover of the ward section will partially come into contact with the existing structure, it was desired to minimize the load to be transferred to the original walls, therefore wooden material was preferred instead of steel material. At the same time, since it represents a much lighter volume than the steel box extension representing the western wall, the hierarchy between the extensions is provided by the material separation.

The steel staircase attachments climbing up the north wall and the steel balcony extension hanging on the same wall were built with steel material for protection and durability. There is a light railing system on the steel balcony extension, as in the steel box extension.

4.6. Schematic Descriptions and Photos of Interventions



Figure 4.4. Site plan of Keçi Castle. Retrieved from Google Earth in February, 2022

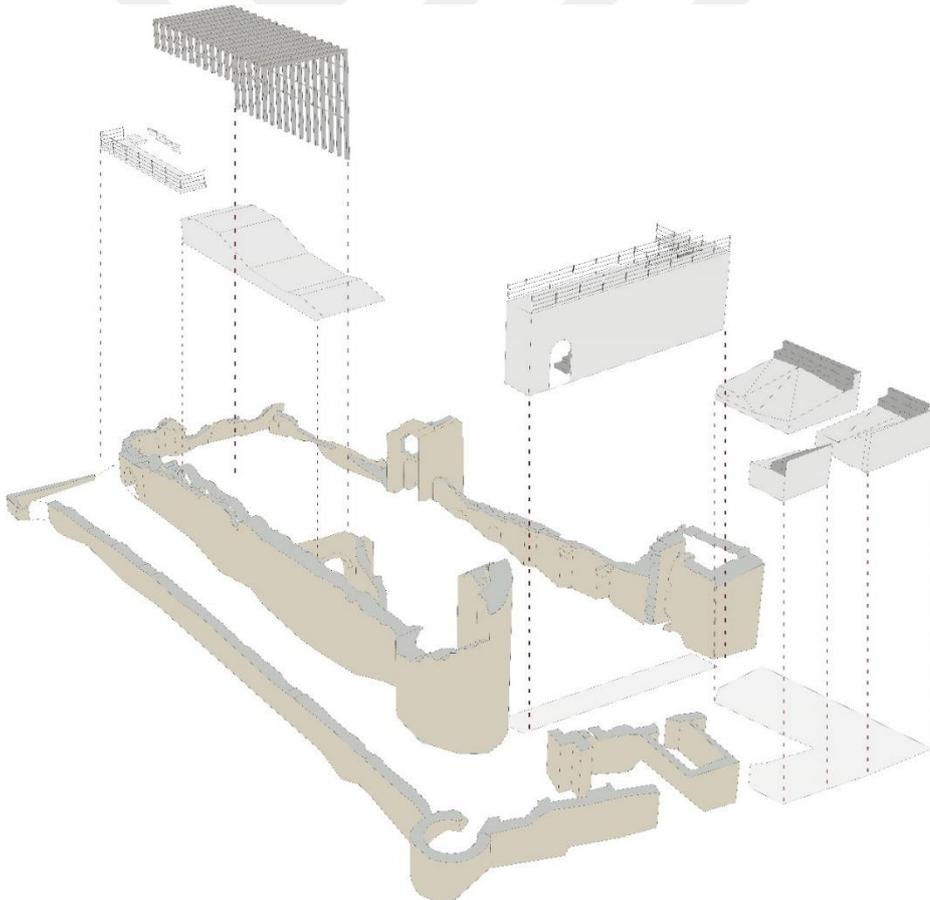


Figure 4.5. Diagram showing proposed adaptive reuse interventions to existing structure.



Figure 4.6. Top view of proposed adaptive reuse interventions to existing structure.



Figure 4.7. Concrete resting area at the western end of the outer castle, seating units and a steel box extension built to replace the demolished west wall of the inner castle.



Figure 4.8. The view of the steel box extension and the concrete staircase from inside the castle interior.



Figure 4.9. Interior view of the castle over the steel box addition.



Figure 4.10. Addition of pergola and wooden flooring defining the ward area and steel box addition at the back.



Figure 4.11. The ward part and the remnant of the existing staircase.



Figure 4.12. Addition of pergola and wooden flooring defining the ward area from another perspective.



Figure 4.13. The steel balcony extension on the north wall of the inner castle and the pergola legs placed on the wall.

CHAPTER 5

CONCLUSION

The preservation of buildings with high historical and cultural value is a subject of careful research and discussion in the discipline of architecture. These structures serve as a bridge between the past and the present, but since they have existed for a very long time, they are worn out over time as a result of various factors, and they are partially or completely destroyed. In cases where this wear and destruction cannot be prevented, the structure that has suffered a certain amount of damage is considered a ruin. A ruined building should not be sacrificed even if it cannot maintain its original function. The destruction of a building does not cause the building to lose its cultural heritage value or historical value. These types of buildings, in addition to their historical and cultural heritage values, acquire a "ruin value" with the destruction and deterioration they have suffered. Although the protection of this value falls within the scope of certain occupational groups, conservation as a concept is considered a cultural activity on behalf of the whole society.

All of the deteriorations of the building, which was considered a ruin, should now be included in the building itself and the building should be considered a whole with these deteriorations. No repair, completion or reintegration intervention should be applied, except for the strengthening works carried out in order to prevent future wear and deterioration. However, restoration and reconstruction interventions, which have been accepted as the most traditional methods throughout the history of conservation, find a great response in the society and can easily get the approval of the society. Conservation interventions performed outside of restoration and reconstruction, even if they contain theoretically correct approaches, have difficulty in being accepted and may even be seen as practices that are strange and unacceptable by the society. In particular, contemporary addition interventions designed with contemporary materials are more difficult to be accepted in society, even if they are theoretically and technically correct.

Restoration and reconstruction practices, which are widely accepted and to a certain extent correct, may not be the best approach when it comes to ruined structures because repairing the damage of a ruined building and rebuilding it in order to restore it may

mean destroying the historical value of these buildings. Therefore, the destruction of the building may cause it to lose its ruin value. Whereas a building that is considered a ruin, should be preserved as a ruin. The most valid way to provide this protection is to keep the structure as it is. However, the original functions of these structures may not be suitable for today's life. Especially castle structures are structures that do not need their original functions today and can no longer serve their original purpose, even if a high level of protection is provided. For this reason, the most effective method for the protection of these structures is to give these structures a new function and to provide a new use that serves today's needs. These structures, which have a very high potential for picturesque use due to their location, can be transformed into places that can be visited, experienced and used for social and cultural purposes according to the adaptive reuse design project. While this transformation allows the building to continue to maintain its historical document quality, it ensures that although it is in ruins, it is brought into today's life and preserved in this way.

Adaptive reuse methods differ in the scope of interventions applied. There are some studies that classify this diversity in the literature. These studies, which classify contemporary strategies and implementation methods in the context of interventions, include all building typologies that can be adaptively reused. Adaptive reuse approaches in some sources were classified especially on the basis of ruins only. There are many differences and common points in the adaptive reuse approaches applied on the ruins. Although the applications made to the buildings were classified into different groups by the strategic classification, interventions were made with approaches that did not destroy the ruined structure of the building and respected the original texture. The contemporary interventions added by the re-functioning consist of buildings with different qualities to the old building, with references made to the original condition of the building and its existing texture in the positioning and design decisions of the buildings.

This study explains the emergence of ideas that can be considered theoretically important in the context of conservation and adaptive reuse, as well as their relationships to each other, and reduces the concepts of conservation and adaptive reuse to the specifics of castle ruins. The recently implemented Szatmáry Castle (Hungary), Castelo Novo Castle (Portugal), Tossa de Montbui Castle (Spain), Pombal Castle (Portugal), Doria Castle (Italy) and Morella Castle (Spain) adaptive reuse

projects analyzed within the framework of the abovementioned strategies and approaches. Finally, in the light of these compiled examples and approaches, proposals for the adaptive reuse of the castle ruins of Selçuk Keçi Castle (Turkey) are presented to increase the acceptance rate in the society by basing the validity of the conservation interventions realized with contemporary additions which is provide a protection of the ruin castle structures, add value to them, make them visible and provide the opportunity to define a new function on these theoretical foundations and example projects and also to create a guide for similar adaptive reuse projects that can be prepared in the future.



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