

**Reuse Potential of Three Monuments in the Walled  
City of Famagusta within Cultural Tourism  
Perspectives**

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## **ABSTRACT**

It is undeniable that heritage buildings are containers of culture and identity of a region. Sustaining these buildings, through conserving them with their original characters, is necessary to protect the culture and the traditional lifestyles. In some cases, conserving and restoring old buildings, without adapting them, leads to lose some of their values, such as historical and economical values. Besides, if historical buildings are left without re-functioning, they become obsolete and deteriorated. Adaptive reuse of existing buildings can be one of the suitable treatment methods, to conserve the old buildings for fitting their present life to serve social purposes; whilst remaining as self-financing through giving them new functions. The new functions are expected to respect the values of buildings, history of buildings and their surroundings and also consider the architectural characters of them.

Due to its geographic position, Cyprus had been attacked many times and became the significant centre of cultures, histories and different architectural styles. Therefore, protecting these significances for the next generations is necessary. Political and economic problems, regarding North Cyprus, lead to the financial limitations to conserve historical and heritage buildings. Hence, cultural tourists can play an important role as a tool for conserving heritage buildings in North Cyprus.

The main aim of this study is the determination of the appropriate function for adaptive reuse of three monuments in the Walled City of Famagusta, which are selected by the Technical Committee on Cultural Heritage of Cyprus for being 'financially supported by EU and implemented by UNDP-PFF' determined by

Technical Committee on Cultural Heritage of Cyprus. The reason for choosing this aim is, that inappropriate functions for historic buildings in this region, can lead to destroy the identity and culture of the Walled City of Famagusta. The methodology which is chosen for this aim is evaluation survey and questionnaire.

This study covers the theoretical background of conservation, adaptive reuse and also cultural tourism as financial income for conserving heritage buildings with the purpose of finding features which adaptive reuse projects should have. In order to analyse the three monuments and outline the reuse options according to historical and architectural features and also heritage values, a framework is created. Besides, given the fact that participation of the actors is a vital part of successful adaptive reuse projects, asking opinions of tourists, locals and experts is included as part of framework to find appropriate function for adaptive reuse of three monuments. The conclusion of this thesis illustrates the results which are achieved from both analyses and questionnaires for proposing appropriate functions for the three selected monuments.

**Keywords:** Conservation, Adaptive Reuse, Cultural Tourism, Appropriate Functions, Othello Tower, Martinengo Bastion, Ravelin Bastion.

## ÖZ

Tarihi değeri olan binaların, bir bölgeye ait kimliği ve kültürü barındırdığı, tartışılmaz bir gerçektir. Kültürü ve geleneksel yaşam tarzını korumak adına, bu binaların kendine has özellikleriyle korunarak sürdürülmesi gerekmektedir. Bazı durumlarda, eski binaların adapte edilmeden korunması ve restore edilmesi, tarihi ve ekonomik dahil olmak üzere birçok değerın kaybedilmesine neden olmaktadır. Ayrıca, tarihi binaların yeniden kullanılmaması durumunda, binalar kullanışsız bir hale gelir ve yıpranır. Tarihi binaların günümüze uygun hale getirilerek sosyal amaçlara yönelik kullanılması ve aynı zamanda yeni işlevler kazandırılarak kendi kendini finanse etmesi için, mevcut binaların yeniden işlevlendirilmesi, uygun bir koruma yöntemi olabilir. Yeni işlevlerin, binanın değerlerine, tarihi ile çevresine saygı göstermesi, ve mimari özellikleri de göz önünde bulundurması beklenmektedir.

Coğrafi konumu nedeniyle Kıbrıs, birçok kez saldırılara maruz kalmıştır ve bu nedenle kültürlerin, tarihlerin ve çeşitli mimari tarzların önemli bir merkezi haline gelmiştir. Sonraki nesiller için bu önemli değerlerin korunması önem taşımaktadır. Kuzey Kıbrıs ile ilgili politik ve ekonomik sorunlar, tarihi binaların korunmasıyla ilgili finansal kısıtlamalara neden olmaktadır. Bu nedenle, kültür turizmi Kuzey Kıbrıs'ta tarihi binaların korunması için önemli bir araç olarak rol oynayabilir.

Bu çalışmanın temel amacı, Avrupa Birliği tarafından finanse edilmek ve UNDP-PFF tarafından uygulanmak üzere Kıbrıs Kültürel Miras Teknik Komitesi tarafından seçilen ve Gazimağusa'nın Suriçi bölgesinde bulunan üç yapı için yeniden kullanım doğrultusunda uygun olan işlevi belirlemektir. Bu amacın belirlenmesindeki neden,

bu binalara yönelik uygun olmayan işlevlerin seçilmesiyle, Suriçi'ndeki kültürün ve kimliğin zarar görmesidir. Bu çalışmada kullanılan yöntemler anket ve değerlendirme anketidir.

Çalışmada, yeniden işlevlendirme projelerinde bulunması gereken özelliklerin belirlenmesini sağlamak üzere, koruma, yeniden işlevlendirme ve tarihi binaların korunmasında ekonomik gelir sağlayan kültür turizmi hakkında teorik bilgiler verilmiştir. Üç yapının analiz edilmesi ve tarihi, mimari ve miras değerlerinin korunması için yeniden kullanım seçeneklerini belirlemek üzere bir çerçeve oluşturulmuştur. Ayrıca, başarılı yeniden işlevlendirme projelerinde katılım hayati bir rol oynadığından, üç adet anıt bina için uygun işlevler bulmayı amaçlayan bu çerçevede, turistlerin, yerel halkın ve uzmanların görüşlerine de yer verilmiştir. Bu araştırmanın sonuç bölümünde, seçilen üç yapıya uygun işlev önerisi sunmak için, analiz ve anket sonuçlarından elde edilen sonuçlar yer almaktadır.

**Anahtar Kelimeler:** Koruma, Yeniden İşlevlendirme, Kültürel Turizm, Uygun Fonksiyonlar, Otello Kulesi, Martinengo Kalesi, Ravelin Kalesi

*I dedicate this thesis to God almighty, to my husband and my best friend Mohammad Rajabi and also to my parents Yahya Joudifar and Nahid Fakheri because of their patience and encouragement during this study.*

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# Chapter 1

## INTRODUCTION

Historic sites and buildings are one of the most important evidence of the past lifestyle. Historic and prehistoric buildings, building interiors, structures, monuments, works of art or other similar objects such as areas, places, sites, neighborhoods, and cultural landscapes are eligible for determination as historic landmarks or heritage buildings if they possess one or more values or qualities (Savvides, 2013). The conservation of these worthy places is in a sense the preservation of culture and heritage values of a region (İpekoğlu, 2006). In addition, these buildings can help us to understand the civilization of the past, connected the past to present and show what has happened in different past periods. The main argument for conserving heritage is to enliven cultural assets by evaluating their architectural, historical, environmental, visual and aesthetic characteristics. Moreover, conservation of heritages, helps make national identity, which enable people to describe who they are. Calder (2015) argued that, successful conservation attempts to protect what we value, and support sustainable development practice.

Today, one of the most controversial issues is, conservation for contemporary uses. Conflict between protecting existing historic areas and also new changes in contemporary lifestyle has set up the various approaches in conservation theme (Nasser, 2003). One of the conservation terminology that can connect historic features and new life is adaptive reuse activities. Adaptive reuse is a component of

different ways for conserving historical buildings that can be exerted for new goals. This process is a main role in sustainable developments of societies. Furthermore, adaptive reuse is one of the appropriate ways to alter old buildings that have beneficial strategies in terms of sustaining buildings for constructing them. Moreover, one of the productions of adaptive reuse include providing physical manifestations on which identity and sense of place can be made. The results of heritage conservation and adaptive reuse activities consist of four aspects of sustainable development: environmental, economic, social, and cultural sustainability. Another achievement of reusing old buildings is to enhance the value of land and properties in that area (Stas, 2007).

Adaptive reuse of historic buildings can sustain these types of buildings for the next generations through giving them new functions. Besides, the most successful adaptive reuse projects of heritage buildings are those that regard and protect a building's significance and add a contemporary layer that provides identity of buildings for the future. Moreover, the new function of these buildings have to respect to the values and history of a building.

Walled City of Famagusta in North Cyprus is one of the house of monuments, historic sites and heritage buildings in this island. Amongst many valuable heritage buildings, Othello Tower, Martinengo Bastion and Ravelin Bastion are the historic buildings, which are 'financially supported by EU and implemented by UNDP-PFF' determined by Technical Committee on Cultural Heritage of Cyprus. Moreover, these buildings approximately are in a same situation in conservation plans. In the Walled City, Othello Tower has been recently conserved by UNDP-PFF,

additionally, UNDP will initiate conservation of Martinengo Bastion and Ravelin Bastion soon.

It is generally recommended to reuse them with new functions for the current uses. These buildings not only have to be adapted due to the requirements of community, but also they have to represent their original features after conservation and renovation with their new functions.

### **1.1 Problem Statement**

Conservation of the heritages of a region is one of the most essential issues of communities. The architectural and valuable heritage of Cyprus is astonishingly rich, from the Neolithic period until the current centuries (Hyland, 1999). Since Cyprus during its lifespan had many occupiers, which all left part of culture to the island, it has become multi-cultural country. Although Cyprus is divided into two, it is undeniable that the Island has a common history and culture. Given this island's rich historical backgrounds and wealthy buildings, it is required to conserve and protect their cultural heritage for the next generations. As time passed, adverse weather conditions and human reasons such as wars, have led to damage on the architectural heritage buildings in Cyprus. "Especially, earthquakes that occurred in several times have become effective on the obsolescence of historic buildings" (Ozay & Ozay, 2004, p: 273). Hence, these significant buildings need to be conserved to remain for the future generations to illustrate the history, identity and culture of Cyprus. One of the method for conserving heritage buildings is adaptive reuse of them. In adaptive reuse projects selecting the appropriate function matters as much as how buildings can be adapted to new functions, based on their economic, social, cultural and environmental values, with the aim of preserving them. Re-functioning has been the

oldest methods for conserving existing buildings in Cyprus parallel to the world. Greater number of the buildings were adapted to new usage during the Ottoman Period in this island. On the other side, the first laws to preserve historic buildings and cultural heritage during British Period were prepared and have been progressed and improved in the other periods. Nowadays, conserving historic and heritage buildings through adaptive reuse has been kept, based on organizational and financial frameworks of conservation (Ozay & Ozay, 2004). “UNDP works to support the ongoing peace and confidence building process by promoting initiatives that encourage dialogue and cooperation between the communities of Cyprus” (UNDP, 2016). In addition, conservation works of historic buildings are fully funded by the European Union and implemented by UNDP in this island.

In terms of adaptive reuse of three selected buildings; Othello Tower, Martinengo Bastion and Ravelin Bastion; the problem which designers are faced with is, what will be happen if they do not have appropriate functions after conservation and restoration. The problems that are associated with assigning the inappropriate new functions are; since adaptive reuse must respect to a monument’s original characters, unsuitable functions cause values of selected buildings to be ignored and also Walled City’s culture, identity and intangible values will be at the danger to be lost. In addition, if ideal function is not given, the number of visitors to North Cyprus or as specific expressed, to the Walled City of Famagusta, will be decreased, which results in reduction of income that is brought to the historical buildings as financial support, in order to protect these buildings for the next generations.

## **1.2 Research Questions**

Three significant buildings in the Walled City of Famagusta, which are selected as case studies; Othello Tower (Otello), Martinengo Bastion (Çifte Mazgallar), Ravelin Bastion (Akkule), that are 'financially supported by EU and implemented by UNDP-PFF' determined by Technical Committee on Cultural Heritage of Cyprus. In order to preserve for continuity, these buildings through adaptive reuse with the aim of sustainability for the future and also according to problem statement the main question arises: 'Which new functions are appropriate for Othello tower (Otello), Martinengo Bastion (Çifte Mazgallar), Ravelin Bastion (Akkule) located in the Walled City of Famagusta, within the contemporary adaptive reuse concept?' This will be achieved by examining the other research questions, which are addressed below:

1. How can designers propose the ideal functions for these three buildings to be in recognition of original functions?
2. Which types of value do these three case studies have? And also which types of potential do they have?
3. Are these functions compatible with modern needs of the local community and tourists in Cyprus?
4. Finally, can these new functions lead to attract heritage tourists in North Cyprus and enhance tourism development as a financial income for conservation of historic buildings to this region?

## **1.3 Aim of The Study**

To pursue the research questions, the main aim of this study is the determination of the appropriate function for adaptive reuse of three monuments in the Walled City of



Famagusta, which are selected by the Technical Committee on Cultural Heritage of Cyprus for being 'financially supported by EU and implemented by UNDP-PFF' determined by Technical Committee on Cultural Heritage of Cyprus. In order to achieve this aim, following the decision making process is required. The decision making process necessitates initially the heritage values analysis of three selected buildings to investigate the significance of them to guide the conservation and reuse of them; followed by the historical features analysis of these buildings with the purpose of displaying the evidences of architectural changes over time and evolution of Cypriot culture; and architectural features analysis with focus on determination of openings, integrity of spaces, mass information, condition of environments; and lastly taking opinions by the contribution of locals, tourists (cultural tourists and educational tourists) and also experts.

#### **1.4 Methodology and Limitations**

In this thesis, based on the research questions and previous studies in literature review, the study is divided into two parts with different methodologies for collecting data.

The first part includes literature survey such as books, articles and webpages in order to examine the theoretical background of related topics (architectural conservation, adaptive reuse of historic buildings and cultural tourism as a tool to financially support conservation heritages), in order to create the framework for realizing the aim.

The next step is to investigate the re-use potentials of selected monuments from the Walled City of Famagusta which are Othello Tower (Otello), Martinengo Bastion

(Çifte Mazgallar), Ravelin Bastion (Akkule). These are the monuments in Walled City of Famagusta which recently took financial support from UNDP-PFF for being restored or consolidated by the suggestion of the Technical Committee on Cultural Heritage of Cyprus.

The potentials are extracted by the analysis of the heritage values, and historical and architectural features of three selected buildings in the light of the theoretical framework. In order to evaluate this part, besides research based on direct observations a literature survey has also been used. Observational data are collected by taking photos and sketches, and investigating the architectural drawings taken from UNDP-PFF.

The next part is to propose appropriate functions in order to sustain these three buildings for the future generations through participation of actors (tourists, locals and experts). For achieving the information about the preference of actors, structured questionnaire is the methodology used for collecting data.

Data evaluation includes mixture of both Qualitative and Quantitative methods. Qualitative methods are used for the analysis of architectural, historical features and heritage values of each building to discover the possible suitable functions for cases, based on the potentials of the buildings.

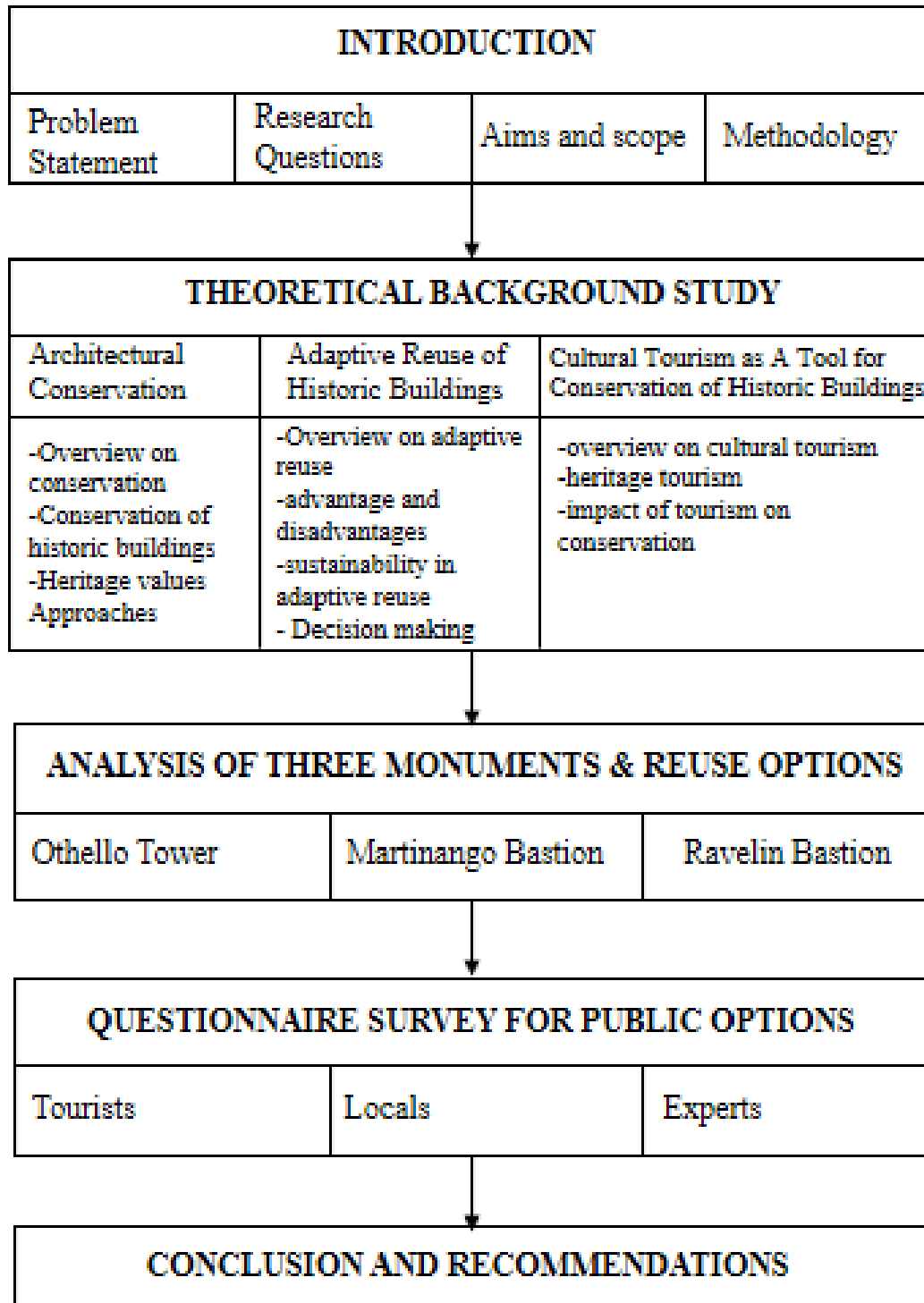
Qualitative methods also include interviews with UNDP-PFF representative in order to collect data on conservation projects of the three monuments.

On the other hand, quantitative methods are used through public participation surveys in the form of structured questionnaires, in order to illustrate and compare the percentages of people's preferences for determining the most appropriate new functions for cases. The experts include conservation project designers of UNDP-PFF, experts from Department of Antiquities, EMU conservation experts, Technical Committee on Cultural Heritage of Cyprus, tourist (educational tourists, cultural tourists) and locals. The data and their relationships have been analyzed by using computer assisted quantitative data analysis software (MICROSOFT EXCEL).

### **1.5 Structure of Thesis**

The (Table 1.1) illustrates the structure of the present thesis. In this chart the main subjects of each Chapters and related sub subjects are presented visually in a systematic way.

Table 1.1: Structure of study



## Chapter 2

### THEORETICAL BACKGROUND STUDY

**Introduction of the Chapter:** In this chapter, conservation of historic buildings and the themes related on this act are discussed. Besides, one of the important terminology of conservation, adaptive reuse, and also its effects on the historic buildings are considered. Based on aim of this study, the important part of this chapter, which is needed to consider, is decision-making in adaptive reuse projects. In addition, the third part of this chapter, is impacts of cultural tourism in conservation and adaptive reuse activities.

#### 2.1 Architectural Conservation

Based on the meaning of the word ‘conservation’ in Cambridge English Dictionary, conservation is “everything done to keep works of art or things of historical importance in a good condition”. Conservation is the act of preventing decay and deterioration. It encompasses all processes that lengthen the life of cultural and natural heritages, with the aim of protecting them for future, for who look at historic buildings with wonder the human and artistic messages in such buildings possess (Fielden, 1994). The protection and restoration of architectural works, archaeology, arts and artifacts from ancient times are also known as conservation. In addition, architectural conservation includes the process employed in prolonging constructed heritage by certain interventions (Kolo, 2015).

This sort of protection can be expressed as a procedure of interpreting, understanding and managing the architectural heritage to deliver it safely to the posterity (Forster, 2010). A lot of historical buildings are much more fascinating and have greater characters when compared to their modern counterparts, having been built by skillful craftsmen who use natural and very high quality materials (Hegazy, 2015).

Furthermore, Parks Canada defines conservation in (2010) as processes that purpose to safeguard the heritage value of a historic place and extend its physical lifespan. This process regularly includes physical intervention to prevent decay, and includes the use of and caring for resources intelligently (Calder, 2015). Moreover, Boussaa (2010) states that “the main intent of conservation is about improving and upgrading the lives of the people in historic places and not just a matter of restoring bricks and mortar” (Boussaa, 2010, p:307). Its main aim is to achieve the community’s identity, sense of place and culture of society without decreasing people’s inhabitants’ daily requirements. Given the definitions of conservation, it seems that the main objective of these activities can have several aspects such as educational, legal, cultural, technical and economic aspects which are expressed in (Table 2.1).

Table 2.1: The main reasons of conservation of old buildings from Forster, 2010, p: 102.

Cultural	Retaining a valued part of the built environment because of its architectural or historic significance.
Educational	Using the building as a teaching source heritage tourism and also attracting visitors to an area.
Economic	Conservation can create new jobs; it is more labor intensive than new build; any money spent on conservation schemes generally stay more local.
Legal	Compiling with local and national planning policies and legislation.
Technical	Preserving the structure and fabric to minimize unnecessary repairs in future.

### **2.1.1 Conservation of Historic Buildings**

The considerable distinctive characteristic of historic cities is apparently their historic buildings with historical significances. Historic significance should encompass several aspects of our city's history and evolution (Slay, n.d.). Prehistoric sites have been found in most part of a district to reveal characters that can sustain both ordinary and ceremonial life. Some of the structures which were built and inhabited by early residents remain till present (Wirth, 1991).

Given the significance of historic buildings, it is crucial that under any circumstance we should protect and conserve them. The historic buildings are at the danger of destroying, since conserving these building is vital issue for any region. As earlier discussed, one of the significance of historic building, historic urban sites and traditional houses is that they are the most vital evidence and documents of the previous life style. Therefore, preservation of these traditional values in the framework of revitalization and conservation of architectural heritage is in a sense the preservation of the areas' culture. The main target of conservation of historic places is to invigorate cultural building through the evaluation of their historical, artistic, architectural, ecological and visual characteristics. This assessment study, which is crucial in the framework of conservation plans, is an unavoidable stage to decide the ideologies of the plans and approaches as well (İpekoğlu, 2006). "Conservation of historic places is not an isolated and individual project; it includes a series of projects, which have physical, environmental, social, cultural and also economic impacts" (Orbaşlı, 2000, p: 18); (Boussaa, 2010, p:307).

Additionally, more reasons for the conservation of historic buildings are addressed below:

- Historic heritage is an inimitable expression of the richness and diversity of the past which is a unique resource;
- When the original use may no longer be viable, the upkeep, reworking and reuse of architectural heritage will yield considerable environmental, aesthetic and economic benefits;
- The abundance of existing built environment is a source inspiration and meaningful precedent;
- Cultural tourism raises as a result of these architectural heritage buildings which plays significant part in the economy (Kolo, 2015);
- Just like written documents, structures can be read as historic evidence and can help in better understanding of the past conditions and how much the society has changed; and also
- According to Kolo (2015), “the conservation of these architectural heritages requires removing guesses about existing buildings and thinking more carefully on how they can be gainfully used or improved so as to highlight their qualities” (p: 9).

The following are key contributors and main requirements needed to succeed at conservation process in conserving historic buildings; administrator or owner, art/architectural historians, archeologists, architects, contractors, conservators, civil, environmental engineers, mechanical and electrical engineers, historic garden engineers master craft worker, material scientist, town planner, curator and quantity surveyor (Hegazy, 2015).



These are organizations and guidelines which come together to make the common conservation practices of today. Some principles and roles are organized according to places, architecture, heritage (tangible & intangible), natural and site conservations. These roles which are defined in Charters, have been improved during times and assigned to different types of heritages' conservation. These Charters and roles can be seen in Appendix A.

Some of the institutions that concentrate on conservation issue and the organize conferences and seminars on the theme of preservation of sites and old buildings are:

- *SPAB, date founded (1877)*
- *ICOM, date founded (1946)*
- *ICCROM, date founded (1956)*
- *Europa Nostra, date founded (1963)*
- *ICOMOS, date founded (1965)*
- *UNDP, date founded (1966)*
- *UNESCO, date founded (1972)*
- *TICCIH, date founded (1973)*
- *Aga Khan trust for culture, date founded (1987)*

### **2.1.2 The Role of Values in Architectural Conservation**

‘Value’ could mean cost, currency, price, capability, merit, suitability and the validity of a document or goods (Throsby, 2000). Moreover, ‘value’ is used in two senses. The first as moral, principle, ideas serving as guide to actions (collective and individual) and secondly as references and indicators to the features and qualities appreciated in things, particularly the positive ones (prospective and actual). Value is

relatively implied depending on time, conditions and it relates to culture and nation of people (Mason, 2002).

Historic properties are more significant than others in any urban environment. Although there are questions as to which takes priority in the protection of historic monuments, artifacts and buildings (Navrud & Ready, 2002). It is nonetheless proper for different levels of significance to be reflected in conservation programs, actions and priorities which should be to the detriment of properties with more localized or modest importance and also value (Wirth, 1991). Since “Conservation must preserve and if possible enrich the message and values of cultural property” (Douglas 2006, p: 5). These values are used for determining both the priority to be accorded, the proposed intervention and identity set up of individual treatment. These priorities obviously influence on culture of each historic structure. Furthermore, the important point in conservation decisions of heritage buildings is using heritage values as a point of reference (Mason, 2002).

There are various types of values, and the connections between these values are complicated, that a more effective means of managing this theme could be a neutral, clear and well upon manner of describing all the heritage value types. These types of values are categorized by different authors in different ways, but their meanings are similar. These different categories are illustrated below in (Table 2.2):

Table 2.2: Different categories of conservation values, Source from the Burra Charter (1999), Mason. R (2002), Filden. B (1994) Adapted by Author (2016).

Alois Riegl 1905	Burra Charter 1999	Bernald Filden 1994	Jukilehto 2002	Lipe 1984	Frey, B.1997	Randall Mason 2002	English Heritage 1997					
Commemorative value	Historic value	Historical value	Historical values	Historic value	-	Educational value	Historic value	Cultural value				
	Intentional commemorative value	-		Symbolic value	Symbolic value		-	Symbolic value	-			
	Age value	-		Age value	-		-	-	-			
	-	Scientific value		Technological/scientific value	Technical value		-	-	-			
Present-day values	Art/ Artistic value	Artistic value	Aesthetic value	Architectural value	-	Economic value	Sociocultural value	-				
	Newness value	-		Documentary value	Informational value			-	Educational value	-	Educational/Academic value	
	-	-		-	-			-	-	-	Resource value	
	-	-		Scarcity value	-			-	-	-	Recreational value	
	-	-		Archaeological value	Archaeological value			-	-	-	-	
	-	-		Aesthetic value	Aesthetic value			Aesthetic value	-	Aesthetic value	Aesthetic value	
	-	-		Townscape/Landscape value	Environmental value		-	-	-	-		
	-	-		Use value	Ecological value		-	-	-	Nonuse value	-	
	Use value	-			Economic value		-	Economic value	Monetary	Use value	Economic value	
	-	-			Social value		-	-	Option	Sociocultural value	Social value	-
	-	-			Ethnic value		-	-	Existence		-	-
	-	-			Political value		-	-	Bequest		-	-
-	-	Fundamental value	-		-	Prestige	-	-				
-	-	Emotional value	Spiritual value	Spiritual value	-	-	Spiritual/Religious value	-				
-	-		Continuity value	Architectural value	-	-	-	-				
-	-		Identity value	Artistic value	-	-	-	-				
-	-		Wonder value	Human value	-	-	-	-				

In terms of table above (Table 2.2), each reference or author has classified values into various categories and each category includes different values, for instance, Fielden (1994), categorized values into three parts, such as cultural value, use value and emotional value. Each of these categories have subsets such as (emotional value: fundamental value, spiritual value, continuity value, identity value and wonder value). These subset values with similar meanings are included in different categories by different authors. For instance, historic value has been clarified in different categories such as under commemorative (Riegl, 1905), under cultural value (Fielden, 1994), under historical value (Jukilehto, 2002); or under socio-cultural value (Mason, 2002). As following, definition of each value, without categorizing them under any heading are presented;

**Socio-cultural Values:** Socio-cultural values are traditional core of conservation. Based on Mason's definition (2002), "values attached to a building, an object or place because they mean for people or social culture age, beauty, artistry or person or event that are in cultural affiliation process" (p:22). Historical, cultural/symbolic, social, spiritual/religious, aesthetic is subset of sociocultural values.

**Historical Value:** Historical value is at the base of the notion of heritage. it can result from several ways; such as, age of heritage's material, from its aggregation with events or people, from buildings' uniqueness or rarity, from its qualities of technology, or from buildings' potential of documentaries. "One important sub group of historical value is educational or academic value. This type of historical value is the potential to gain knowledge about the past in the future" (Mason, 2002, p:23). The other crucial sub group of historic value according to Mason in (2002) is, artistic

value, which is based on a building's being unique, being the best or being good instance.

**Cultural/Symbolic Value:** At the core of every culture are history and a robust heritage; ideas, habits, and materials, handed down through time. Therefore, cultural values are historical values and a fragment of the notion of heritage because no heritage is void of cultural value of some sort. Cultural value helps in building cultural connection today, could be, ethnic, historical, and political or related to other meanings of living together. A distinct kind of symbolic/cultural value is the political value, which is the heritage usage to form or sustain civic relations, ideological causes or protests. These values come from the association between the physical environment and civic/social life; the ability of heritage sites to inspire positive reflections and political conducts that forms civil society. Landscape, ecological values and townscape are also important factors in cultural values (Peyravi, 2010).

**Social Value:** The idea of social capital is where this value typically comes from. The site usage for social meetings (like celebrations), games, picnics, markets or activities that are related but that do not actually directly capitalize on the site's historical values but rather on its public-space or shared-space qualities contributes immensely to the social values of a heritage site. The social values of heritage facilitate social connections, networking, and the likes which are not particularly related to the central historical values of the heritage. Social value likewise comprises of the 'place attachment' characteristics of heritage value. The community identity, social cohesion, or other affiliation feelings that a social group has to a place is called place attachment (Mason, 2002). The buildings' identity can create a sense

in which the historical background of the country can be understood by people (Feilden, 1994).

**Spiritual/Religious Value:** Sometimes, heritage sites are highly connected or impregnated with spiritual, religious and all forms of sacred significance. These values could have come from philosophies, teachings and beliefs of organized religion. When the sites are symbol of ancient tradition of ethnics, they also secular experiences of wonder and solemnity triggered by visiting the place (Mason, 2002).

**Aesthetic Value:** This is talking about to an extensive sort of qualities. It could be the visual qualities of a heritage, the development and design of an object, site or building. This category can be interpreted more extensively to include sound, smell, sight, as well feeling. In essence, a heritage building might be perceived as valuable as the sensory experience it provides. The design and development of an object, site, or building can be a basis of aesthetic value. Aesthetic value can be considered in terms of façade, layout and design (Taylor, 1999).

**Wonder Value:** The feeling of the people when they see the structure, how much curiosity it awakens is the wonder value of the heritage site (Sayce et. al, 2009).

**Continuity Value:** Historical building's continuity reveals the durability of constructions that must be carried into future (Sayce et. al, 2009).

**Universal/ Exceptionality Value:** The exceptional universal value is the natural and cultural significance that is as outstanding as to go beyond boundaries of nations so much so to be of common significance for current and future generation. In this case,

successfully protecting of this heritage is of utmost significance to the international community (Jokilehto, 2007).

**Economic Value:** This is one important way community identify, evaluate, and resolve on the comparative value of anything. This value is more than the amount of profit, for instance monuments it could be equivalent to the value of the building or cost of conserving them. There are two sub-groups in economic value. They are the use (market) value and the non-use (nonmarket) values (Mason, 2002).

- **Use Value/ Functional (Market Value):** Also called “assigned a price”, this value of material heritage refers to the services and good coming from it tradable and priced in current markets. The purpose of historical structures can also be considered from the building’s economic condition, if the structure can generate income then the building’s survival is easier (Peyravi, 2010). Besides, this value can increase the economic values of both buildings and their neighborhood.
- **Nonuse Value (Nonmarket Value):** What the society enjoys from the site being preserved is the nonuse value. These might be driven by a desire that the location be open to visitors (altruistic values), or that the place be conserved for coming generations (bequest values), or that people not visiting now may choose to visit later (option value), or just that the place is being conserved even if no one ever really visits the place (existence values). The last classification of non-use benefits may be the reason why we want to

spend funds to keeping heritage goods considered too sensitive to be opened for visit by the public (Mason, 2002).

By and large, historic buildings possess intrinsic values and any nation claiming to cherish cultural accomplishment in any field has the responsibility of taking care of them. The value of historic properties necessitates the consideration of a number of factors. These types of factors are placed in order and characterized based on the acquired and inherent features of a work. Quite a few categories exist in the determination of heritage values, some of which overlap into aforementioned categories. Value is described as a set of positive characteristics appreciated in cultural sites or objects by particular groups or individuals (Abbas, 2013). Bearing in mind the values of each object, buildings and sites help to conserve them in the best way (Sayce, et. al, 2009).

Based on (Table 2.2) and definition above the table below (Table 2.3) has been prepared. It illustrates values which includes all subgroups of values. These values are collected from the values' definitions by Mason (2002), Fielden (1994), Jukilehto (2002), Peyravi (2010), Taylor (1999) and Sayce, et. al (2009).



Table 2.3: Different values, adapted by Author (2016), from Feilden (2007), Mason (2002), Jukilehto (2002), Peyravi (2010), Taylor (1999) and Sayce, et. al (2009).

Curiosity/ secular experience	Wonder	<b>Heritage's Values</b>
Uniqueness/ good instance/ rarity	Artistic	
Religious/ sacred significance/ solemnity	Spiritual& Symbolic	
Durability/ idea and habits through time	Continuity	
Documentary	Documentation	
Historical/ identity	Historic & Identity	
Archeology/ age/ scarcity	Archaeological, Age & Scarcity	
Visual quality/ sensory experience (sound, smell, sight)/ well feeling	Aesthetic	
Architectural style/ architectural details/ architectural features (mass, façade, layout)	Architectural	
Townscape/ ecological/ landscape/ view/ picturesque	Townscape, Ecological & Landscape	
Technology & materials/ academic/ knowledge	Technological, Scientific & Educational	
Potential of use/ giving function	Functional	
Use value (potential of generating income)/ none use/ non market value (altruistic, bequest, option, existence values)	Economical	
Place attachment (community identity, social cohesive) shared space/ public space qualities/ social connections/ networking	Social	
Ideological causes/ protests/ other meanings of living together / civic relations	Political & Ethnics	
Exceptionality value/ outstanding or cultural significance	Universal	

### 2.1.3 Different Approaches in Order to Conserve Historic Buildings

Various approaches are used in protecting and keeping heritage structures with each having its own distinctive method and styles, and all fall under conservation of heritage sites. Conservation is the act, governing the various practices comprised in conserving these heritage sites. Based on this, conservation can be grouped into three main parts with each having different subsets.

Table 2.4: Various terminology related to conservation, Adapted from (Frodl, 1966; Fitch,1972; Ahunbay,1996) by Türker (2002).

Conservation	Interventions	Related Terminology
Conservation	Preservation	<ul style="list-style-type: none"> <li>Protection</li> <li>Liberation</li> <li>Façade cleaning</li> <li>maintenance</li> </ul>
	Restoration	<ul style="list-style-type: none"> <li>Repair</li> <li>Consolidation</li> <li>Reintegration</li> <li>Renewal of fabric</li> <li>Replication</li> <li>Carrying</li> <li>Reconstitution</li> <li>Reconstruction</li> </ul>
	Adaptation	<ul style="list-style-type: none"> <li>Adaptive reuse</li> <li>Transformation</li> <li>Renovation</li> <li>Conversion</li> <li>Rehabilitation</li> <li>Refunction</li> <li>conservation</li> </ul>

According to the table above (Table 2.1), the level of intervention increases from top to down and the related terminologies are explained in Appendix B.

Various stages of interventions in conservation of historic buildings are defined as below:

- *Preservation*: The objective of ‘preservation’ is to keep a building or site’s current form by halting the processes of deterioration. Its individual component, integrity of a building, material, or present form can be retained through protection, maintenance or stabilization efforts (Calder, 2015).
  
- *Restoration*: “This is the act of restoring to a former state or position, or to an unimpaired or perfect condition” (Bradshaw 1995, p: 3). It is also the procedure of returning the artifact to the form in which it would have been physically (Kolo, 2015). Anamnesis, diagnosis, therapy and controls are equivalents of condition survey, identification of the causes of damage and decay, selecting of the corrective measures and regulating the effectiveness of interventions. Without establishing its possible rewards and hazards to the architectural heritage, no actions should be taken at all. For any project to be carried out on architectural heritages, it’s necessary to have a detailed comprehension of material characteristics and structural behavior.
  
- *Adaptation*: Adaptation is the practice of adjusting and altering a building or structure and /or its environment to suit/fit new situations (Chudley 1983). More precisely, adaptation can also be described as any work allowing a change in the size, use, or performance of a construction, which might include extensions, alterations, improvements and further works adapting it in some way (Douglas, 2006).

## **2.2 Adaptive Reuse**

After speaking about various types of conservation in the previous part of literature in this study, it is clear that there are differences between preservation, restoration and

adaptive reuse in terms of intervention in conservation. In this part of literature, the adaptive reuse of historic buildings and also the issues which relate to this terminology is discussed.

“Adaptive is from two Latin words, (ad) which is (to) and (aptare) which means to (fit)” (Douglas, 2002, p:1). With adaptation, heritage buildings can attain certain usefulness, therefore, such adaptation is encouraged through a combination of enhancement and conservation (Haidar & Talib, 2015). Adaptive reuse is a way of conservation of historical buildings, so they are used for new purposes, functions and performances. Thus, adaptive reuse can be described as a process of giving new functions to old buildings. Cantell (2005) defined this act as “the process by which structurally sound older buildings are developed for economically viable new uses” (p:2). Adaptation is widely understood in the light of description referring to the ‘change of use’, all-out ‘retention’ of fabric and form, and prolonging ‘useful life’ (Ball, 2002; Mansfield, 2002; Douglas, 2006; Bullen, 2007, cited by Wilkinson et.al., 2009).

There are two distinct types of restoration based on Mine (2013). Restorations that attempts to ‘save the originality’ of the building’s spatial and volumetric organization is the first one. This means that the new purpose or space program of the new usage will have to be compatible with the earlier use of the historical structure. The second type is restoration that attempts to ‘change the originality’ of the building’s spatial and volumetric organization (Mine, 2013). It is, however, undeniable that an adaptive re-use is a specific kind of refurbishment that is entirely challenging to designers even though it has been effectively carried out on a number of facilities which consist of sacred buildings, domestic buildings, government building and industrial heritage

buildings, etc. (Mine, 2013). Reutilizing of old buildings has since been as a tool for preservation of historic buildings, saving many historically significant buildings from demolition and at the same time facilitating the revitalization of neighborhoods and supporting the economic growth of older cities. The building conserved, with its significant architectural features and details preserved, can function in a new public or private capacity that meets a community's current needs while it continues to provide a real connection to the past.

Adaptation is described by Douglas (2006, p:14) as “any work to a building over and above maintenance to change its capacity, function or performance”. Adaptive reuse activities fall into different categories, which can take place ‘within use’ and ‘across use’. A case in point, an office building could go through an adaptation process and still be used as an office (a good example of ‘within use’ adaptation) (Wilkinson et.al., 2009). There are various approaches and methods for adaptation. Some may decide to use the building for the same old purpose but improve the building performance (Elsorady, 2014). Otherwise, its use might convert into residential and be categorized to be “across use” adaptation (Wilkinson et.al., 2009).

Pearson and Sullivan (1995) on the other hand discoursed another different approach to adaptive re-use; the ‘compatible reuse’ and the ‘most appropriate reuse’. The difference between the two is keeping and increasing the significance of the culture. Compatible reuse ensures that the site is not damaged nor the adaptation negatively affecting its cultural significance. In contrast, most ideal re-uses are not mostly for compatible use only, but also they might emphasize and maximize the understanding of the building's cultural significance. In order to describe clearly the adaptive reuse of historic building, a question is asked, ‘how can a building or site widely accepted

by the community as personifying the quality of corrupt be repurposed into a beneficial and productive place once again?’ (Ronda, 2011).

Improvement in both industry and commerce has led to the request for even more interior environments which are sophisticated, both for needs of leisure and work. This makes buildings becoming archaic, obsolete or redundant, which has provided a chance for restoration and re-functioning (Yıldırım, 2012). The adaptation of buildings started since the initiation of constructing. The process of a building diminishing in its utility, in line with its original purpose is called obsolescence. Too often, buildings today, which are obsolescent, are said to be ‘kept on’ by adaptive reuse. Obsolescence takes a number of shapes such as physical obsolescence, where buildings or their components wear out literally. Functional obsolescence is said to occur when the building becomes useless or unwanted for the desired purpose. Economic obsolescence happens when the economic rationale for a structure of building is no more and locational obsolescence, on the other hand, takes place when the site or location of the building is no longer appropriate (Wilkinson et.al., 2014).

Functional obsolescence is one main reason for adaptive reuse of buildings (Wilkinson et.al., 2014). Functional obsolescence occurs under four different circumstances. The first is, when the purpose for a building no longer exists; the second is when a building is no longer in form, although the purpose for a building still exists. The third is, when the systems like the heating, plumbing and electrical no longer meets present standards and codes, and the fourth is, when the historic buildings space configurations are no longer suitable for current market needs and requirements (Bond, 2011).

According to Bullen & Love (2010) there are various ideas from different authors about adaptive reuse reasons, which is illustrated in Figure 2.1.

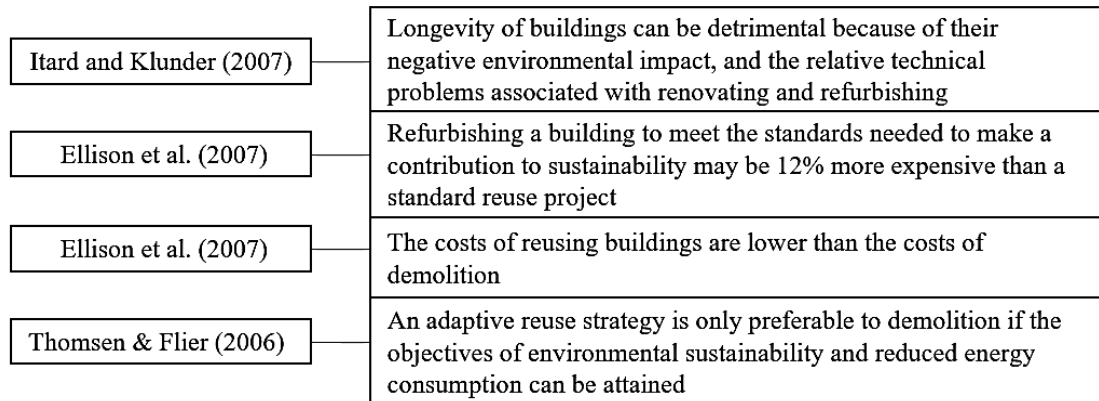


Figure 2.1: Various ideas from different authors about adaptive reuse reasons, adapted by Author (2016) from Bullen & Love (2010).

### 2.2.1 Advantages and Disadvantages of Adaptive Reuse

Each adaptive reuse project can have advantages and disadvantages aspects which are presented as following:

- *Environmental*

Environmental advantages become very important when adaptive reuse consists of historic buildings because these buildings add a lot the amenities, identity and landscape of the area they are a part of. One of the environmental advantage of recycling buildings key is preservation of the fabric building's "embodied energy". Their embodied energy is protected when buildings are reused. It is because of the fact that the reuse projects are sustainable economically rather than completely novel constructions, thus it is crucial to say that embodied energy costs are much higher in new buildings than in buildings that are adaptively reused. The Australian Greenhouse Office reported that reusing of building materials typically includes

saving about 95 percent of embodied energies that could then be lost (Hoff, 1994). Generally, the reuse of existing building stock for new valuable purposes delivers environmental benefits because new buildings harm the environment in their construction phase (Aydın, 2010).

- *Social*

For the communities that value them, preserving and reusing historic buildings is full of benefits in the long-term. When properly done, adaptive reuse can renovate and preserve the heritage importance of a structure (Hoff, 1994), its cultural value (Terrence, n.d.), and ensures it survives instead of it deteriorating because of neglect or being unrecognizable.

As adaptive reuse developments are mostly multifaceted and distinctive, they might need specialized and skillful designers, developers and artists. Although the need for skilled labor mounts more challenges in the project, nonetheless these developments generate employment for these skilled labors. Adapting a locating around a structure in already adapted can indicate to potential customer and employee the dedication to the society you live in, as they serve as physical references offering valuable information about the past. These references provide information about building applications, lifestyle, construction technique, culture, and spatial order (Aydın, 2010). Additionally, adaptive reuse can generate a ‘sense of place’ (Terrence, n.d), ‘place attachment’ and ‘collective memories’ association between the current and the previous times. (Komleh, & Alambaz, 2014).



- *Economic*

There are quite a lot of economic reserves and earnings to be gotten from adaptive reuse of historic buildings. With the forecasted increase of the cost of energy in the future, embodied energy saved from not demolishing a building will also increase. Although no actual research yet on the appeal in the market of recycled heritage structures, they have become popular because of their uniqueness and historic genuineness. Economic sustainability of adaptation includes it involving fewer material usages (i.e. resource consumption); fewer energy consumption, fewer pollution and fewer transport energy during construction (Johnstone 1995; Bullen 2007 cited by Wilkinson et.al., 2014). The action of demolition of building is an uneconomical process in terms of materials except they are recycled or reused materials (Department of the Environment and Heritage, 2004). The notion of sustainability is the main drivers for adaptation since the late 1990s owing to the concept of reusing of structures. Enhancing the output of existence stock, via adaptation, is the utmost vital aspects of upgrading the sustainability of the built environment (Wilkinson et.al., 2014).

- *Cultural*

The cultural advantages of heritage adaptive reuse and conservation are usually called as Hawkes (2001) states it in ‘The Fourth Pillar of Sustainability’, historic spaces are physical manifestations of our culture. Hawkes (2001) sees the design, maintenance, management, regulation and animation of places such as community and performing art centers, libraries, museums, galleries, town halls, and historic buildings to be a form of cultural expression in itself. Heritage adaptive reuse processes provides the opportunities for greater shared appreciation and

understanding of community heritage. Built heritage embodies a community's history through its structure and materials, setting, previous and present uses, associations and meanings (ICOMOS Australia, 1999).

- *Promoting innovation*

Adaptation of heritage structures offers real challenges for architects and designers which compel them to propose innovated solutions. With the advent of developing pressure in towns, more heritage buildings are being reused, turning out to some brilliant patterns of ingenious designs that preserve the significance of the heritage structures (Hoff, 1994).

- *Aesthetic*

Although aesthetics is indeed subjective and preferring architectural style is a ceaseless source of discussion, people generally want aesthetically attractive environment. Buildings from the pre-modern era (or “prewar”, speaking of Second World War) are usually said to be eye-catching, whereas modern, postmodern, and contemporary styles are not that appreciated by all. However, everybody will agree that a dilapidated spaces or an empty place is much unattractive than a properly kept building, regardless of its design or style. Consequently, historic conservation and adaptive reuse development actions largely rises a town's aesthetic value greatly, if for nothing else, resisting deterioration, thus drawing attention and providing inhabitants somewhere they can be proud of. (Terrence, n.d.).

In addition, some of the disadvantages that exist in adaptive reuse projects are explained below:

- Economic: In a few situations, fixing the insulation standard of new buildings, some supplies for current buildings, some materials and cost of energies are costly expensive.
- Environmental: As far as adaptive projects are concerned, energy efficiency and renovated buildings are not in the improvement plan, in fact consumption might not be suitable for the neighboring buildings.
- Technical: “There is usually no assurance that new buildings will solve the entire problems of the old building which has been adapted. Actually solving all these problems is difficult and costly” (Douglas, 2006, p:25).
- Legal: It may be quite difficult to meet the regulations required to get (and adapt) older properties.
- Functional: No assurance that a building adapted would fit the functionality of a new purpose built facilities (Douglas, 2006).

Generally speaking, these advantages and disadvantages can be summarized in figure below (Figure 2.2) as adaptive reuse barriers and drivers.

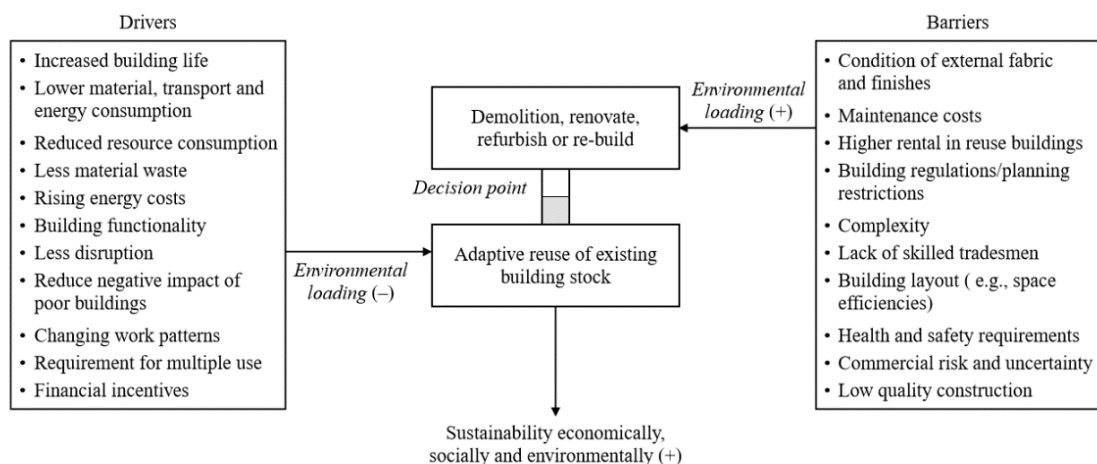


Figure 2.2: Determinants and deterrents in adaptive reuse activities from Bullen & Love (2011).

## **2.2.2 The Reuse Approaches in Responding to The Buildings' Past Narratives**

Usually, the common adaptive reuse practices take three different approaches in responding to the building's past histories.

### **2.2.2.1 Restoration to Original State**

The building is reinstated to its original architectural design in the first approach. The building is reworked with vivid attempts made to return it to its original occupied condition and any interstitial time or function is removed. The purpose of the building changes depending on the requirements of a new program in an adaptive reuse project, and it may not be suitable to completely return the building to its past life as its function must be outdated. Restoration of an abandoned building may be a suitable strategy for a renovation design if the function of the building is the same as its original function and the aim is for the subject to experience the building as it was in its early condition. It should however, not be a denial of more recent history as Ronda (2011) explains, "Ideally, converting old structures to new uses involves delving into the past, not to rewrite history, but rather to breathe new life into it" (p:16).

### **2.2.2.2 Tabular Rasa Method**

The 'Tabular Rasa Method' where the building is considered as a blank slate, a designer, and client force their own agenda and all prior uses and histories are erased is the second adaptive reuse approach used today. The exterior of the building may be completely unrecognizable as new design and ideology are imposed on the structure that does not have any connection with the older building. A new spatial and qualitative organization is created for the interior of the building (Ronda, 2011).

Although this method belongs to adaptive reuse, it cannot be applied to old buildings which have heritage values and historical significance.

### **2.2.2.3 Incorporating All Stages of a Monument in New Design**

The third approach to adaptive reuse makes attempts to integrate some form of the building's history into the new design. The phases, comprising of the ruinous ones, are represented through some form of interpretation into the new design. Ashurst (2007) explains this methodology, stating that successful modern approaches to interpretation incorporate all stages of a monument's history including details of its most recent past and post-ruinous past having the objective of being able to provide visitors with the most comprehensive understanding of a monument's story. This is a leave from the more traditional and quite selective approach in the UK, which focused on a specific time in the life of the pre-ruined building (typically its earliest, defining or grandest phase) (Ronda, 2011).

Several factors have to be considered in choosing from all the alternative available in the array of historic buildings available. More so, the factors work together. An example is, raising the local people's appreciation or structure matching of residents' landscape characteristics. The increase of economic advantages might lead to conservation and modifications in social connection. The value of historic buildings can be passed to the coming generations based on how sustainable the reuse plans are and how well it can be applied by the locals. This will result to more society identification; improvement of resident's culture and values and economic level (Wang & Zeng, 2010).

### **2.2.3 Sustainability Factors for Adaptive Reuse**

According to Kincaid (2002) cited by Aydın (2010), the success/failure in the adaptation of buildings to new purposes is measured based on sustainability and quality of life in the cities.

It seems that benefits of adaptive reuse and the factors of sustainability go hand in hand. Sustainability is the central concept of the 21<sup>st</sup> Century and it is described as “meeting the needs of the present, without compromising the needs of future generations” (Brundtland Report, 1987, p:43) by WCED (World Commission on Environment and Development). Sustainability denotes the possibility of socially molded connections between the society and mother nature over protracted time (Altinay & Hussain, 2005; Aydın, 2010).

Adaptive reuse of historic structures contributes to financial sustainability by means of offering up-to-date existence that decreases locational obsolescence as a result of the modifications in social character that did not meet the functional needs of the prospective and present users (DEH 2004). Additionally, reusing of historic buildings addresses to the community’s requirements of the people and cultural importance of the buildings, which can increase community sustainability. In terms of social development, sustainable settlements and societies should produce high-quality lifestyle. Life quality is connected to social spaces and physical structure of human settlements. Physical structure, on the other hand, is formed in relation to the social and cultural structure of societies. Adaptive reuse of buildings has an essential law in the sustainable development of the society, discouraging the uneconomical practice of rebuilding and restructure. Reuse is the best alternative and the positive strategy to new construction in terms of sustainability (Aydın, 2010).

With adaptive reuse, natural descent of buildings over time will be diminished; it will decrease deterioration that results in energy inefficiency, which eventually contributes to environmental sustainability (Yung & Chan & Xu, 2013). The sustainable adaptive reuse of historic structures involves beyond only the conservation and restoration of architectural and historic values and the raise in financial development, it has to spread out from essentially considering the structure itself to the larger neighboring townscape. Yung & Chan & Xu (2013) mentioned that, logical strategies, policies and administrative measures can back up and enhance the other dimensions of sustainability. Sustainable design and historic preservation have a natural bond and an adaptation action to re-use have its social, cultural, economic and ecological advantages.

In Table 2.5 various types of sustainability and its impacts on social, environmental, economic and physical aspects can be seen.

Table 2.5 Summary of Sustainability Factors for the Adaptive Reuse of Historic Buildings, source, Yung, Chan, & Xu, 2013, p.05014003

Sustainability factors	Description of sustainability factors	Source
<b>Economic</b>		
Self-sustain	Whether it can be self-sustaining would affect the economic viability of the new use (considering future running and maintenance costs)	Murtagh (2006), UNESCO (2007)
Economic efficiency	Costs of rehabilitation versus economic return from either rent income, business return, and/or tourism revenue	Murtagh (2006)
Business return	The extent to which it can generate employment, tourism, and business activities leads to economic growth	Tweed and Sutherland (2007), Steinberg (1996)
Land value and rent	Increase in land values and rent as a result of growth in traditional and new economic activities indicates economic growth	Tweed and Sutherland (2007), Steinberg (1996)
<b>Social</b>		
	Social sustainability refers to harmonious development that is compatible with the cohabitation of diverse groups while encouraging social integration, with improvements in the quality of life for all segments of the population	Polse and Stren (2000)
Quality of life	It is a common indicator which can be measured through people's own evaluation	DETR (1997)
Social networks	Connectedness with people, place, and time; social relationship, interaction, and support	Bramley and Power (2009), Atkins (2004)
Social inclusion and cohesion	Combat social exclusion of the poor and the disadvantaged, access issues, e.g., gentrification. Achieved through community involvement	Tweed and Sutherland (2007), Yung and Chan (2011, 2012b)
Sense of place and belonging	A feeling of belonging to a particular community or group and members which are important to one another. It helps us to link our roots	Pendlebury et al. (2004)
Conserve original way of life	Enhance continuity of life and strengthen cultural traditions and forms and cultural diversity	Lowenthal and Binney (1981), Steinberg (1996)
Community development	Empower community through participating in collective activities and developing networks	UNESCO (2007), Woolever (1992)
Satisfaction of new use	A common measure for social well-being	Shiple et al. (2011), Ashworth and Tunbridge (2000)
<b>Environmental</b>		
Development density	Overly dense development has negative impact on urban development	Chan and Lee (2009)
Noise level	LEED environmental quality: energy efficiency, carbon emission, noise level, air quality, lighting, heat, waste, etc. can affect environmental performance	U.S. Green Building Council (2000), Langston (2010)
Urban environment	Urban patterns and form can preserve and enhance the original townscape, street patterns, land use, building form, etc.	Steinberg (1996)
<b>Political</b>		
Community participation	Participation in decision making, and execution and use of the buildings	The International Council on Monuments and Sites (ICOMOS) (1987, 2009), Shiple et al.(2011)
Government policies and strategies	Supportive government policies and strategies at local level. Strengthening the local authorities' decision-making power	Steinberg (1996, 2004)
Effectiveness and transparency	Optimal administrative costs. Citizens are well informed about the formulation and implementation of the policies	World Bank (2008)
Financial support	Heritage project funding or incentives	Bullen and Love (2010), Shiple et al. (2011)



The other aspect playing important roles in the development of adaptive reuse is participation in these activities. It is clearly acknowledged that community participation is crucial to promote sustainable development (Agenda 21, United Nations, 1992) and to gain the preservation of historic districts and buildings (ICOMOS, 1999). Community involvement is described as “a process by which people, especially disadvantaged people, can exercise influence over policy formulation, design alternatives, investment choices, management, and monitoring of development interventions in the communities” (World Bank 1992, p: 2). The Charter for the Conservation of Historic Towns and Urban Areas, 1987, particularly stated that “The participation and the involvement of the residents are essential for the success of the conservation program and should be encouraged”. The Burra Charter accentuates that heritage conservation cannot be sustained without community participation (ICOMOS 1999, Article 12). This reveals that involvement of locals and government authorities in decisions about adaptive reuse projects and new uses is an essential issue to consider.

#### **2.2.4 Decision-Making Process in Reuse**

Writer ‘Stewart Brand’ (1994) claims that adaptive reuse completely quashes the ‘form follows function’ axiom. He wrote that “the building becomes more interesting when it leaves its original function behind. The continuing changes in function turn into a colorful story, which becomes valued in its own right; the building succeeds by seeming to fail” (cited by Ronda, 2011, p:16).

Yıldırım (2012) in his article ‘assessment of the decision-making process for re-use of historical assets’ recommended that, a general principle of conservation is, the original function of a place is the most ideal one; however, from a financial concept,

providing a new use may be the only effective way of maintaining the building. When adaptation to reuse proves success, it will be possible for the building to continue its existence by serving its new function, possible for the new users of the building to be pleased with their quality of life within the space, and possible for the building to satisfy urban requirements by serving a new purpose. Hence, the proper function given to the buildings will offer benefits and guarantee sustainability from economic, socio-cultural and environmental aspects (Wilkinson et.al., 2014).

In this discussion, it is needed to examine two subjects in adaptive reuse projects. One is new functional, cultural and social components of the building (gains) and the second is the quality of the adaptation which hopes to raise customer satisfaction so as to ensure continuity of the new function (requirements of the new function and facilities provided by the building). The new purposes will bring social benefits and become beneficial tools for preservation when they meet a settlement demand (Aydin, 2010). This is the reason why activities such as tourism can play some significant and crucial roles in the conservation of the old buildings.

#### **2.2.4.1 Adaptation Decision-Making Based on Heritage Values, Architectural and Historical Features**

Wang & Zeng (2010) in their article ‘A multi-objective decision-making process’ suggested that reuse decision-making should be based on original values, historical analysis and architectural analysis of the buildings and the contributions to the environment and society.

In the deliberation on the form of building, “the change of form of any historic building requires a proper understanding of the reason for the existing building, which includes the idea of form, cultural and historic values, and use of materials,

location of the building, architectural character, space gain, space change and structural analysis” (Elsorady, 2014, p: 2). These shared values are interpreted as collective memories and serve as a symbol of community identity, culture, and heritage. Also in the building function discussion, several scholars, such as Murtagh (1997), Nelson (2005) and Weeks (2012) all agree on the significance of new function in adaptive reuse (Elsorady, 2014).

- *Historical Features*

Park (2006) in his article ‘respecting significance and keeping integrity’ suggested that the investigation of historic properties such as significant materials, cultural features, time periods, and physical features, have to form components the decision-making procedure on the kind of conservation treatments required for each historic property (Elsorady, 2014). Since historic buildings have been built many years ago, they can be the most famous and durable symbolism of ancient or past civilizations. Prehistoric and historic buildings and structures are often the resource of much of humans’ information and art from those cultures. Considering historic values of old buildings in adaptive reuse decision-making can help designers for finding and proposing the ideal functions to display the buildings identity and their regions’ culture and civilization.

- *Architectural Features*

Elsorady (2014) expressed about grouped features, which are concerned with the building unit itself, its users and its connection to the community. These indicators include architectural integrity, sustainable adaptation, a form of building public perception, and building function. Many preservation scholars propose that building type is one of the most crucial factors defining architectural integrity. Kwan (2001)

sees a change in purpose as a crucial issue in adaptive reuse projects. Kwan further suggests that the importance of the idea of building type in the architectural design practice is conspicuous in scholarly work. In a number of cases, the notion of building function turns out to be the most central in the initial phase of a building design. It is necessary to identify how and why the building was set out in a certain style and to comprehend the original connection between the detailing and how it is integrated into the building form, as this will assist to arrange the new hierarchy for the new uses (Elsorady, 2014).

- *Heritage Values*

As it is mentioned the importance of heritage values in 2.1.2, considering historic buildings' values are needed in decision-making process. Evidently the value of a building and its use are intertwined, highest and best use leads directly to the highest present value providing the highest yield for investors and owners (Wilkinson, 2014). These values can be heritage values, architectural values as well as historical values. Other factors affecting value are political forces and local competition.

#### **2.2.4.2 Adaptation Decision-Making Based on Social participation**

A building to be conserved is given a detailed analysis in order to ascertain factors and features that must be used or overcome in order to realize a vital reuse of the structure. As aforementioned, the successful adaptive reuse is a project with suitable new use since it can have advantages for society, culture and environment. In addition, it should be compatible with contemporary life style while protect identity, history and culture of the region.

The new function should have features which are related to residents' requirements and also stakeholders. This is one of reason why Conservation of Historic Town and

Urban (1987) stated participation and corporation of residents are important for adaptive reuse project to reach success. It is clearly acknowledged that community participation is crucial to promote sustainable development (Agenda 21, United Nations, 1992; cited by Macnaghten & Jacobs, 1997), and to gain the preservation of historic districts and buildings (ICOMOS, 1999). Hence, successful adaptive reuse is a sustainable adaptive reuse, and sustainable adaptive reuse can be achieved by participation of who take profits from adaptive reuse, the local and national and international governments who are concerned about keeping the fabric of the historical buildings in question by to ensuring that standards are followed and the designers, whom considers time as money in the reuse process and could cut corners to save time. Simply put, architectural historians, the government, developers and owners.

There are several methods which include participation to determine the appropriate functions according to adaptive reuse potential of the buildings where two of them are summarized in table below (Table 2.6).

Table 2.6: Different types of decision- making for assessing the appropriate function based on potential of building for adaptive reuse projects, adapted by author (2016), from Wilkinson & Langston (2014).

	<b>Authors</b>	<b>Name of methods</b>	<b>Information</b>	<b>Figures</b>
1	Chudley (1981)	Preliminary Adaptation Assessment Model of (PAAM)	The PAAM identifies exit points with an indication of the options available to stakeholders at each stage. This initial model sequences factor to reflect a rank order of weight to each factor.	Appendix C
2	Kincaid (2002)	Two level for decision making of Kincaid (2002)	Option one is to change the use with minimum intervention because of the inherent 'flexibility' of the building. Option two (framing the issue properly, identifying and evaluating the alternatives and selecting the best option (Turban et al. 2005; Luecke 2006) is for adaptation with minor change.	Appendix D

As it is shown in Appendix C and D, highlighted parts are related with participation of actors in decision-making process of historic buildings' re-functioning.

To find the best way to give the proper function in adaptive reuse project, it is required to be familiar with the methods used to evaluate historic building patterns. A six-step method to deal with the historic buildings pattern and subsequent reuse of interesting vacant buildings was proposed by Fuentes (2010) and Yıldırım (2012). It seems that these steps are the summary of previous information which is discussed in value analysis in decision-making. The Figure 2.3 shows these steps.

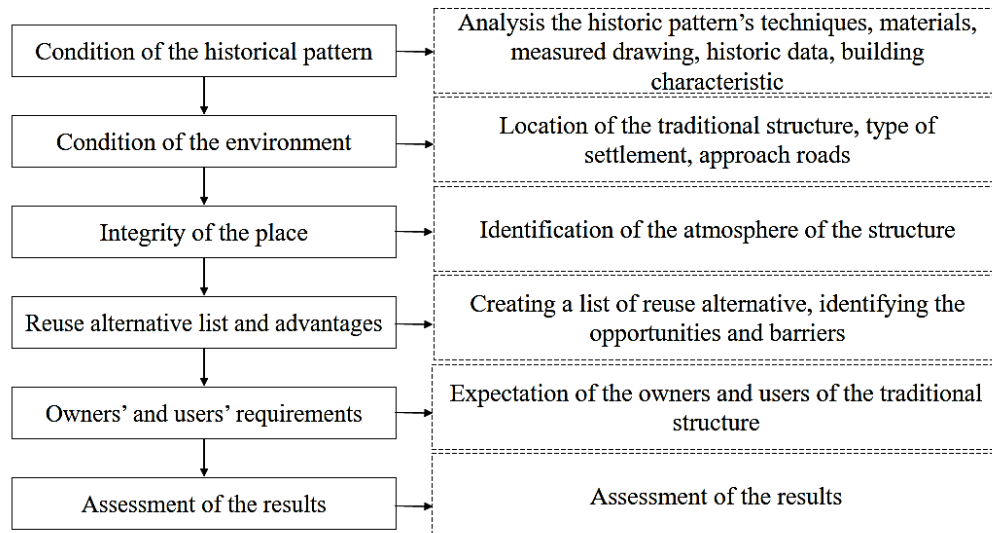


Figure 2.3: The steps of finding the appropriate function by Fuentes (2010) and Yıldırım (2012)

1- The historic pattern's condition: The historical pattern has to be properly comprehended to the extent converting the space in a manner suitable for its new use by the architect is easy. Therefore, blueprint analysis of historical patterns procedures and materials is important.

2- Condition of the environment: The physical condition of the structures was determined by conducting a survey of the site (Fuentes, 2010).

3- Integrity of the plan: A place's integrity and connectedness helps to keep and enrich a structure's cultural significance. For example, the effect of accessibility to vehicles pedestrians including disabled, is vital in the ambiance of any place (Yıldırım, 2012).

#### 4- Re-use alternatives:

- The different kinds of re-use are new activities which could make enough revenue to fund the restoration and upkeep costs acquired if project is carried out by individual financiers. (like hotels and restaurant)
- Public use, on the other side, do not create enough revenue to cover restoring and maintaining costs but brings a lot of gain socially to the society.
- Usually, it is the responsibility of the government to support cultural center and reuse of the museum kind. The routine resolution of reusing a historical pattern as a museum is not always viable (Yıldırım, 2012).

5- Users requirement: It is important to put into consideration the proprietors' and users' requirements. These requirements can include the needs of the proprietor or designer, resident, sightseer or client even the passersby. "Their desires including installing modern heating, cooling, electrical and plumbing systems, ought to be considered" (Yıldırım, 2012, p:388).

6- Assessment of the results: Given the situations of the structure and its surrounding, and following the needs of the proprietors and handlers, the achievements and detriments of the re-use decisions are assessed below (Yıldırım, 2012).

Assessing the situation of a building supports in providing records of that building. This assessment can be carried out by taking standard diagrams of the building, analyzing the supplies expended there and grouping the wear out of the historical pattern. Important also is an assessment of environmental situations which will lead an analysis of the role that are needed to manage the built historical area (Yıldırım,



2012). Generally speaking, there are various methodologies in order to find the most suitable decisions for adaptive reuse and also ascertain the potential of adaptive reuse some of which are explained in this study. Definitely, some phases of these methods are same.

The other method which can be considered from Worthing & Bond (2007) and Yıldırım (2012), is shown in figure below (Figure 2.4). This method is for proposing appropriate new function in adaptive reuse.

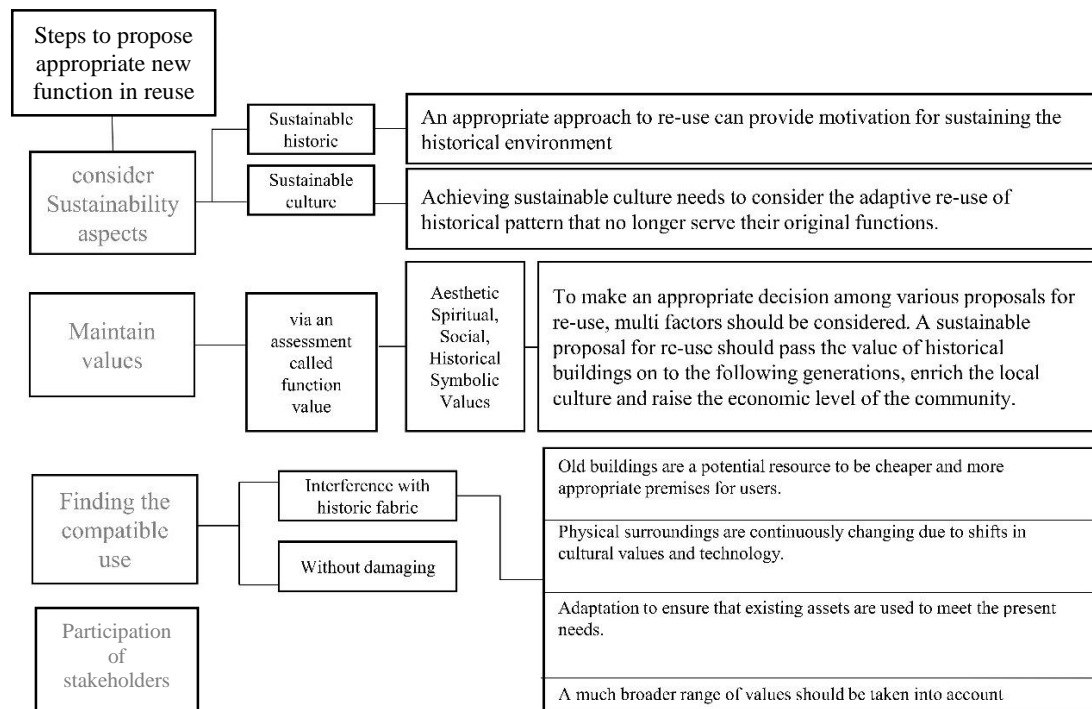


Figure 2.4: Steps to propose appropriate new function in reuse, adapted by Author (2016), based on Worthing & Bond (2007) and Yıldırım (2012).

### 2.2.5 Interventions in Adaptive Reuse Projects

One of the key interests of architectural preservation is an adaptation of historic buildings to the present day's varying requirements. Since the heritage buildings were made with the techniques of the past periods, the processes of their adaptation

need interventions at several levels (Yüceer & İpekoğlu, 2012). “The evidence of past additions, alterations and earlier treatments to the fabric of a place are evidence of its history and uses which may be part of its significance” (Venice Charter, 1964). As Washington Charter (1987) declared, “before any intervention, existing conditions in the area should be thoroughly documented”. Additions to structures may be considered as long as the design does not compromise historical elements of the existent buildings (Fournier & Zimnicki, 2004). Historic preservation should be the primary basis for the possibility consideration of an addition (Fournier & Zimnicki, 2004).

According to Morton (1992), “because such expansion has the propensity to drastically alter the historic look, an exterior addition should be considered only after it has been determined that the new use cannot be successfully met, by altering no character-defining interior spaces” (cited by Fournier & Zimnicki, 2004, p: 8).

Addition spaces are usually connected to increasing appeal, so as to build more spaces. When the former performance was modified, the places for a public building was probably not adequate in a developing city; since, the need for more places rises. Extensions are augmented to old structures when their insides were demolished. They ought to keep back fasciae of these structures and can be erected on bare land (Orbaşlı, 2000). As the historic buildings are constructed centered on the techniques employed during its period and in past conditions also, the process of additions requirements varied intervention processes too. While it is actually important that the intervention be with the minimum touch, such intervention procedures are the main procedures in adaptive reuse projects. The exterior additions can be mentioned to be a component of a building and it can be joined to main building or built on the

surrounding area. Based on respect to the fabric buildings, it is not a must that the addition be a main section of ancient building or finishing them. Additions can go away from the borders of buildings or joined to the mass of them (Orbaşlı, 2000).

Additions must respect the value of old buildings. These additions that would be a portion of the buildings' elements or located in the surrounding of these structures do not result in the reduction of its value and substance. Given the amount of significance of architectural, cultural, current, authentic based importance and contextual importance, the worth of every structure is known (Yüceer & İpekoğlu, 2012).

Monuments with all their later alterations and additions which are truly to be accepted in principle as part of the historic fabric are the result of irreversible historic processes (Petzet, 2004).

### **2.3 Cultural Tourism as A Tool for Conservation of Historic Buildings**

Visiting new places has been qualified as an educational notion in which people can learn about different aspects of other societies such as its culture, history and geography. Consequently, domestic and international tourism can provide cultural exchange among different area and personal experiences, not only from the past, but also for contemporary life (Günce, 2003). According to this view point, "tourism can be understood as a positive power of natural and cultural context for their conservations" (ICOMOS, 1999). One kind of tourism that aim to introduce the monuments and historic site for other community and also protecting them, is cultural tourism.

Undoubtedly, tourism can have impacts on different aspects such as economic, social and environmental aspects. The figure below (Figure 2.5) presents the summary of negative and positive impacts of tourism on various aspects.

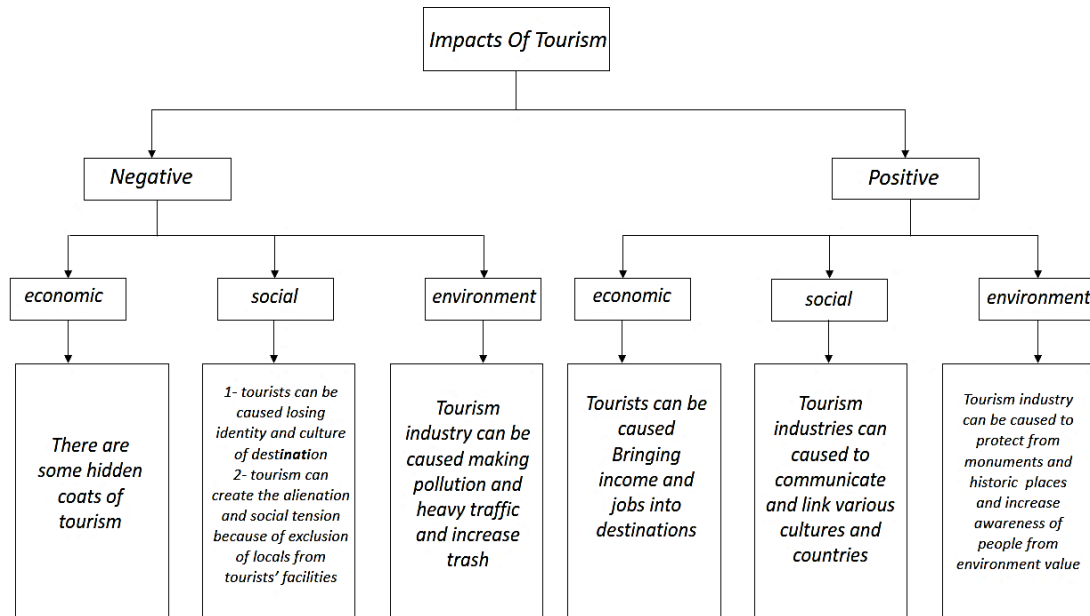


Figure 2.5: Negative and positive effects of tourism. Source: adapted by Author 2016), from Günce, E. (2003), Scholtz, M., & Slabbert, E. (2015), UNDP (2016).

Tourism industry is an important factor for conservation of historic places by realizing the full economic potential of an era. If the city can convert to places for recreation, retail hub and leisure, the income can be existed for the economy of the regions further (Teo & Huang, 1995).

In the majority of tourism development cases, it is seen that the interests of political and commercial activities try to lead preservation of historic places to revive and restore these places with the tourist attractions and associates commercial purposes. This means that tourism can be a tool for bringing money and those historic buildings encourage many owners to restore these buildings hurriedly and sometimes harmful. If conservation and development activities become too hastily acts, they can lead to

be short-lived, particularly where environments and buildings are destroyed in the name of conservation. Once the desirable popularity is gained, there is a threat to lose the value of buildings. "Tourism interest has in places triggered off some examples of show piece conservation, through the isolated restoration of historic houses to appeal to visitors" (Daher, 2006, p: 171).

### **2.3.1 Cultural Tourism**

Cultural tourism is known as “the efforts which said maintenance and protection demand of the human community because of the socio-cultural and economic benefits which they bestow on all the populations concerned” (ICOMOS Charter on Cultural Tourism, 1976). Furthermore, cultural tourism was mentioned as a “movement which involves people in the exploration or the experience of the diverse ways of life of other people, reflecting all the social customs, religious traditions, or intellectual ideas of their cultural heritage” (ICOMOS Charter on Cultural Tourism, 1976).

Based on perspective of tourism activity, this type of tourism enables people not only to experience traditions, customs and the physical environments of other people’s life, but also they can explore architectural, historical, archaeological and cultural significance of regions that have remained from the past. Cultural tourism is not as same as recreational tourism. This differentiation is because of the fact that the cultural tourism wants to recognize the original and natural visited places (Csapó, 2012).

According to the ‘World Tourism Organization and European Travel Commission’ (UNWTO) there are two concepts for explaining cultural tourism. The first one is called the ‘broad approach’ and the second one is called the ‘narrow approach’.

Based on the first approach, all people's movements are included in this explanation, because "they satisfy the human need for diversity, tending to raise the cultural level of the individual and giving rise to new knowledge, experience and encounters" (Csapó, 2012, p: 205). Due to this, nearly all the recreational trips can be categorized as cultural tourism based on the tourists' needs for gaining new experiences to understand new observations and knowledge (Csapó, 2012). The second approach is the "movements of persons for essentially cultural motivations such as study tours, performing arts and cultural tours, travel to festivals and other cultural events, visits to sites and monuments" (UNWTO). Given what UNWTO has defined, "some activities to visit monuments and heritage sites, exhibitions and museums, visiting theatres and concerts, festival tourism and pilgrimage or study tours are the basic products of cultural tourism".

On the other hand, according to the report of the 'European Travel Commission on City Tourism and Culture' which is established in 2005, there are various categories in circle of cultural tourism that stated as an inner and outer circle:

I. The inner circle illustrates the fundamental component of cultural tourism that can be classified into two sectors, the first one named as heritage tourism which is related to artefacts of the past and the second part is mentioned as arts tourism which is related to present cultural production like; performing and visual arts, literature, poem and contemporary architecture and so on.

II. The outer circle shows the second elements of cultural tourism that is divided into two elements as well. The first one is named lifestyle which includes beliefs, cuisine, traditions, folklore and so on and the other sector namely creative industries that

some designs such as web, fashion and graphic design, film, media as well as entertainment are included (City Tourism and Culture – The European Experience, 2005 cited by Csapó, 2012).

The relationship between outer and inner circle of cultural tourism is illustrated (Figure 2.6) below. In order to comprehend the information related to this figure, it is important to discuss heritage tourism and its subsets.

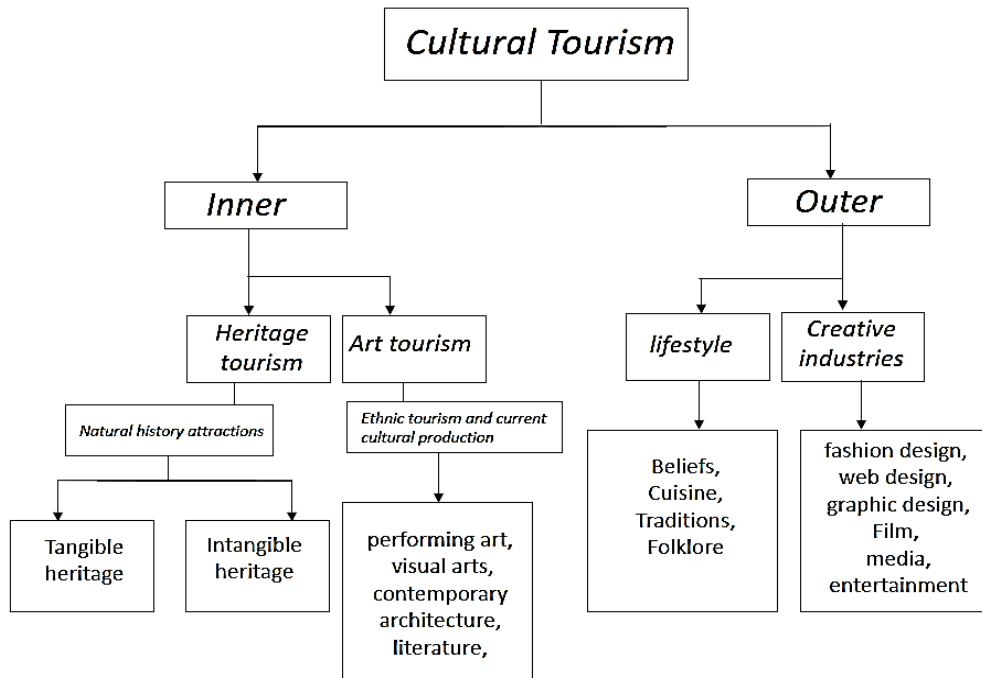


Figure 2.6: Different categories of cultural tourism, Adapted by Author (2016), from Hughes (1996) and Csapó, J. (2012).

Although, some of social scientist (Yiannakis and Gibson 1992) categorized some types of cultural tourists as mass tourists such as anthropologists and archeologists, these tourists are recognized by their unexpected interests and their serious approaches which make differences between them and mass tourists. Although, casual leisure is not so humiliating, it is too mundane and banal for the most people in order to find identity within it (Stebbins, 1997).

The question raised here is that what is the relationship between casual leisure, serious leisure and cultural tourism? In order to realize and answer to this question, it is better to consider other definitions of cultural tourism. Cultural tourism is a term which refers to travel within leisure interesting to destination that have one or more than one cultural feature (Csapó, 2012). In addition, cultural tourism is a type of empirical tourism that tourists can experience and participate in deep and new experiment of the emotional, aesthetic, psychological and intellectual nature. Many of the people who tour for cultural reasons can be understood as pursuing a singular form of serious leisure known as the liberal arts hobbies (Stebbins, 1997).

Sometimes the aim of cultural tourists to visit a destination is to experience the region's culture for finding distinct life style. This theme is used for various situations as well as travels where culture is the basic activity and motivation. This is difference with travels that culture is its subsidiary activity and has incidental motivation. Despite these ambiguities, it is obvious that cultural tourism "does not usually include live entertainment, including variety shows, music hall, pantomime, pop concerts, rock, reggae, jazz, folk music, dancing, circus, comedy, and magic" (Williams, 1988, p:708). What remains is investigated 'popular culture' containing live entertainment (Hughes, 1996).

As Urry's statement in 1994, the rewards of cultural tourism are more important for tourists in the current life. Consequently, these qualities can divide serious leisure and casual leisure as well (Stebbins, 1997). In addition, these five items can be price of serious leisure and are given to cultural tourists.

1. Creating positive feelings about activities;



2. Participating in finding career;
3. Achieving skills, knowledge and training during their serious leisure time;
4. Benefits and prices that gained with serious leisure activities which will be discussed later;
5. Growing unique ethos; and (Stebbins, 1997).

Historic places are a type of touristic places which include appropriate spaces for attracting tourists. It seems that there are some attraction places in historic cities to attract cultural tourists such as following;

- The attractiveness related to physical of the buildings, places and spaces as well as views and vistas;
- The characters and features which are walkable and explorable;
- Living in these specific places;
- The factors which can be introduced the identity and character of places such as industry and crafts;
- Giving this chance to visitors to be part of urban life;
- Related to the past and feeling its atmosphere that are the intangible value of these spaces (Daher, 2006).
- The certain tastes like architecture and food as well as music and art;
- Attainment of knowledge for instance history of visited area, foreign language; and
- Improving certain social skill for example the way to connect and talk with local people and the manner to act suitably based on local norms (Stebbins, 1997).

The accessibility of many other attractions, possibly of a various nature, and having desirable atmosphere which is made by locals will persuade consumers to stay in destination in long time. Creating atmosphere, which is tourists appreciate, will prepare benefits in long term for growing tourism industry, urban development and also historic appreciation. At the same time, moreover, "visitors themselves are becoming more demanding of destinations, the facilities on offer and the quality of the experience" (Daher, 2006, p: 183). "Urry (1990) draws attention to a dropping trend in repeat visits to places, thus increasing competition for new custom in the cultural tourism marketplace" (Daher, 2006, p: 183).

The attraction objects for cultural tourist such as historical significance, natural or built beauty, offering leisure, adventure and amusement are not socially and psychologically available as much as mass tourism. For cultural tourists, it is crucial to grow:

1. The certain tastes like architecture and food as well as music and art;
2. Attainment of knowledge for instance history of visited area, foreign language and;
3. Improving certain social skill for example the way to connect and talk with local people and the manner to act suitably based on local norms.

### **2.3.2 Types of Cultural Tourism**

Based on standardization, the table below (Table 2.7) is provided to point out the most important types of cultural tourism or in the other words, it shows "the elements of cultural tourism from a thematic concepts grouped followed from the principles of the preferred activity" (Csapó, 2012, p: 209).

Table 2.7: Types of cultural tourism. Source: Csapó, J. (2012), p: 209.

Types of cultural tourism	Tourism products, activities
Heritage tourism	<ul style="list-style-type: none"> <li>• Natural and cultural heritage (very much connected to nature-based or ecotourism);</li> <li>• Material               <ul style="list-style-type: none"> <li>- built heritage,</li> <li>- architectural sites,</li> <li>- world heritage sites,</li> <li>- national and historical memorials</li> </ul> </li> <li>• Non material               <ul style="list-style-type: none"> <li>- literature,</li> <li>- arts,</li> <li>- folklore</li> </ul> </li> <li>• Cultural heritage sites               <ul style="list-style-type: none"> <li>- museums, collections,</li> <li>- libraries,</li> <li>- theatres,</li> <li>- event locations,</li> <li>- memories connected to historical persons</li> </ul> </li> </ul>
Cultural thematic routes	<ul style="list-style-type: none"> <li>• wide range of themes and types:               <ul style="list-style-type: none"> <li>- spiritual,</li> <li>- industrial,</li> <li>- artistic,</li> <li>- gastronomic,</li> <li>- architectural,</li> <li>- linguistic,</li> <li>- vernacular,</li> <li>- minority</li> </ul> </li> </ul>
Cultural city tourism, cultural tours	<ul style="list-style-type: none"> <li>• "classic" city tourism, sightseeing</li> <li>• Cultural Capitals of Europe</li> <li>• "Cities as creative spaces for cultural tourism"</li> </ul>
Traditions, ethnic tourism	<ul style="list-style-type: none"> <li>• Local cultures' traditions</li> <li>• Ethnic diversity</li> </ul>
Event and festival tourism	<ul style="list-style-type: none"> <li>• Cultural festivals and events               <ul style="list-style-type: none"> <li>- Music festivals and events (classic and light or pop music)</li> <li>- Fine arts festivals and events</li> </ul> </li> </ul>

Types of cultural tourism	Tourism products, activities
Religious tourism, pilgrimage routes	<ul style="list-style-type: none"> <li>• Visiting religious sites and locations with religious motivation</li> <li>• Visiting religious sites and locations without religious motivation (desired by the architectural and cultural importance of the sight)</li> <li>• Pilgrimage routes</li> </ul>
Creative culture, creative tourism	<ul style="list-style-type: none"> <li>• traditional cultural and artistic activities</li> <li>- performing arts,</li> <li>- visual arts,</li> <li>- cultural heritage and literature</li> <li>• as well as cultural industries</li> <li>- printed works,</li> <li>- multimedia,</li> <li>- the press,</li> <li>- cinema,</li> <li>- audiovisual and phonographic productions,</li> <li>- craft,</li> <li>- design and cultural tourism</li> </ul>

Despite of Table 2.7, there are the other definitions about cultural tourism. “The concept of cultural tourism tends to be applied to trips whenever cultural resources are visited regardless of initial motivation. The term is limited by a failure to include entertainment” (Hughes, 1996, p: 707). This means that cultural tourism is restricted to historic places and contemporary art such as sculptures galleries and paintings galleries to visit. Cultural tourism is known as historic tourism and heritage tourism as well. Prentice (1993) states the ‘heritage tourism’ refers to tourists who are attracted to the natural history or the performing arts. In addition, there is another form of cultural tourism that can be known as ‘arts tourism’. This term also has been used by Myerscough in 1988 to mention museums and art galleries as places to visit by cultural tourists. Additionally, the target of cultural tourists is experiencing the

culture of other places which identify the different ways of lives (cited by Hughes, 1996).

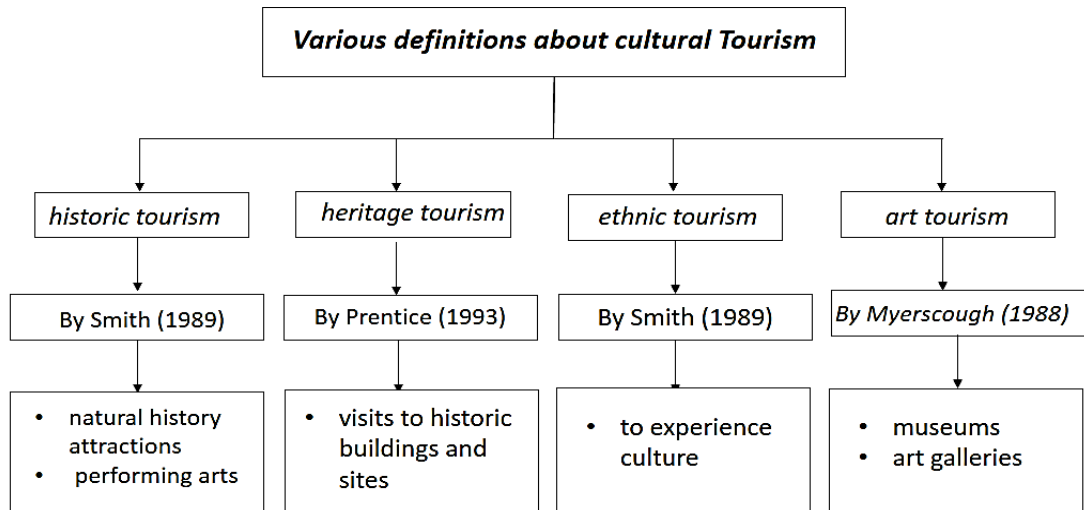


Figure 2.7: Various definitions about cultural tourism, adapted by author (2016) from Hughes (1996).

### 2.3.4 Cultural Tourists and Their Characters

In the light of definitions about cultural tourism, the important point that comes to mind is how should be cultural tourists? And also it is necessary to assess who is the cultural tourists when dealing with the intricate phenomenon of cultural tourism. Cultural tourists are such tourists who play important role in creating the cultural tourism industry. Based on Mckercher & du Cros in 2003:

“This kind of tourists are not travelling away from home to reproduce the needs and requirements of the home environment in more advantageous and desirable circumstances in a remote land or country but they are disposed with the adequate (cultural) motivation getting to know the different and remote (local) culture’s social and landscape values” (p:51).

Due to the benefits of cultural consumption like social honor and prestige, a way to make distinction between social levels is provided by the consumption of cultural productions such as taking part in artistic or cultural events. To be an active consumer of cultural production needs an enough knowledge level and understanding that is disproportionately available to various social levels (Kim, Cheng & O’Leary, 2007).

The close relationship between tourists’ socio-economic situation and their preference to participate in cultural activities illustrate that tourists with high income, who tend to visit and attend cultural events, are mature professionals. Craik (1997) argued that people who belong to lower socio-economic status and education do not have a tendency to participate in cultural activities. Since, they do not prefer to be a cultural tourist. Herbert in (2001) stated that visitors who opt to visit literary heritage places have usually higher social levels such as professional, managerial and also white collar workers (Kim, Cheng & O’Leary, 2007). Furthermore, Hughes in 1987 found that “higher social and economic groups are overrepresented in the consumers of art and culture (cultural and heritage attractions)” cited by (Kim, Cheng & O’Leary, 2007, p: 1367). Despite of the social and economic features of visitors some other demographic features like gender and age has an impact on cultural consumptions. The recent surveys (Hall & Zeppel, 1990) and (Zeppel & Hall, 1991) have revealed that generally females are more active consumers rather than males in cultural productions. Besides, mature aged are represented more than other visitors in art and cultural festivals (Kim, Cheng & O’Leary, 2007).

When the term of cultural tourist is defined, the next step in the research is what is the various types of cultural tourists? This typology may be complex as much as

previous expression about cultural tourism and cultural tourists. The depth of experience of visitors and also the importance of culture in the decision of trips are indexes for showing the division of different types of cultural tourists that have been made by McKerracher and Du Gros (2003).

According to Office of National Tourism (1997) explanation about cultural tourism, which is “cultural tourism is tourism that focuses on the culture of a destination, the lifestyle, heritage, arts, industries and leisure pursuits of the local population”, (Csapó, 2012, p: 204) makes it clear that decision about destinations in cultural tourism is a critical issue to consider. On the other side, based on Arts Industry Tourism Council, 'Cultural Tourism Development in Victoria', (1997); cited by Ismail (2008), the definition of cultural tourism as “the phenomenon of people travelling specifically for the sake of either experiencing another culture or the cultural attractions of a place” and also “cultural tourism is a genre of special interest tourism based on the search for and participation in new and deep cultural experiences, whether aesthetic, intellectual, emotional, or psychological” (Stebbins, 1997, p: 450) it is clear that experience can be mentioned as reward of cultural tourism.

Furthermore, according to 'Bureau of Tourism Research' in Australia (1998), one of the significant effects of tourism on tourists is known as experiences. Based on this research which is about 'Cultural Tourism in Australia', there are some attractions to attract cultural tourists in Australia. These attraction objects which gives different experiences to tourists include some festivals and exhibitions like musical, comedy, visual art, dance, multi arts and heritages. In addition, based on Bureau of Tourism Research (1998), performing concerts such as arts and ballet, contemporary theatre,

classical opera, holding museum and galleries, sites, monuments, historic and heritage places, art and craft workshop and studio and cultural displays (cited by Csapó, 2012).

As it is shown below in the Figure 2.8, the typology of cultural tourism according to McKerracher and Du Gros (2003) point of view, displays the depth of experience achieving after trip and also the tourist's decisions.

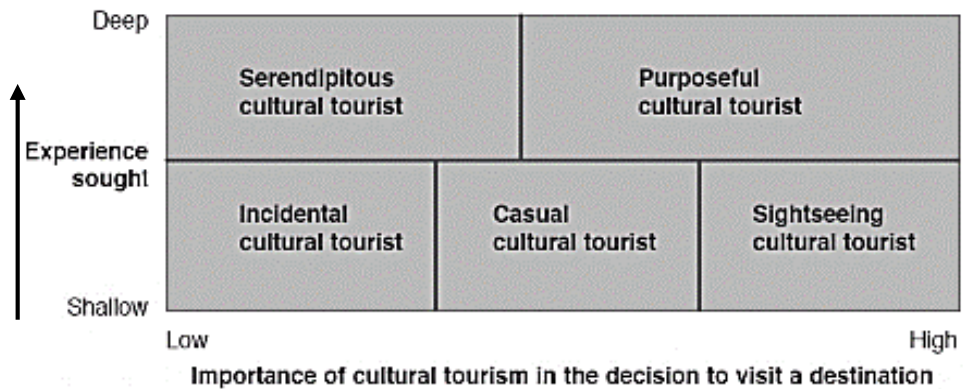


Figure 2.8: Typology of cultural tourism, from McKerracher and Du Gros (2003), p:46.



Table 2.8: Types of cultural tourists, from Mckercher & Du Gros (2003), p :46.

Type of cultural tourist	Short characterisation
The purposeful cultural tourist	Cultural tourism is the primary motivation for visiting a destination and the tourist has a very deep and elaborate cultural experience
The sightseeing cultural tourist	Cultural tourism is a primary reason for visiting a destination, but the experience is less deep and elaborated
The serendipitous cultural tourist	A tourist who does not travel for cultural reasons, but who, after participating, ends up having a deep cultural tourism experience
The casual cultural tourist	Cultural tourism is a weak motive for travel and the resulting experience is shallow
The incidental cultural tourist	This tourist does not travel for cultural reasons, but nonetheless participates in some activities and has shallow experiences

### 2.3.5 Heritage Tourism

Heritage has a wide meaning which consists of the natural as well as the cultural environment. It includes “landscapes, historic places, sites and built environments and also biodiversity, collections, past and continuing cultural practices, knowledge and living experiences” (ICOMOS, 1999). It documents and represent all steps of historical development process, organize the nature of various nations, territorial, native and local identities and is a part of contemporary life. A fundamental objective to manage heritage is the communication between its significance and needs in order to conserve its original community and tourists (ICOMOS, 1999).

“Heritage can be classified as tangible immovable resources (e.g. Buildings, rivers, natural areas); tangible movable resources (e.g. Objects in museums, documents in archives); or intangibles such as values, customs, ceremonies, lifestyles, and including experiences such as festivals, arts and cultural events” (Timothy & Boyd, 2003, cited in Csapó, 2012).

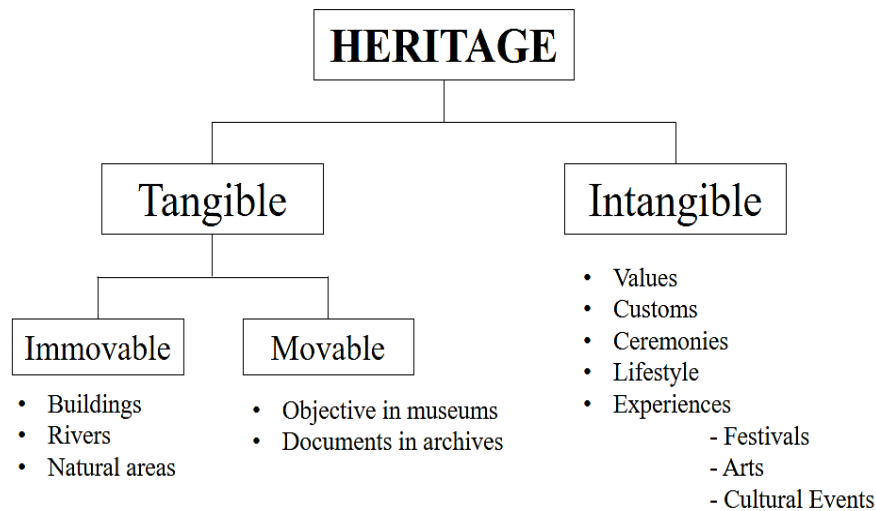


Figure 2.9: Different types of heritages, adapted by Author (2016) from Timothy & Boyd (2003) and Csapó (2012).

Heritage is defined as inheritances and values which are transformed from one generation to the next. In tourism activity, the meaning of heritage is not only natural history, cultural traditions, buildings, landscapes, artifacts, but also as Teo & Huang (1995) mention, “those among these that can be portrayed for promotion as tourism products” (p:599).

Heritage tourism is an important part which is belonged to cultural tourism that presents the cultural, historical and natural resources of regions authentically based on experiencing the places and activities. Regarding the classification of cultural tourism, UNESCO makes differences between various types of heritage such as monumental, movable, intangible and world heritage. If several types of heritage and heritage tourism took into investigation, it can be understood that there is difference between material, non-material heritage and cultural heritage sites. In order to clarify this difference, Figure 2.10 is drawn.

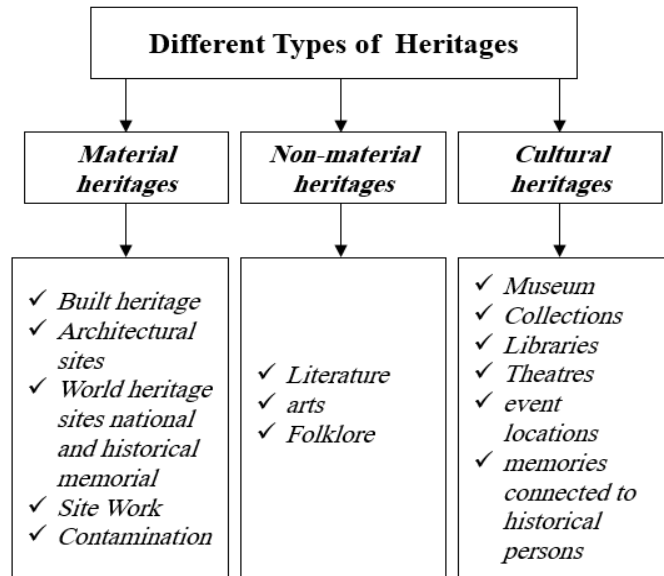


Figure 2.10: Different types of heritage, adapted by Author (2016) from Csapó (2012).

Undoubtedly, in the emphasis on the heritage tourism, the heritage means cultural value of the past which is worthy to protect and preserve for the next generations. In addition, heritage tourists can have different features in compare to other types of tourists, the characteristic sections for the post-modern heritage tourism are presented in Figure 2.11:

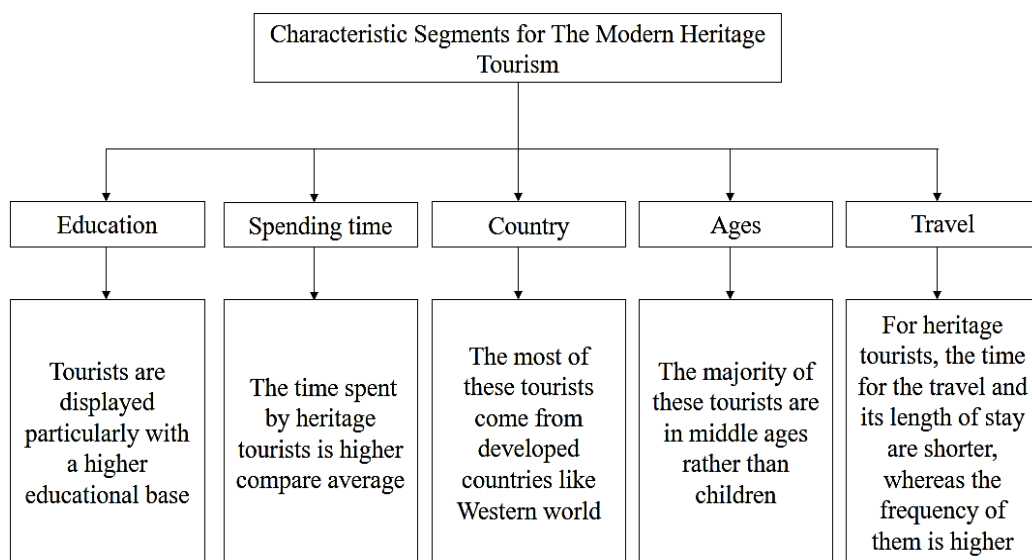


Figure 2.11: The characteristic sections for the post-modern heritage tourism, adapted by Author (2016) from Csapó (2012).

### **2.3.6 Sustainable Tourism Development in Historic Places**

As it has been obvious in previous parts, tourism has become the complex phenomenon with diverse types of dimensions such as bio-physical, political, cultural, economic and also ecological, aesthetic and social dimensions. Achieving useful interaction between locals, tourists and their expectation, causes to make many challenges and opportunities in order to develop this activity. “The participation and combined effort of local and native community, conservationists, tourism operators, property owners, policy makers, those preparing national development plans and site managers” is essential for gaining a sustainable tourism industry, increase the conservation of heritage and protect from region's value for later generations (ICOMOS, 1999).

It is undeniable that, public participation in terms of tourism planning can be the crucial issue in this industry. This is because of the fact that participation of people gives this view point that tourism is managed in a way which encounter the requirements of the residents and reduce the negative influence of the local's culture and environment. There are various types of public participation which are illustrated in Table 2.9. The types of participation chosen has various implications for the kinds of consequence that are gain. Based on Schipani (2008), UNESCO Bangkok, which argues that “if any types of participation chosen is ‘passive participation’, the outcome will not reflect public opinion and needs because the public is not able to offer any input into the decision-making process” (p: 70).

Table 2.9: Various types of participation in tourism industry, from Schipani, 2008, UNESCO Bangkok, p: 70.

<b>Type no.</b>	<b>Type of participation</b>	<b>Implications</b>
Type I	Passive	In this type of participation, the public only participates by being told what is going to happen or what has already happened. Decision-makers do not consult with the public and only share some information.
Type II	Contributors or consultants	People are consulted about problems and opportunities and they participate by contributing information and resources.
Type III	Implementers	People participate by carrying out activities and contributing their labour. They are not involved in decision-making.
Type IV	Decision-makers	People are actively involved in analysis of the problems and are involved in planning and decision-making. People have a stake in maintaining new structures and practices and have control over outcomes.
Type V	Self-mobilization	People participate by taking independent initiatives, without being organized by external institutions. They may enlist the assistance of others, but they remain in control of the process.

What is important is the extent of interaction between tourists and environment as their corporation and also sustainable development. “Socially sustainable development is tourism developed in a manner that maintains or improves the integrity of the non-site communities and inhabitants” (Günce, 2003, p: 184). Sustainable tourism investigates the requirements and long term interests of the society into and around the tourist regions. It would be logical to think that negative feelings about tourists by inhabitants lead to destroy the tourism industry and decrease the interest of tourists for visiting destination because this sense can be passed on to them. Nevertheless, the relation between tourism and locals deals with the problems (Saghay, 2006).

In addition, all places are not appropriate for tourism developments. Easy accessibility, vicinity to other attractions such as historic, leisure or commercial, can play a significant role in development of tourism potential. In addition, the extent of remained historic buildings, the amount of contemporary intervention and fabric

features are the important point for destinations. Although having two tourism attraction close to each other may encourage the tourists, having appropriate planning to develop this activity can make relationship with them in order to show-off the value further (Orbaşı, 2008).

Sustainable tourism specially focuses on conservation of the cultural heritage and traditions of local societies. Based on the ‘World Summit on Sustainable Development’ which was held 2002, sustainable tourism is a type of tourism and related infrastructures, which is used in both present and the future.

Therefore, it can be resulted that sustainable tourism is known as a species of tourism which meets the needs of hosts and tourists in destination, while preserving and increasing opportunities for the future (Altinay & Hussain, 2005).

### **2.3.7 Managing Tourism at Heritage Places**

Based on (ICOMOS, 1999), “conservation should provide responsible and well managed opportunities for members of the host community and visitors to experience and understand that community's heritage and culture at first hand”. There are some principles about conservation in heritage places in order to improve the tourism industry.

- Since domestic and international tourism is among the foremost vehicles for cultural exchange, conservation have to present responsibilities and well managed chances for members of locals and tourists in order to experience and realize the heritage and culture of society in the first step.

- The communication between heritage regions and tourism has been active and consist of conflicting values. It needs to be administered in a sustainable way to remain for next generations and also present one.
- Worthwhile, enjoyable and satisfying are the features which should be created by conservation and tourism program in Heritage areas, in order that visitors need to experience them.
- Host communities and native peoples should play a role in planning to conserve heritage places and tourism.
- Tourism and conservation activities should have benefits for locals.
- Tourism promotion plans should increase the natural and cultural heritage features (ICOMOS, 1999).

The historical and traditional parts of a city can be considered as cultural tourists' attractions in many historic town of countries. Since tourism industry has become a grate components of economy in each region, historic urban fabrics constitutes investment as well as asset. Hence, historical towns, cities and areas can be known as 'productions' for the tourism industry, especially cultural tourism. Tourism is potentially a compound for the protection of historic fabric (Orbaşlı, 2000).

The monuments and historic places can be recognized as tourism attraction and for many European countries it can play one of the main part of economic activities. The clean economy is the attribute that is expressed for monuments and traditional and historical places nowadays. These types of areas which include monuments and historic buildings are known as two beneficial aspects. The first one is a place to invest and asset. In order to sustain these buildings for future generations and also

based on identity and nature of a place, tourism is known as a potential item for preserving and conserving these monuments on an urban scale (Daher, 2006).

Appreciating and visiting historic spaces by tourists, could be the main reason to protect and preserve buildings in these kind of areas. Moreover, these can raise the interest of local people to live in that specific region. Although, it can be mentioned that tourism industry is not a direct source for conserving monuments, though it can improve and increase the financial sources indirectly which was not available previously. Additionally, tourism can lead to restore and adaptive reuse of buildings which have been not in use for a long time. This is a model that can be used to preserve the historic buildings. Furthermore, tourism can increase the level of economy in each region. The awareness of society on the influence of preservation and conservation leads to increase the participation of locals, since, the demands for preservation go up as well. The experiences illustrate that, the places where this recreation is introduced, is a successful corporation between locals and development results (Daher, 2006).

At least, based on what is discussed during this chapter, it is crucial to note that improving and developments have to occur at time of significant alteration. On the other hand, based on the activities that have been completed for conservation of urban spaces, it is self-evidence that the culture of communities is not just a memory for locals, but there is the important part of people's life. Although, tourism can be mentioned as an economic developer, progress is defined within improving qualitative factors such as cultural, social and environmental activities.



**Conclusion of The Chapter:** As a conclusion, this chapter introduce the methods which are needed for proposing appropriate function for the most of historic buildings. According to ongoing debates, architectural features analysis, historic features analysis, value analysis and also considering actors' participation are key roles for reuse potential of historic monuments.

## Chapter 3

# ANALYSIS OF THE THREE MONUMENTS (OTHELLO TOWER, MARTINENGO BASTION AND RAVELIN BASTION) AND REUSE OPTIONS

**Introduction of The Chapter:** In this chapter, first, the methodology which is used in this study is expressed. In the second part of this chapter, three selected monuments, which are located in the walled city of Famagusta, are analyzed based on their architectural features, historical features and values. In the last part of this chapter, the results of evaluations are discussed.

### 3.1 Methodology

According to the literature review, heritage buildings are important, given the fact that they can illustrate the identity and culture of a region. Based on ongoing debates, these buildings need to be conserved and maintained for the next generations. Undoubtedly, there are some rules and principles for conserving this type of buildings as well as some approaches such as adaptive reuse. In Chapter 2, it is pointed out that adaptive reuse is a way for old buildings to be adapted to changes in modern life.

Due to the rich, long and turbulent history of Famagusta, this city has enjoyed the opportunity to obtain a great diversity of prominent monuments of cultural, historical and architectural aspects (Walsh & Edbury, 2012).

The goal of this thesis is to analyse adaptive reuse alternatives for three selected historical buildings in the Walled City of Famagusta; Othello Tower, Martinengo Bastion and Ravelin Bastion.

The main reason to choose these buildings is because of the fact that they are granted for conservation by UNDP-PFF as an international agent operating in Cyprus. In this projects, Tecnalía (FUNDACIÓN TECNALIA RESEARCH AND INNOVATION) from Spain has prepared these projects for UNDP-PFF, which their cover pages of Ravelin Bastion and Martinengo Bastion are shown in appendixes (Appendix G). Furthermore, as components of world heritages, these buildings are actually old, since they were built in Venetian and Lusignan period and reflect various historical layers, they need to be protected. Also they can be among the main attraction objects for cultural tourists in Walled City of Famagusta.

In this research, a mix technique for proposing appropriate functions for these three monuments through decision-making of a new use is chosen. The methodology to identify old buildings in order to propose appropriate re-functioning was developed from managing the built heritage plan of Worthing & Bond, Aydin (2010), Elsorady (2014), Murtagh (1997), Nelson (2005), Weeks (2012), Park (2006), Kwan (2001), Conservation of Historic Towns and Urban (1987), World Bank (1992), Agenda 21 United Nation (1992), Wilkinson et.al. (2009), Fuentes (2010) and Yildirim (2012).

The decision-making framework which is used in this study, identify information about a buildings' historical features, architectural features and determining heritage values of the three selected buildings as well as the aspirations of experts and users. The methodology which is used in this study, provides a mix models for decision-

making that is made from various references. This method can be easily adapted to any historic building. Moreover, the balance between project feasibility, environmental impact and social benefit can be objectively evaluated.

In order to be effective, a plan of conservation should be consonant with a management plan. For managing historical buildings which have lost their uses, a new function should be adapted to the structure. The situation and condition of these buildings should be first assessed for a new use. After that, the general information of these cases must be detailed. There are three steps, which have various sub-steps, that have been evaluated for giving new functions to historic buildings in an adaptive reuse projects. The historical features of each case are evaluated first, to give information about the historical point of them. The next step is architectural evaluation. In this context, significant material that show original material and its significance need to be considered. In addition, the physical features of the buildings which includes mass information and the importance of the architectural elements are investigated. Moreover, the components of buildings that consist of the original structure, plan, architectural details and sections and different types of area are analyzed. On the other side, integrity of the plan plays a key role. In this context, the accessibility, the structure of the old buildings and architectural style is examined. In an architectural survey, the other important feature that should be observed is knowing about the original function of the structure and also the different functions of it during past periods. Functional and structural assessment provides the direction towards the new use.

For maintenance of the structure of old buildings, it is necessary to determine the buildings' values. Protecting these values in re-functioning of old buildings is needed in adaptive reuse projects.

In order to achieve these goals, initial method, is literature survey. Literature survey on historic analysis, architectural analysis and heritage value analysis is a method which needs to use the previous research and to find the best way for analysis of three cases that includes books, articles, journals, internet sources, projects and so on. The other method is observation which includes photography, UNDP-PFF sketches, and drawings. Data evaluation for these methods is qualitative. Qualitative method is to assess and interpret the aspects which are needed for successful adaptive reuse projects. The achieved knowledge can be used to evaluate the situations of cases for considering the best functions.

On the other hand, the other method chosen in this thesis is questionnaire survey. This questionnaire is directed to locals, tourists and experts about their preferences about the new functions decisions. Two pie charts and tables in order to show the re-functioning options of each three monuments that include four types of actors have been prepared for both primary functions as main function and secondary functions as supportive functions. Based on the reasons which are discussed in Chapter 2, about the requirements of tourists and locals in conservation projects, this method is needed. The data evaluation for this method is quantitative in order to compare the percentage of preferences of various groups. After collecting data, the program which is needed to evaluate the information is Microsoft Excel Program. Using this program can give the charts and diagrams to show how many people prefer each function written in questionnaire to be as new functions. Subsequently, as it is

mentioned, the pie charts and tables for main and supportive functions are drawn to show each actors' preferences. After evaluation of this part, the preference of all actors will be presented as a whole chart and a table as well. The evaluation of this table can be seen at the end of Chapter 4. A framework which is the synthesis of different types of models, from various authors and references for decision-making methodology, is schematically draw in below:

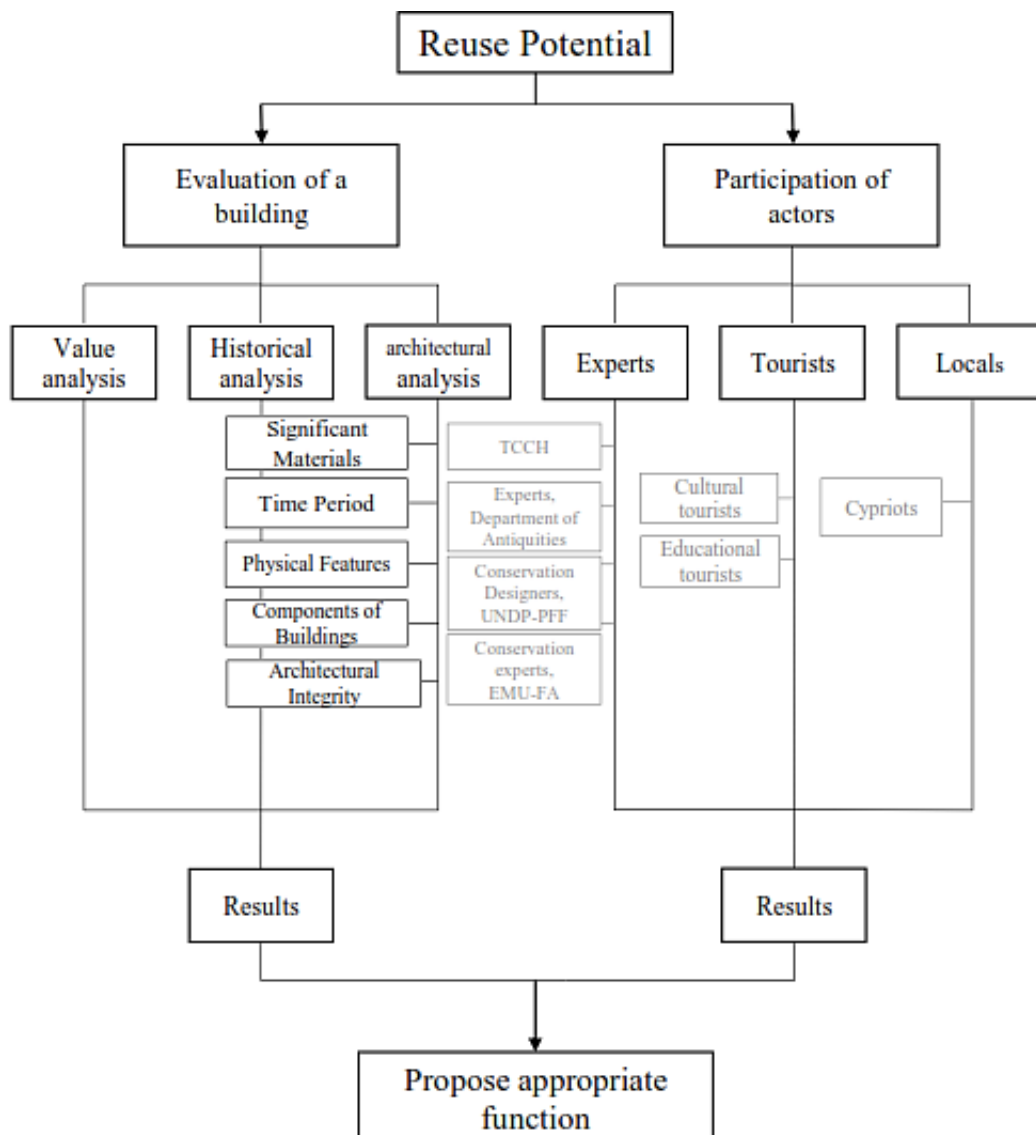


Figure 3.1: Decision-making model for reuse potential of historic building, adapted by Author (2016) from Mason (2002), ICOMOS (1999), UNESCO (2009), Aydin (2010), Elsorady (2014), Murtagh (1997), Nelson (2005), Weeks (2012), Park (2006), Kwan (2001), Conservation of Historic Towns and Urban (1987), World Bank (1992), Agenda 21 United Nation (1992), Wilkinson et.al. (2009), Fuentes (2010) and Yıldırım (2012).

### **3.2 Study Area (Three Monuments in The Walled City Famagusta)**

Cyprus is an Island which is strategically located at the crossroads of the continents such as Europe, Asia, and Egypt in Northeast of the Mediterranean Sea. This island is the third largest one in the Mediterranean Sea because of its 3572 square miles' area. The geographic setting of Cyprus cause to connect this island to culture and economy of the mainland civilization in Persians, Ionians, Arabs, Romans, Anatolia, Greece and Aegean region, Syria, Egypt, including the Hittites, Egyptians, Assyrians, Phoenicians, Byzantines, 'Lusignans' between 1192 and 1489, 'Venetians' between 1489 and 1571, 'Ottomans' between 1571 and 1878, 'British' between 1878 and 1960, Greek Cypriots Turks together between 1960-1963 and separately after 1963 (Gunnis, 1947; Hill, 1952; Cobham, 1908).

The island of Cyprus had the opportunity to be a house of many remarkable remains of architectural, cultural and historical heritage through its wonder, long, wealthy and unique history. Owing to the fact that Cyprus was ongoing influenced from various culture of different periods, which have significantly formed the history and identity of Cyprus (Hoşkara & Dorathı, 2007; Türker & Dinçyürek, 2007).

The island of Cyprus in 1974 was divided into two parts, South part (Greek Cypriots) and North part namely Turkish Republic of Northern Cyprus, TRNC (Turkish Cypriots) following Turkey's peace operation. TRNC was founded in November of 1983. Given that North Cyprus is not recognized internationality, it is extensively vulnerable to external economic changes. Moreover, this is an area having a noticeably small economy with limited natural resources and also a small internal market (Katırcıoğlu et al., 2007).

Apart from the rich history of North Cyprus, it has been the center of attraction, hosted civilizations of different periods and accommodated the periods changes in its area by protecting their cultures. Northern Cyprus can share the heritage of its history with people, songs, roads and trees. The walls that surround Nicosia and Famagusta, the glory castles, the cathedrals where kings wore crowns, monasteries dedicated to saints spreading Christianity, tombs, dervish lodges, and neighborhoods with social housing, which are still being visited, are examples of heritages in North Cyprus (Hoşkara & Doratli, n.d). These can be defined as tangible heritages of the North Cyprus. Other items of tangible heritages in this state can be seen in Appendix E. On the other side, intangible heritages are expressed below:

- *Handicraft;*
- *Folk Dancing, music and songs;*
- *Cultural Festivals (İskele festivali, Zeytinlik festivali, Güzelyurt festivali, etc.);*
- *Cuisine;*
- *Traditional Coffee Houses;*
- *Languages and;*
- *Oral traditions (Hoşkara & Doratlı, 2007).*

Although Cyprus is a small island that its whole population is around 1.3 million residents (of which only 313,626 people live in the Northern part) (World Bank, Last updated: Jun 2, 2016), there is rich architectural heritage from old periods (Neolithic period) to present. Some remained vulnerable buildings such as monuments and also archaeological sites that have cultural and architectural significance, illustrate that



the architectural conservation has normally been regarded as a vital responsibility (Hyland, 1999). Hence, as a result of values and worth of these buildings in North Cyprus, they need to conserve and protect for the future generations.

“Town Planning Department as Planning Authority in North Cyprus has organized a list of historic buildings in urban quarters of “Walled City of Nicosia (386 buildings), Walled City of Famagusta (49 buildings), Girne (257 buildings), Lefke (41 buildings) that are worth to be preserved (under the new Town Planning Law/Section 26), in collaboration with the Department of Antiquities” (Doratlı, 2000, p: 860).

Main criteria for making inventory, that is used was the traditional, artistic, historic, characteristics, archaeological and architectural the value of these buildings.

When it comes to conservation of cultural heritage in North Cyprus, Town Planning Department and Department of Ancient Museums and Monument; and also Board of Antiquities play a key role in the conservation and preservation them. Association of the Chambers of Turkish Cypriot Engineers, Foundation of Evkaf, Municipalities and Architects (KTMMOB chamber of Architect), Department of Environment have all play important role in conservation of heritages with different intensity (Doratlı, 2000).

Historic and worthy buildings in North Cyprus attract cultural tourists from around the world, to this land. In North Cyprus, “tourism is a basic priority sector for the economic development of this land. The tourism industry is one of the main income creator for North Cyprus” (Katircioglu et al.,2007, p: 39). The tourism industry

contributed \$691.6 million (17.12 per cent) to the GDP of North Cyprus (TRNC State Planning Organization, 2015). Although “net tourism revenue has the greatest share in invisible account and is especially used for compensating trade deficit” (Katircioluđlu et al.,2007, p: 41), unrecognition of North Cyprus gave irrecoverable damages to the tourism industry over the years.

One of the tourism problem in North Cyprus is transportation; “there is limited direct flight from/to foreign countries other than Turkey to/from North Cyprus” (Katircioluđlu et al., 2007, p: 43). This is another main damage that has happened due to the political non-recognition in tourism industry. Based on Turkish Republic of Northern Cyprus State Planning Organization (2015), the great majority of tourists, 74%, come from Turkey. Also, vital problem related with the tourism planning is the lack of physical plan for the creations that presents the geographical distribution of activities in the area (Katircioluđlu et al.,2007).

The political isolation in North Cyprus influences economy such as existence of inappropriate exports and tourism revenues. On the contrary, higher education emerged) so, one of the main revenue resources of North Cyprus specially in city of Famagusta is educational tourists.

According to the TRNC State Planning Organization December 2015, the last statistic from the number of tourists visiting TRNC during 2010-2014 represents in table below (Table 3.1). The number of visitors for each city of North Cyprus has been not inserted.

Table 3.1: The number of tourists visiting the TRNC during from 2010-2014, by Turkish Republic of Northern Cyprus State Planning Organization (2015)

MAIN ECONOMIC AND SOCIAL INDICATORS					
2010	2011	2012	2013	2014	
5,649,534,936.0	6,559,174,528.7	6,915,831,629.3	7,579,403,276.2	8,840,388,007.6	GNP (Current Prices YTL, ₺)
3,750.6	3,908.5	3,840.8	3,969.5	4,031.9	GNP (Million \$)
3.6	4.0	0.5	1.3	4.9	Real Growth Rate (%)
22,146.9	25,850.2	27,077.2	29,216.8	33,127.8	GNP Per Capita (Current Prices YTL, ₺) <sup>11</sup>
14,703.0	15,403.0	15,037.9	15,301.6	15,109.0	GNP Per Capita (\$)
5,614,136,886.0	6,508,996,348.7	6,955,084,709.3	7,606,898,636.2	8,858,586,587.6	GDP (Current Prices YTL, ₺)
3,727.1	3,878.6	3,862.6	3,983.9	4,040.2	GDP (Million \$)
3.7	3.9	1.8	1.1	4.8	GDP Real Growth Rate (%)
3.3	14.7	3.6	10.2	6.5	Inflation Rate (%)
375.8	299.1	128.2	285.0	195.0	Budget Deficit (Million \$) <sup>1</sup>
4,692.0	5,007.1	5,156.1	5,930.5	5,164.5	Bank Deposits (Million \$) <sup>2</sup>
2,069.1	2,116.4	1,775.6	1,555.7	1,379.0	Foreign Exchange Reserves (Million \$)
96.2	152.9	122.4	120.7	133.9	Export (Million \$)
1,604.2	1,699.9	1,705.3	1,699.4	1,784.3	Import (Million \$)
-1,508.0	-1,547.0	-1,582.9	-1,578.7	-1,650.4	Foreign Trade Balance (Million \$)
6.0	9.0	7.2	7.1	7.5	Export / Import (%)
902,390.0	1,022,089.0	1,166,186.0	1,232,753.0	1,366,007.0	Tourist Arrivals
741,925.0	801,326.0	904,505.0	923,308.0	1,020,577.0	Turkey
160,465.0	220,763.0	261,681.0	309,445.0	345,430.0	Other
405.8	459.4	571.9	613.4	691.6	Net Tourism Revenues (Million \$)
93,498.0	93,470.0	96,539.0	97,868.0	103,149.0	Employment
12,619.0	9,864.0	9,174.0	8,929.0	9,320.0	Number of Unemployed
11.9	9.5	8.7	8.4	8.3	Unemployment Rate (%)
277,680	283,281 <sup>11</sup>	292,129	301,988	313,626	Population
1.1	1.7	1.5	1.5	1.4	Population Increase Rate (%)
85.7	87.4	90.1	93.1	96.7	Population Density
15.2	14.6	14.8	14.4	14.1	Crude Birth Rate (Per Thousand)
6.9	4.1	4.1	4.2	4.4	Crude Death Rate (Per Thousand)
0.8	1.1	1.1	1.0	1.0	Natural Increase Rate (%)
12.9	12.3	11.8	11.3	10.8	Infant Mortality Rate (Per Thousand Live Bi
1.9	1.8	1.8	1.8	1.8	Total Fertility Rate
					Life Expectancy at Birth (Year) <sup>3</sup>

Famagusta (Gazimağusa) is one of the largest cities in North Cyprus that can attract tourists because of its rich architectural, historical and also valuable monuments (Lyssiotis, 2010).

The length of historical walls which are built of ashlar, surrounding old city Famagusta, are three kilometers. In addition, the walls reach nine meters in width at same points. There is a ditch around the walls, that have the best view of the walls. “A moat 46 meters wide was dug on the outer flanks of the wall and was filled with water” (WMF, 2016), but because of risk of malaria they drain water in 19<sup>th</sup> Century.

During Venetian period the wall on the sea front, the ‘Martinengo bastion’ and the ‘Kara (Land) Gate’ were built for military purposes. The city-walls have bastions, gates, ramps, embrasures, arms depots, depots and stables. The towers of the walls are as follows: Arsenal (Canbulat), Porta del Mare (The Sea Gate Bastion), Castella (The Othello tower), Signoria (The Ringed Embrasure), Diamete (The Karpaz Bastion), Mozzo (The Martyr Bastion), Martinengo (Arsenal), Pulacazaro · Moratto · Diocare · Ravelin (The Land Gate, The White Tower) · Santa Napa (The Golden Bastion) · Andurizzi (The water bastion) · Campo Santa (The Ringed Bastion) There is also the Othello building as an interior castle, the two original entrances; Ravelin (The Land Gate) and Porta del Mare but they were The Ottomans later restored the walls that were destroyed during the invasion of Famagusta in 1571 (Gannon, 2015).

### FORTIFICATIONS OF FAMAGUSTA

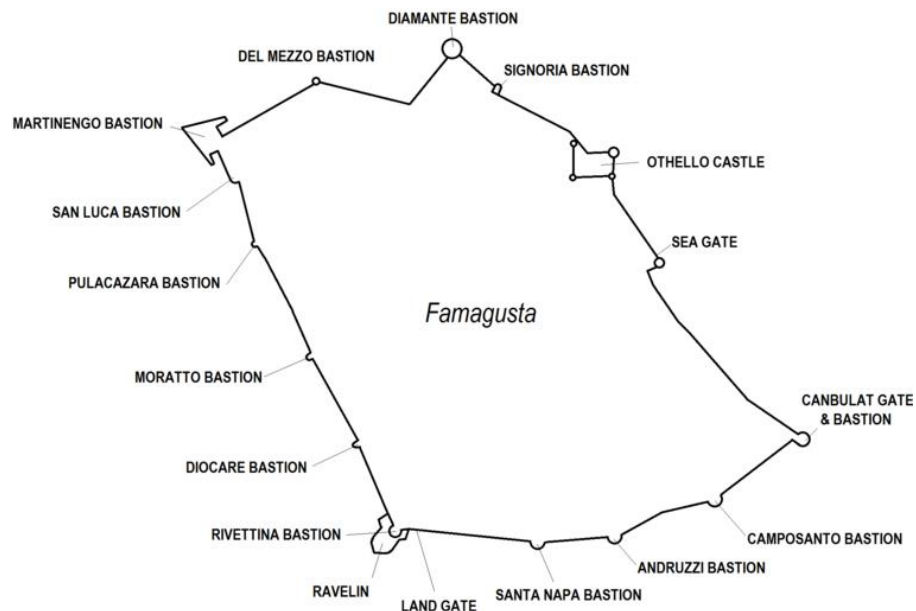


Figure 3.2: Fortification of Famagusta, photo from URL 1

The Venetian walls and fortifications surrounded the old city of Famagusta, stand today as an excellent instance of Renaissance military architecture. These walls have

been built between 1495-1564, including the existing medieval Lusignan walls and towers, which were dramatically decreased in strength, height and also remodeled (Doratli et al.,2007).

The Walled City is much decreased its former glory. In recent decades, lack of resources has caused the decline of the French, Greek, Genoese, Venetian, Ottoman, and British heritage found within the popular walls of this city. In addition, development of modern life in Famagusta has led some of traditional and historical buildings to be at danger in the old city. Fortunately, given the continued political and physical separations of the city between Turkish and Greek Cypriots, for documenting and preserving this wealthy heritage, the walled master plan is needed (Katircioluđlu et al., 2007).

Moreover, the historic Walled City of Famagusta was put in WMF (The World Monuments Watch, 2016), because of its extraordinary architecture during different periods and an unexpected narrative of economic, social, and maritime history of a Mediterranean city. (Katircioluđlu et al., 2007). These characters can be protected prominently in the history of the region which is unfortunately forgotten by many people or cultural tourists today.

“Famagusta is remarkable for the layers of history visible in the remains of buildings built by successive waves of invaders and settlers” (Doratli, 2001, p: 50). Conservation of the substantial historic structures and a successful care on maintenance plan would let inhabitants and tourists to enjoy this historic place.

According to the Salih Önköl (civil engineer, representative at UNDP-PFF, 2016), Technical Committee on Cultural Heritages and UNDP, try to find the ideal functions for these cases and given the fact that the funds for these activities are limited, it is vital to determine the functions to be proposed to make it a successful projects and also attract tourism as a tool to financially supported them. Hence, this study tries to find the most appropriate functions for these cases.

In order to achieve this aim, value analysis, historic analysis and also architectural analysis of these three selected buildings have been evaluated separately in the following section. In addition, the opinions of actors (tourists, students, locals and experts which include Technical Committee members, members of Department of Antiquities, conservation designers of UNDP-PFF and conservation experts of EMU) is needed as well, which is discussed and analyze in the next Chapter.

### **3.3 Case Study Evaluation**

Following the conservation of the Othello Tower in 2015, a study or “Survey, Investigations, Assessment and Project Design for Martinengo Bastion and Ravelin Bastion was carried out between April 2014 and January 2015 and resulted in a Condition Assessment & Report that allowed for the identification of several structural stability issues” (UNDP-PFF, 2016). The locations of these three monuments are shown in figure below (Figure 3.3):



Figure 3.3: Aerial view of Walled City of Famagusta in North Cyprus, from URL 2

As it is expressed before, in order to find possible options of appropriate functions for these three monuments, evaluation of their values, architectural analysis and historical analysis is necessary. As following below, these three selected buildings are evaluated separately. Moreover, experts and users' opinions on these possible options are examined in the following chapter (Chapter 4).

### 3.3.1 Othello Tower

The situation of Cyprus in terms of socio-economic welfare and the level of civilization in the Lusignan period can be known as the pinnacle period of this island. "During this period, the Walled City of Famagusta was an important settlement on account of its natural harbor; a citadel Othello Tower and a fortress were built to protect the city" (Doratlı & Özgürün, 2003, p: 2). The adsorbent Othello Tower (the oldest Lusignan building which is remained in Famagusta,) was initially built in the 14<sup>th</sup> Century as a moated fortress with the purpose of protecting Famagusta's harbor.

Moreover, it is thought that this building had been a residence for members of the regnal family or their entourage during Lusignans period (Long, 2012). The location of this building is Northern side of Famagusta and its coordination is  $35^{\circ}7'39.7''\text{N}$  and  $33^{\circ}56'35.7''\text{E}$ .

"Greek and Turkish Cypriot politicians on June 17 pledged to preserve Cyprus' rich cultural heritage after hailing the restoration of a 14<sup>th</sup> Century seaside garrison that is the Othello Tower. The promise came amid renewed hopes that the east Mediterranean island nation's ethnic divisions can be healed" (Dabilis, 2015). Preservation of North Cyprus's rich heritages, can attract cultural tourists in this area.



Figure 3.4: Aerial view of Othello Tower, Northern Cyprus, photo from URL 3

### 3.3.1.1 Historic Analysis of Othello Tower

"Othello Tower offers the historian a rare visual panoramic of Famagusta's historic structures before the destruction wrought by the earthquake of 1735" (Walsh, 2012,



p:448). During the reign of Henry II (1285-1324), Othello Tower was the main way to entrance to the city. Apparently, Leonardo Da Vinci during his trip into Cyprus in 1481 gave some advices for refurbishing this tower (Hamilton, 2012).

When the Venetians, who took control of Cyprus in 1489, arrived, their Captain, Nicolo Foscareno in 1492, considerably made the town's defenses stronger, remodeled, and expanded as presidio (Kambas, 2014). It just would have had residence for men at arms and therefore would not have been a domicile for any official of high rank. Venetians made sure that, if they removed the first floor and brought the level of the building into line with the embed walls, in the event of an attack, the building was not visible from out of city (Kambas, 2014).

Othello Tower is referred to one of famous Shakespeare's plays in which Othello has been described as a Cristoforo Moor, Venetian governor of 1506, who kills his love 'Desdemona' because of his jealous rage. The play mentions to "a port in Cyprus", and "Cyprus, the Citadel" as well. In addition, it is believed that Moro had lived in the palace of the Provveditore (Walsh, 2012). Although, it is seemed that the Shakespeare knew about Cyprus a lot, it is not so and he had never been there. Shakespeare's play is not contemporary with Venetian period; it had been written more than 30 years after the Ottomans arrived (Kambas, 2014).

After death of the Venetian civil engineer, Giovanni San Michele, who was responsible for remodeling the most part of walled city, around 1559, the fortress was renamed (Ferraro, 2012). As respects, in 1566, a visitor stated that the citadel was not used as a residence for a long time, but it was used as a prison in that period.

"It is rumored that the Venetians filled many of the citadel's ventilation shafts with earth and rubble to prevent cannon balls from penetrating them" (Ferraro, 2012).

There are some legends about hidden treasures which were buried in chambers when Venetians forced to capitulate to Ottomans. Although Famagusta and especially its buildings such as Othello Tower can be mentioned as the greatest Renaissance military engineering, this city fell in 1571, "inevitably from the sea, with 100 galleys and 224 smaller ships under the command of Lala Mustafa Pasha" (Walsh, 2008, p: 27).

This tower renamed to its present name 'Othello's Tower, during the British colonial period and the small garden was named after death of the unlucky Desdemona, who was Moro's wife in Shakespeare's tragedy (Efthimiou, 1987).

"Othello is set, therefore, not only in Famagusta but symbolically at the margins of Christendom and yet at the heart of civilization" (Walsh, 2012, p: 464).

The latest renovation had taken place since Cyprus was separated. This project took cost just over 1 million Euros and was completed by a Turkish Cypriot contractor (Gannon, 2015) with the financial support of UNDF-PFF. The figure below (Figure 3.5) shows the Othello Tower history schematically.

1310	There used to be an old tower and fortification built in 1310
1481	Leonardo da Vinci also apparently he advised the Venetians on the design of the defenses of Famagusta during his visit to Cyprus in 1481.
1492	After Cyprus was sold to the Republic of Venice, the castle's square towers were replaced with circular ones to suit more modern artillery. This building was Reconstructed by Nicolao Foscarino 1492
1492	When the Venetians took over the city, the Citadel was completely re-modelled, and turned into a military stronghold. By removing the first floor and bringing the level of the building into line with the encircling walls, they ensured that it was not visible from outside the city in the event of an attack.
1500-1550	The entrance of it built was changed by Venetian in 1500 and 1550.
1566	Castle used as a prison.
1570-1571	During the Ottoman attack Venetian merchants hide their fortune. In addition, The citadel itself, consists of towers with corridors leading to artillery chambers. In times of war they would have allowed soldiers to move quickly from one part of the castle to another
1900	In 1900, the castle's ditch was drained of water to reduce the risk of malaria.
1963	Since 1963, there is a political conflict between the two communities of island after 1974, division of Cyprus(Turkish Cypriot and Greek Cypriot). The international financial support for heritage was ceased to north Cyprus until 2003.
1974	The "Othello Tower" was long a tourist magnet since 1974 because of division of Cyprus.
2003	After 2003 UN, US and EU have supported cultural heritage conservation as a whole island.
2014	The castle began to be restored in 2014, and it reopened to the public on 3 July 2015.

Figure 3.5: Othello tower history, adapted by author 2016 from, (Gannon, 2015), Long (2012), Dabilis (2015), Walsh (2008), Kambas (2014) and (Ferraro, 2012).

### 3.3.1.2 Architectural Analysis of Othello Tower

The Othello Citadel is an important heritage building in North Cyprus. Moreover, it can be known as a vital point in the history of Mediterranean, Cyprus and Famagusta. "Its importance and a sense of age and mystery are evident when one walks through the portals of the citadel" (UNDP-PFF Projects Sheet). This building includes the walls of fortifications, walls connecting and also four remained tower which were originally eight ones. "The monument comprises of two structures one inside the other. The outer Venetian fortifications that date from 1492 were constructed around the earlier Lusignan fortification from the 14<sup>th</sup> century" (UNDP-PFF Projects Sheet). The key defensive situation of Famagusta at the apex of the city walls and also the keeper between the sea and port are formed by this Citadel.

“Analyzing the architecture of this citadel is intriguing and relevant to understanding the seventeenth-century European fear of ‘turn[ing] Turks’ in this, or any other, martyred realm” (Walsh, 2012, p: 448).

- *Significant Materials:*

This building has been made from Local Sandstone, Lime mortar and Well-Cut stone. Furthermore, walls are made by corroded sandstone. In many parts of this tower, the walls and their materials are destroyed. The structure of Othello Tower is Sandstone structure and loadbearing.

- *Physical Features:*

The Othello citadel is encircled by a moat and is detached from the rest of the fortifications. At the top of the main entrance of this building (gateway) is a sculpture (marble slab) which is the patron saint of Venice, Winged Lion of St. Mark. The architect of this sculpture was Nicolò Foscarini. This can be presented as the badge of Venice that often can be seen in other parts of Cyprus like in Kyrenia Castle, Nicosia, and Bellapais Abbey. The Lion’s front paws are on the earth, representing Venice's land power, another lion's paws are in the sea, representing its maritime empire. Below the lion, there is a door which is one of the earliest remaining wooden doors in Cyprus (Lucchese, 2012). This entrance which has marble decoration is the only entrance to this building. Based on Department of Antiquities (North Cyprus), Othello Tower originally had a second floor which was pulled down in 1492.



Figure 3.6: Entrance of Othello Tower and its sculpture, (Author, 2016)

A rectangular plan with a big and central courtyard; windows and doors with arches; and also decoration and arrangement which are kept to a minimum are the main character of this castle (Efthimiou, 1987). The citadel includes towers with corridors that can guide visitors to artillery chambers. During war, these corridors would have permitted soldiers to move rapidly from one part of the castle to another. In addition, in time of peace, they would have been used as storage for things that required to be kept secure, safe or cool (URL 5).



Figure 3.7: Inside of Othello castle, (Author, 2016)

Due to the innovation of gunpowder and cannon, the Venetians changed the castles because of their requirement to artillery. Typically, because of the fact that the walls were too thick, they did not destroy them, but they converted old square towers into circle ones. This change has taken place because they knew that a rectangular tower could easily be knocked off from its corners through gunfire (Walsh, 2012).

Originally, as it is mentioned before, this tower was built around a central rectangle courtyard with a square tower at four corners. The kitchens, great hall, store rooms and servant's quarters were placed on the ground floor, reception rooms and bedrooms were located on the second floor (Department of Antiquities, North Cyprus, 2014). This large vaulted Great Hall and corroded sandstone walls, which is located on great hall's far side, are on the north side of the yard and the large kitchen at the other side. It is assumed that this great hall was refectory or dining hall. This room is from about 1300 and it is enormously built with a vaulted roof and tall Gothic arches. Inside its main room the coats of arms of the kingdom of Jerusalem still survive. A pier protecting the harbor began from this citadel (Department of Antiquities, 2014).

The reason for making small windows with no glass were because of defense purposes (URL 8).

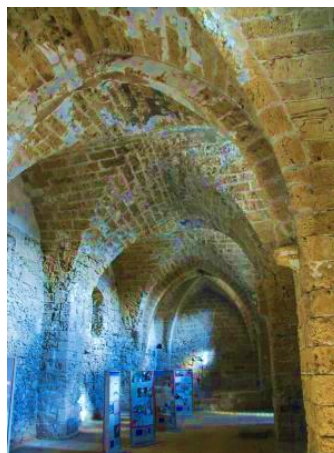


Figure 3.8: Large vaulted Great Hall, (Author 2016)



Figure 3.9: Windows of Great Hall, photo from (URL 5)

Climbing up to the upper levels of the castle can give the satisfactory views of the city and port. From the north-east side of tower, visitors can catch a sight of the modern harbor below and the ventilation shafts that drop down to medieval ways (Hadjicostis, 2015). Nowadays, this harbor which is known as the entrance of Famagusta, is used still by modern ships as well as the past in the golden age of Famagusta in 1300 to 1400 A.D. The yard in this castle and vaulted Great Hall are still used for folklore performances, exhibitions, concert, and theatre performance after the latest consolidation studies (Kambas, 2014).



Figure 3.10: View from Othello Castle, (Author, 2016)



Figure 3.11: Stairs to roof of Othello Castle, (Author, 2016)

- *Components of The Building:*

The Othello Tower includes open and close areas. The open area is the courtyard which connect four towers that includes complex corridors inside, and close area, as it is mentioned, is Great Vaulted Hall. The picture below can show the section from two towers of this citadel and also the section from Great Hall.

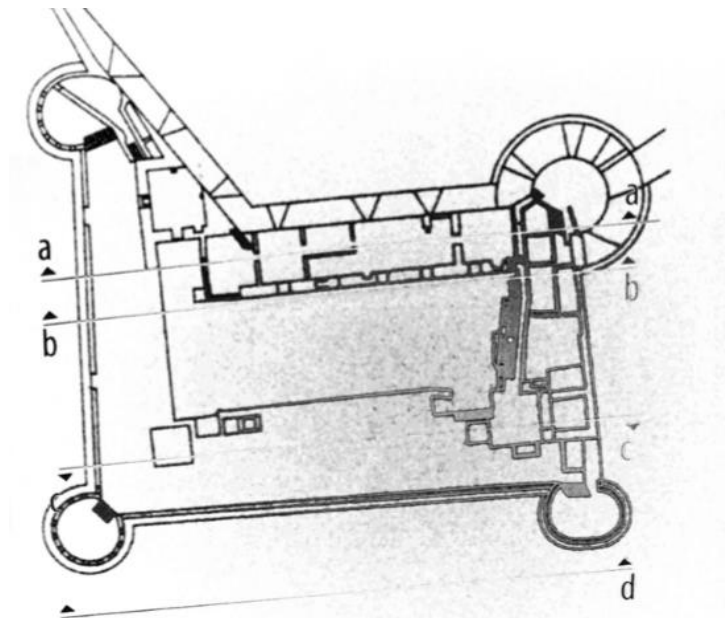


Figure 3.12: The plan of Othello Tower, (UNDP-PFF, 2016)



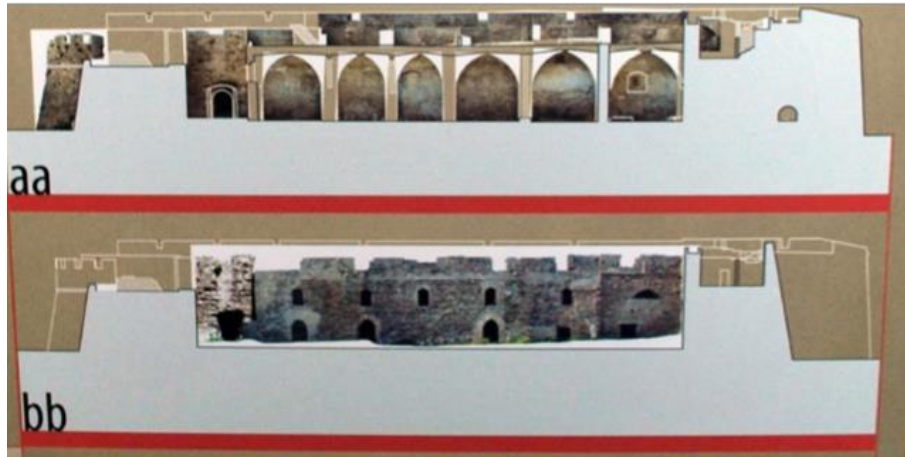


Figure 3.13: Sections and view from Great Vaulted Hall in Othello Tower, (UNDP-PFF, 2016)

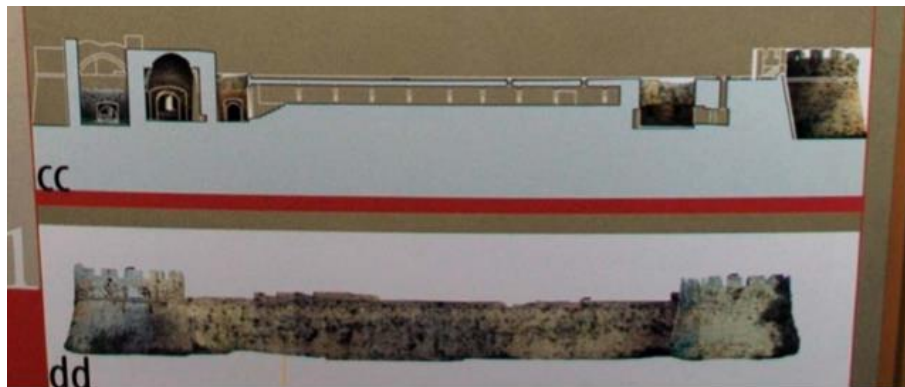


Figure 3.14: Sections and view from towers in Othello Tower, (UNDP-PFF, 2016)

The Figure below (Figure 3.15), presents plan of Othello Tower. In this Figure, different components of this building are remarked by circles. Each circle has a number which is written in its related picture.

As it is shown in the pictures below, Othello tower has one staircase to guide visitors on the top of its towers. In addition, these towers can connect to each other. The dreadful corridors inside of these towers illustrate the history that was happened in this building.

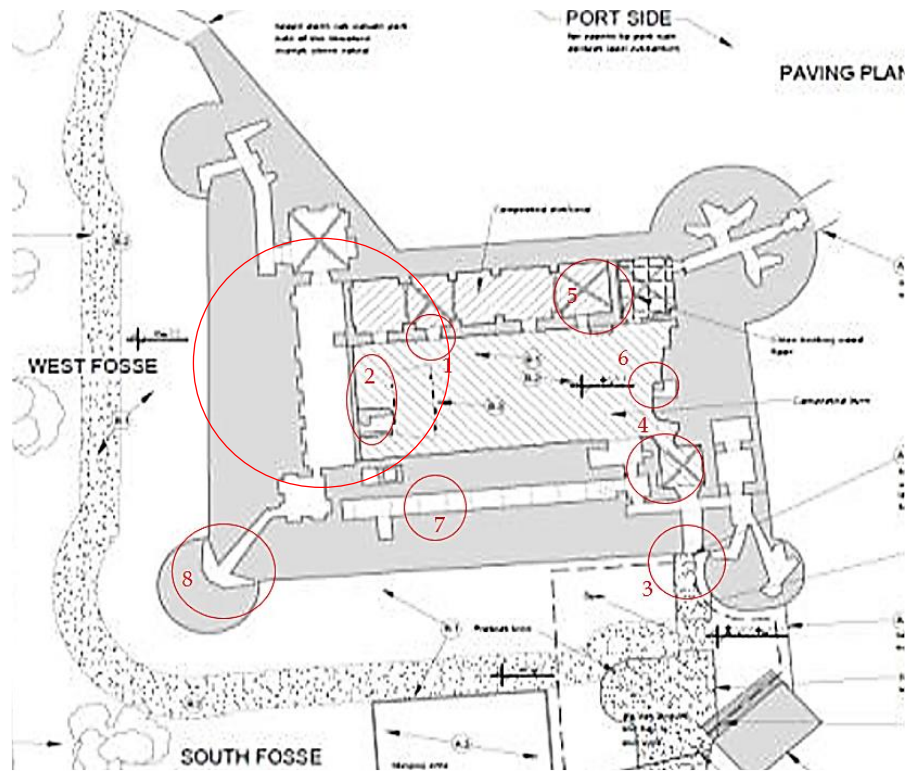


Figure 3.15: Schematic plan of Othello Tower, (UNDP-PFF, 2016)



Figure 3.16: Different parts of Othello Tower, (Author, 2016)

- *Integrity of the plan:*

The Othello Tower has wide spaces such as a huge open area (courtyard) which can connect the four towers and a vast close area (Vaulted Great Hall). The architectural style of this building is mix of Venetian and Lusignan architecture. As it can be seen in figure below (Figure 3.17), the accessibility of this building from main street (Yesil Deniz Cd) is around 2-3 minutes. The other accessibility from port is around 14 minutes.



Figure 3.17: Accessibility of Othello Tower from streets, (adapted by author, 2016 from URL 2)

- *Building's Functions:*

The previous functions of Othello Tower were residence, citadel, military and prison and the present function is Multi-functional center (exhibition, concert, theater) held in opening. The military features of this citadel was impossible to attack to Othello, because of very deep ditches surrounding it and depth of walls of this tower (6 meter).

### 3.3.1.3 Value Analysis of Othello Tower

According to the heritage values in conservation part of Chapter 2), the (Table 2.3) is drawn. Same table is used the analysis of the values of Othello Tower. The segments which are ticked, present each value of this Tower. As it is clear, each monument does not have all of the values. The analysis of this part is based on historical and architectural analysis of Othello Tower.

Table 3.2: Value analysis of Othello Tower, adapted and analyzed by Author (2016), from Feilden (2007) and Mason (2002).

Othello Tower Values															
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wonder	Artistic	Spiritual & Symbolic	Continuity	Documentation	Historic & Identity	Archaeological, Age & Scarcity	Aesthetic	Architectural	Townscape, Ecological & Landscape	Technological, Scientific & Educational	Functional	Economical	Social	Political & Ethnic	Universal

- ✓ **Wonder Value:** The castle awakens the feeling of curiosity.
- ✓ **Artistic Value:** The Castle has a unique plan and form which are beautifully harmonic.

- ✓ **Symbolic Values:** The Othello Tower is a symbol of the tragedy of Shakespeare's play. In addition, the marble Venetian symbol at the top of the door entrance of this buildings, can be seen.
  
- ✓ **Continuity:** The monument carries traces of time to today.
  
- ✓ **Documentation Value:** Most notable thing is Shakespeare's play Othello (1603) might have taken its name from this castle. The Castle has many historical facts. Also, it gives information about defense heritage in several periods.
  
- ✓ **Historical and Identity Value:** There were a lot of events which have occurred during different periods in this tower. As archaeologist Sophocles Hadjisavvas said, "this fortress represents the very history of Famagusta" (Kambas, 2014).
  
- ✓ **Archeological, Age & Scarcity Value:** There are many rich layers of history on this monument. Moreover, the Othello Tower is the oldest surviving Lusignan building in Famagusta.
  
- ✓ **Aesthetic Value:** As the aesthetic value refers to visual qualities of heritage, this building has aesthetic value because of the aesthetic rations as well as windows and doors possess pointed arches, and decoration and embellishments of Venetians and Lusignans and also Gothic arches in Great hall besides vaults.

- ✓ **Architectural Value:** This building has been used in several periods from Lusignans to present. Hence it is affected from different architectural styles and techniques of various periods such as Lusignans and Venetian periods.
- ✓ **Townscape, Ecological and Landscape Value:** The view from up levels of the Othello castle can give the fine views of the city and the port.
- ✓ **Technological, scientific and Educational Value:** The methods which were used for the structure of Othello Tower can give us the evidence from past lifestyle and architectural military techniques in previous periods. Hence, current and future generations learn from this monument.
- ✓ **Functional Value:** In 14<sup>th</sup> Century, this building was as main gate of Famagusta. It was built for protecting the Famagusta port from any possible enemy attacks. And nowadays it is used for exhibition hall, events and conferences. With both high and large closed and open spaces, the potential of re-functioning is very high.
- ✓ **Economic Value:** As an existing building, it has an economical value. Besides, the Castle has entrance fees and events/conference fees.
- ✓ **Social Value:** As it is mentioned, Shakespeare's play Othello (1603) might have taken its name from this castle in the past. There have been some wedding ceremonies (Önkal, 2016); theater; concert; fashion show; with gather people for social connections and shared space.

- ✓ **Political and Ethnics:** the monument is an evidence of Lusignans and Venetian existence on the island.
  
- ✓ **Universal Value:** The EU funded and UNDP-PFF implemented “Support to cultural heritage monuments of great importance for Cyprus” project, a study “Survey, Investigations, Assessment. and Project Design” was carried out in 2012. The project started in May 2014 and are completed by mid-June 2015. Besides, Othello’s tragedy of Shakespeare is internationality well-known.

### **3.3.2 Martinengo Bastion**

One of the most adsorbed Venetian additions to the walls, (the walls which embrace the city of Famagusta) is the Martinengo Bastion. It was the most important element of the Venetians’ military architecture of Famagusta because of its triangular design in Mediterranean lands in Middle Ages (Renaissance) (Langdale, 2010). The location of the Martinengo Bastion is in the North-West side of the Wall City in in Hisar Yolu Sk. After 1920, Ottomans called this bastion ‘Tophane’ as well. The architect of this building was ‘Giovanni San Micheli’ who was Italian (Cosmescu, 2015). “The Martinengo would be Famagusta’s most modern configuration in keeping with recent innovations in bastion design which took modern cannons and artillery into account and increased both the defensive and offensive capabilities of the bastion” (Langdale, 2010, p: 167).



Figure 3.18: Aerial view of Martinengo Bastion, Famagusta North Cyprus, photo from UNDP-PFF, 2016.

### **3.3.2.1 Historic Analysis of Martinengo Bastion**

Giovanni San Micheli' redesigned and strengthened Martinengo Bastion between 1550-1559. Because of the fact that the northwest side of the old city in the terms of defense was weak in Venetian period, they realized that the appropriate modern defense building was needed. Therefore, Venetian attempted to set a huge construction project for this problem. It is known that although Leonardo da Vinci (1452-1519) was a peace-lover, he studied about the theory of defense and fortification (Cosmescu, 2015). In addition, the fortifications of Florence in 1528 was built by Michelangelo who lived between 1475-1564. It is stated that some parts of Martinengo Bastion are similar with these two buildings. Besides, it is thought that, Giovanni San Michele inspired from these fortifications as well (Walsh & Edbury, 2012).



Langdale introduce Martinengo Bastion; “the Martinengo would be Famagusta’s most modern configuration in keeping with recent innovations in bastion design which took modern cannons and artillery into account and increased both the defensive and offensive capabilities of the bastion” (Langdale, 2010, p: 167).

During the siege of Famagusta by Ottomans, the death of commander of the Venetian reinforcement troops, Martinengo (who was one of the famous commander in Cyprus) caused to give his name to this building. The well protected tombs of five people who were killed during the troubles of the 1960s, can be seen on the bastion. What a valuable gift it would have been to the Ottoman commander in 1570, but to his military credit he decided not to attack strong points like this. In actual fact, this was the specific policy of Ottoman in winning the Famagusta, not to attack these extremely fortified bastions, but to lead an attack on the weak parts of walls (URL 8). The chart below shows the Martinengo Bastion history schematically.

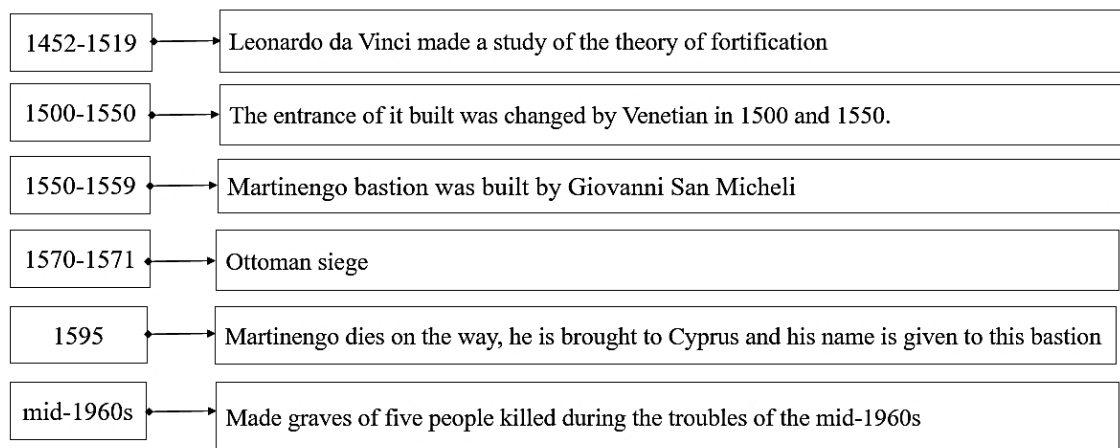


Figure 3.19: Martinengo Bastion history, adapted by author 2016 from, Cosmescu (2015), Walsh & Edbury (2012) and Walsh et al. (2012).

### 3.3.2.2 Architectural Analysis of Martinengo Bastion

The Martinengo is a bastion which has multipart and complex structure. This bastion has really huge heart shape bastion, two Piazza-Basse, two Caveliers, three ramps and orecchioni (Cosmescu, 2015) for additional support. The ideal of the shape of Martinengo Bastion (pentagonal) in venetian military architecture, was presented in about the second decades of the 15<sup>th</sup> Century. “The shape of the spur or pentagonal bastion was optimal. It was necessary to shape it for the necessities of modern artillery that required appropriate positions for barrage fire. Supporting fire and flanking fire” (Walsh & Edbury, 2012, p:195).

- *Significant Materials:*

“The Martinengo Bastion, an imposing renaissance period angled bastion built by the Venetians in preparation for an Ottoman siege, dominates the northeast corner of these fortifications” (Langdale & Walsh, 2009, p:12). This is a reason why all walls of Martinengo Bastion built from stone masonry (Cosmescu, 2015).

- *Physical Features:*

It can be stated that the Martinengo is a type of invented bastion in the 15<sup>th</sup> Century (Langdale, 2010). The barded arrow form of the head of bastion pointing out to landward. In addition, Langdale (2010) described the shape of Martinengo as below;

“The shape of the bastion meant that not only did it command a large field of fire away from the walls, but ensured that should any attackers manage to enter the moat area to attack the weaker walls, its field of fire could also be directed along the line of the walls” (Langdale, 2010, p: 167).

Moreover, this form of the bastion's heading came from typical of Italian fortresses (aka star forts). Their design permitted the location of guns in a side place from which they could fire on the soldiers that were attempting to climb the walls. Gaining time to allow the Venetian fleet in order to reach Famagusta and bring provisions and new troops was the strategic aim of the fortifications in Famagusta (Piperno, 2013).

Although the angular corners can be vulnerable for a bastion, the architect of Martinengo Bastion knew that if he constructed two cannon flankers in both wing of this building, this problem can compensate. With other two cannons in other sides, the ditch was covered with a field of fire. Several chimneys for gunpowder smoke were located on the roof to be escaped. The architect considered niches for gunpowder barrels and cannon balls into the walls (Hillis, 2013).

The other physical features of Martinengo Bastion are the height and width of the walls. As it is mentioned before, this building is an enormous solid work of stone masonry, covering more than one square mile and with a scarp 20 ft. thick. "Martinengo's faces are not equal. Northern face of this building in 262 ft. and western face is 262 ft. (long) and flank of ear is 49 ft. (wide)" (Cosmescu, 2015, p:64). "Martinengo presents a wonderful sloping 245 ft. ascent, a wide ramp on who side two 210 ft." (Cosmescu, 2015, p: 65).

- *Components of The Building:*

The Martinengo Bastion consist of open and semi-open This building has six entrance, two entrance from six ones are from under the ramps; two entrance from the top of the roof and two of them from bastion. Martinengo Bastion includes wide and small spaces and also narrow corridors or tunnels.

In the Figure below (Figure 3.20), the exterior (roof) plan of Martinengo Bastion can be seen. In this Figure, different parts of the buildings are remarked by red circles. Each circle has numbers which are written in its related pictures.

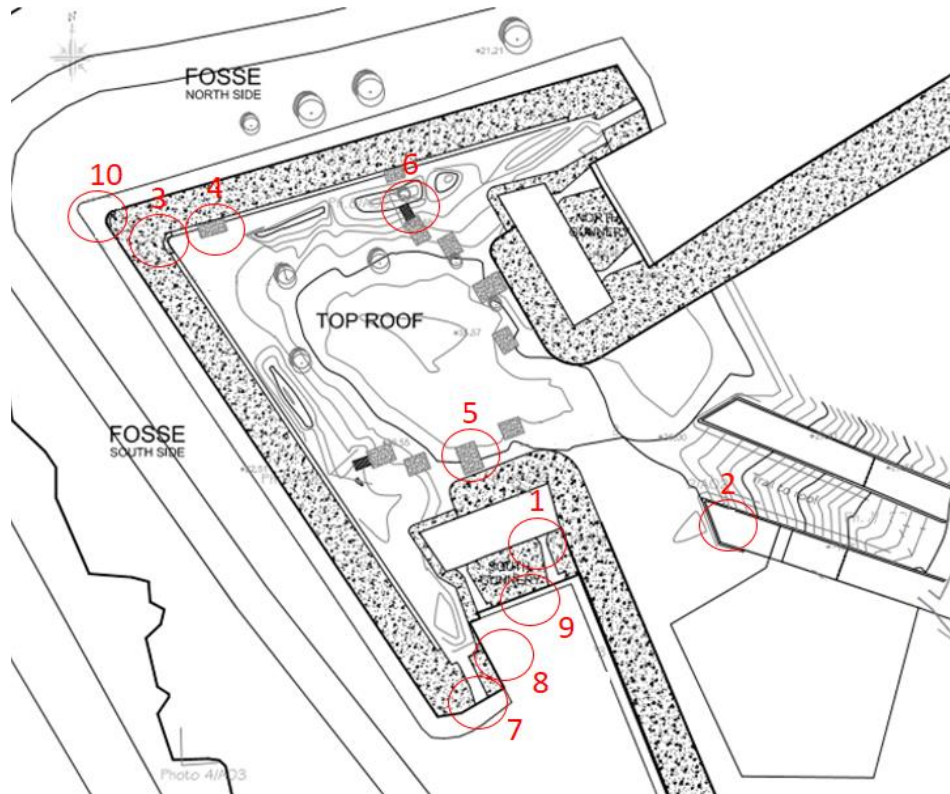


Figure 3.20: Exterior (roof) plan of Martinengo Bastion, source UNDP-PFF, 2016



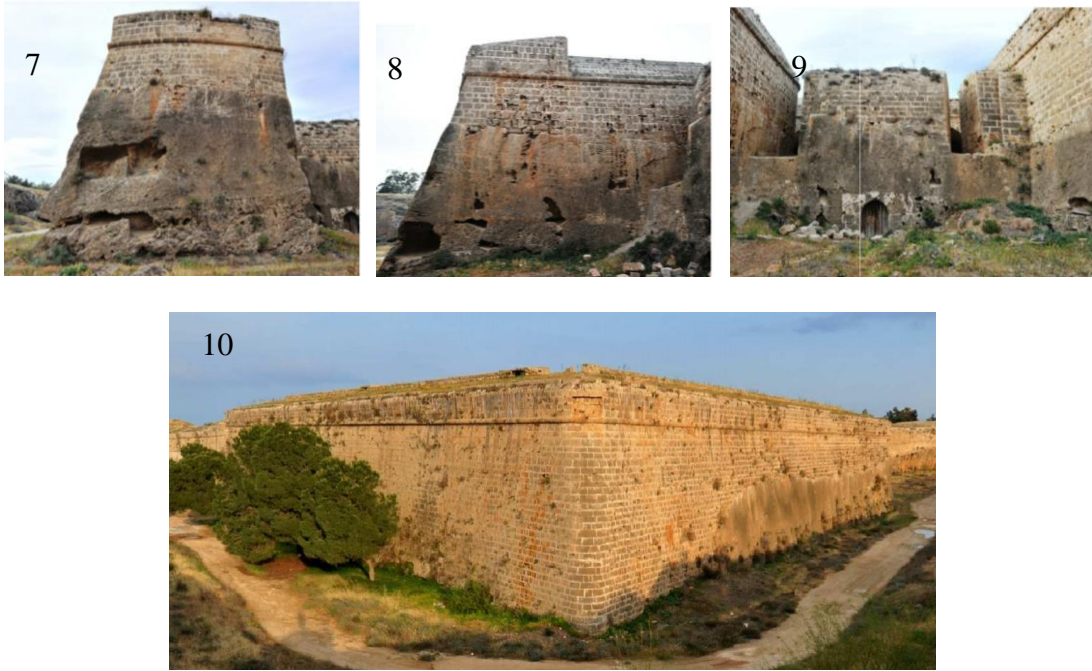


Figure 3.21: Different exterior parts of Martinengo Bastion, (UNDP-PFF, 2016)

In exterior of Martinengo Bastion, it can be seen that, there are two sloping entrances into the enormous chamber, although it is quite clear that the most recent army to occupy this building is the Ottoman army, “the volume of the chamber in conjunction with the very large gun ports is testament to the size of the Venetian cannons that were once housed here” (Piperno, 2013).



Figure 3.22: Sloping entrances into inside of Martinengo Bastion (Author, 2016).

The Martinengo Bastion has four sloping ramps which two of them are entrance to its roof, given the fact that using ramps was for carrying weaponries and riding horses,

they designed them to be enough wide. As the bastion is enormous, over a square mile in size, there is also a bent passageway to let to movement from one side of the bastion to the others (Cosmescu, 2015). The other two sloping ramps are the tunnel ramps to reach the open area and chamber.



Figure 3.23: Access to roof of Martinengo Bastion through two ramps, (Author, 2016).

In addition, this building in its roof has nine ventilations for the escape of gunpowder smoke. These ventilations were restored in the past, but now there are in a bad condition.



Figure 3.24: Chimneys for gunpowder smoke on the roof, (Author, 2016).

The interior plan of Martinengo Bastion includes two wings, north and south wings which are presented as (Figure 3.25), different parts of two wings are illustrated by red circles as well as the exterior plan.

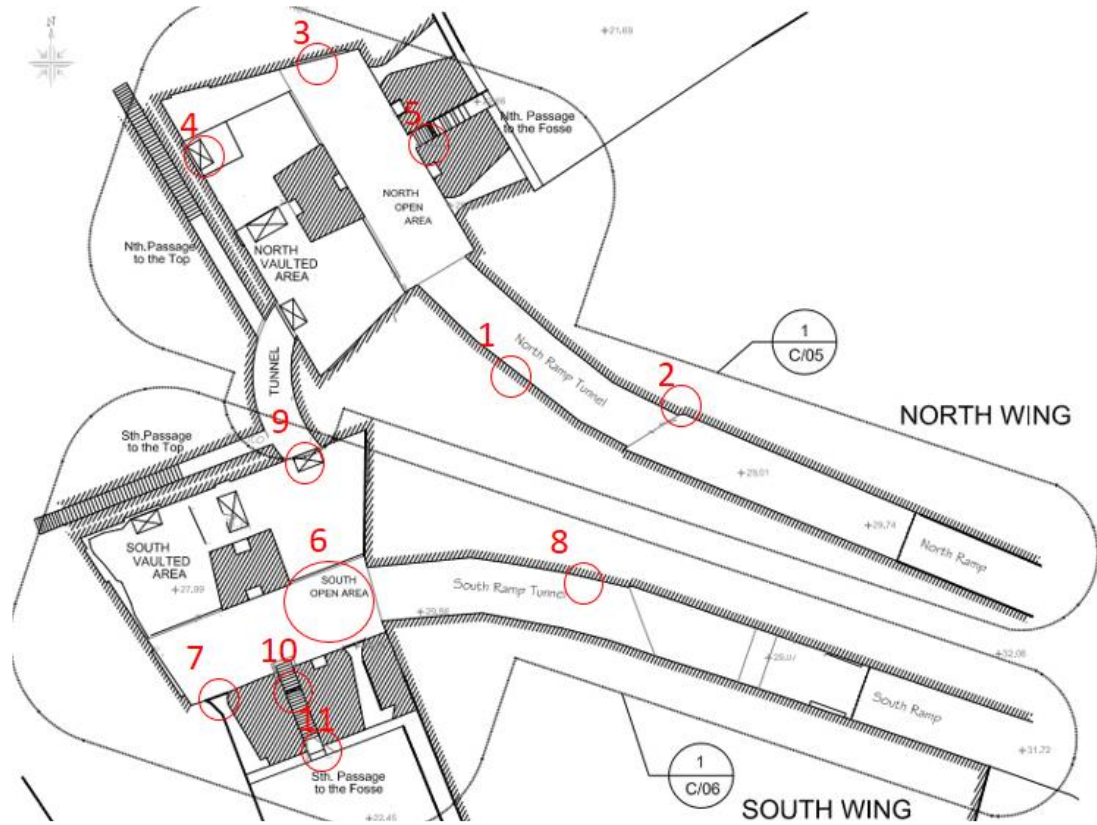


Figure 3.25: Interior (wings) plan of Martinengo Bastion, (UNDP-PFF project, 2016)





Figure 3.26: Different interior parts of Martinengo Bastion, (UNDP-PFF, 2016)

There is a tunnel between two wings of Martinengo Bastion that has vaults and arches which shows Venetian architecture. Which is shown in picture 10 of figure series above (Figure 3.26). In figure below (Figure 3.27), the section of south wing can be seen.



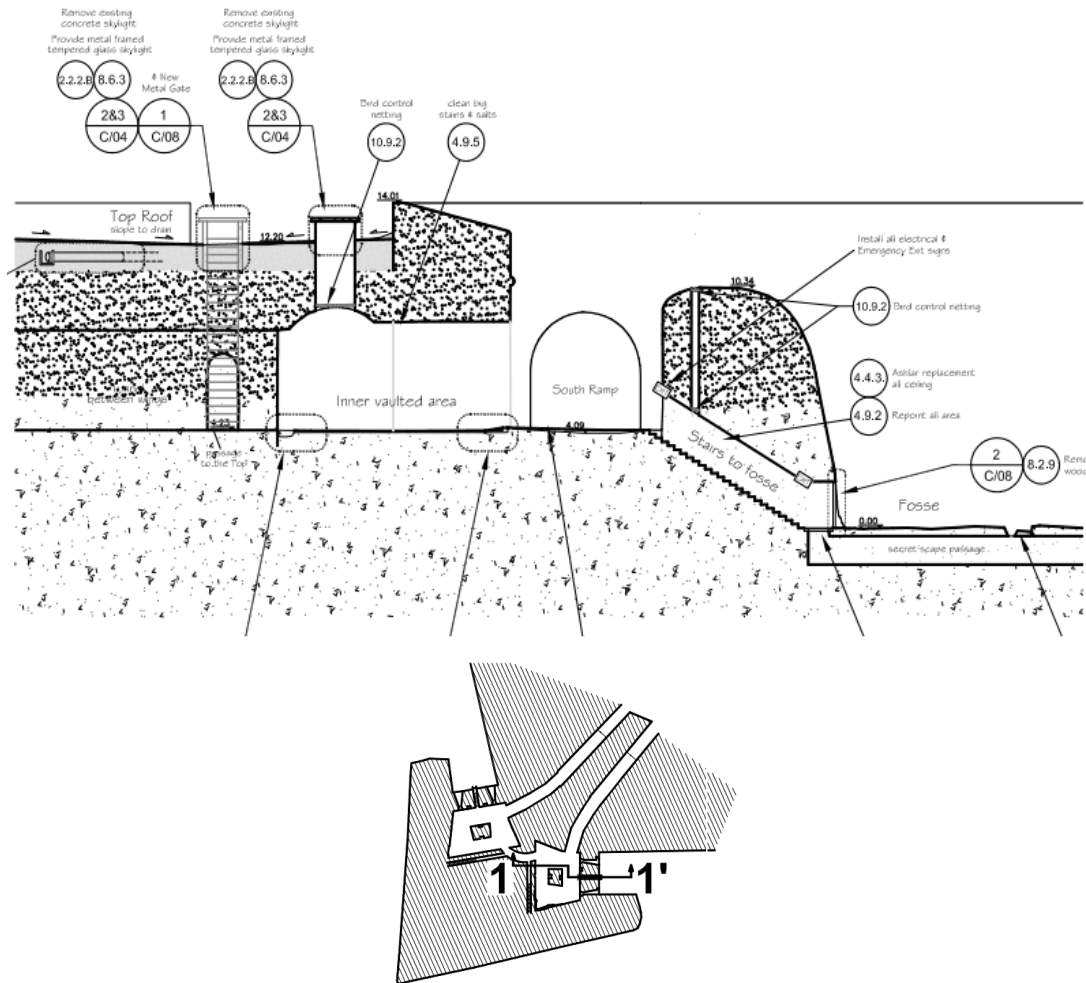


Figure 3.27: Section from south wing of Martinengo Bastion, (UNDP-PFF project, 2016)

- *Integrity of the Plan:*

The Martinengo Bastion has defensive structure and the architecture style of this building is Venetian architecture. The spaces are underground which receive light from two vaulted semi-open spaces and two open courtyards. There is a tunnel connecting them. Besides, there are two ramp tunnels to enter courtyards from outside and there are two ramps to reach the roof of the spaces as the top of the bastion. As it can be seen in figure below (Figure 3.28), the accessibility of this building from main street (Accessibility from Server Somuncuoğlu Sk.) is around 1-2 minutes.



Figure 3.28: Accessibility to Martinengo Bastion from streets, (adapted by Author, 2016 from URL 2)

- *Building's Functions:*

The previous function of Martinengo Bastion was built for military purposes. The military feature of this building was designed by military engineers and also extension into the moat increased military version from inside. It was used as a storage before but the present usage of this monument is none. The architectural style of this building is Venetian military architecture style.

### 3.3.2.3 Value Analysis of Martinengo Bastion

According to the heritage values in conservation part of Chapter 2), the (Table 2.3) is drawn. Same table is used in the analysis of the values of Martinengo Bastion. The segments which are ticked, present each value of this bastion. As it is clear, each monument does not have all of the values. The analysis of this part is based on historical and architectural analysis of Martinengo Bastion.

Table 3.3: Value analysis of Martinengo Bastion, adapted and analyzed by Author (2016), from Feilden (2007) and Mason (2002).

Values Martinengo Bastion															
Wonder	Artistic	Spiritual & Symbolic	Continuity	Documentation	Historic & Identity	Archaeological, Age & Scarcity	Aesthetic	Architectural	Townscape, Ecological & Landscape	Technological, Scientific & Educational	Functional	Economical	Social	Political & Ethnicity	Universal
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- ✓ **Wonder Value:** The bastion awakens the feeling of curiosity.
- ✓ **Artistic Value:** Martinengo Bastion is a good example of architectural military heritage with the unique design and rare, so it can be said that this building has artistic value.
- ✓ **Symbolic Value:** The Martinengo Bastion is a symbol of the defense architecture against the Ottomans in Venetian Period.
- ✓ **Continuity Value:** The monument covers traces of time to today.
- ✓ **Documentation Value:** The knowledge about technology and architecture of the past can be gained from this building in the present time. Based on W.

Dreghorn, (1985), “Even today in modern war fare would be a super defense point for the town”.

- ✓ **Historical and Identity Value:** according to the defined deep historical background, it is clear that this building have historic value due to different historical layers.
- ✓ **Archeological, Age & Scarcity Value:** The Martinengo bastion is remained from 15<sup>th</sup> Century, so it can be said that it has age value.
- ✓ **Aesthetic Value:** Martinengo Bastion have positive visual qualities due to spatial ratios and flow of spaces. It is really huge, designed and decorated by Venetian architectural elements.
- ✓ **Architectural Value:** Inside of Martinengo Bastion, the arches, vaults and Venetian architectural elements can be seen which present architectural value of this building.
- ✓ **Townscape, Ecological and Landscape Value:** When visitors stand at the top of the Martinengo Bastion, they can see the great view from the bastion toward both moat and new city.
- ✓ **Technological, Scientific and Educational Value:** This building is a good example of military architecture of Medieval period that can show the technology of this period.

- ✓ **Functional Value:** although with both high and wide open and semi-open spaces with acoustical qualities; the potential for re-functioning is very high.
- ✓ **Economic / resource Value:** As an existing building, it has an economic value because it can attract the cultural tourism and bring income for the Walled City of Famagusta.
- ✓ **Social Value:** the wide spaces have the potential to gather people for social connections and shared spaces.
- ✓ **Political and Ethnics:** The monument is an evidence of Venetians existence on the island as well as the war proportion against Ottomans.
- ✓ **Universal Value:** The EU funded and UNDP implemented “Support to cultural heritage monuments of great importance for Cyprus” project, a study “Survey, Investigations, Assessment. Project Design was carried out between April and January 2015.

### **3.3.3 Ravelin Bastion**

The second most aged section of the walls after Othello Castle, which is located at the south-west side of the walls, is called Land Gate. This is one of two original gates of the old town and another one is called Sea Gate (Langdale & Walsh, 2009). “Developing a Moat Park from the Martinengo bastion to the Ravelin and Land Gate entrance would create a zone of circulation which would bring pedestrians to virtually all of the significant monuments of the city along an attractive and enjoyable route” (Langdale & Walsh, 2009, p: 29). The Ravelin Bastion (or Rivettina

Bastion) which is in front of the Land Gate, was involved in the war between Ottomans and Venetians in 1570-1571. The original name of Ravelin means the Demilune lunette - or the bastion in the shape of a crescent. Also this bastion was influenced from the old French word that means half-moon shape (URL 9).



Figure 3.29: Aerial view of Ravelin Bastion, Famagusta, North Cyprus, photo from URL 4

### 3.3.3.1 Historical Analysis of Ravelin Bastion

During ottoman attack, undermining started in several places, particularly near the Arsenal, and the Ravelin. When the Famagusta was surrounded, the Venetians blew Ravelin up, and the thousand Ottoman soldiers and a hundred of the Venetian people were killed (Cobham, 1908).

“During the first one on June 21 the Turks fired the mines under the tower of Arsenal and climbed up though the ruins. At the end of the third attack the Ravelin was abandoned to the hands of Turks” (Mariti, 1971, p:182). When the enemy laid siege

to the Walled City of Famagusta, there were only two roads for achieving the land, one of them was the Sea Gate and another was Land Gate. Land Gate that is protected by Ravelin Bastion that was not going to topple easily. There was no way into this building except over the wooden drawbridge (Cobham, 1908).

The name of this building was changed into 'Akkule' or the 'White Bastion' by Ottomans (from the Turkish, "Ak" meaning white and "Kule" meaning bastion) or ("White Tower"). The original name was altered when Venetians waived the white flag of surrender at the end of the battle 1571. It is obvious that after weeks of battling and tunneling under the walls, finally the Ottomans could access to the Ravelin (Famagusta Walled City Association, 2016b).

“Although destruction of Ottomans halted the enemy advance for a while, the Venetians defending Famagusta were quick to build more barricades behind the fallen tower, using sandbags and earth-filled carts. However, by 1 August, the Venetians surrendered, weakened by hunger, fatigue and plague” (Cobham, 1908, p:145).

The evidence of this drawbridge is still remained. Today, the entrance used along with the bridge over the ditch. The chart below can be shown the Ravelin Bastion history schematically.

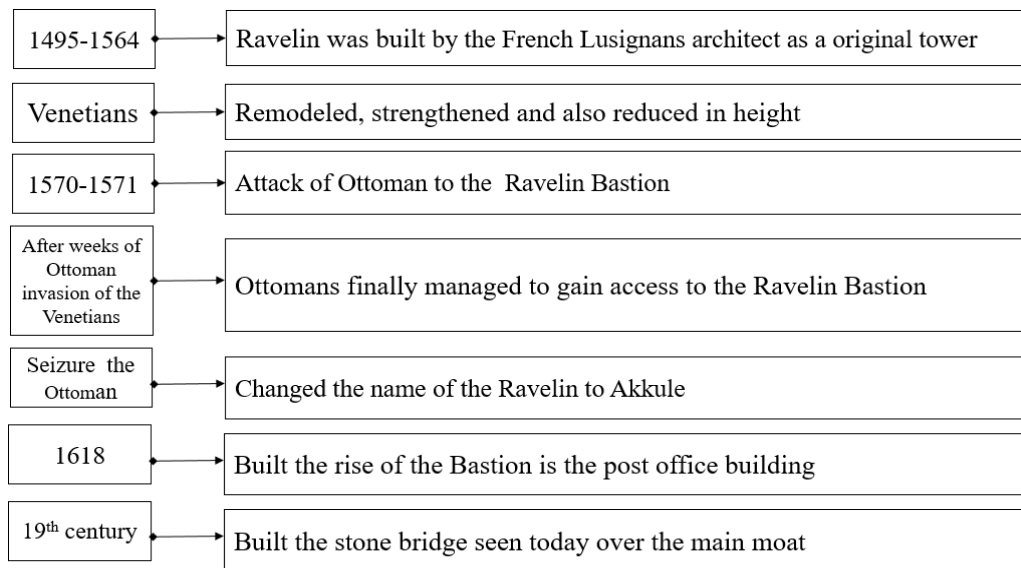


Figure 3.30: Ravelin Bastion history, adapted by Author, (2016) from Cobham (1908), Mariti (1971), URL 9.

### 3.3.3.1 Architectural Analysis of Ravelin Bastion

The architect of the original Ravelin was French Lusignans. In addition, it can say that the architectural style of this building in mix of Lusignans and Venetian architectural style. The main function of Ravelin Bastion was to guard the main entrance to the Famagusta that was nearby. The building is set up by different levels of constructions linked to the outside of the city through small passageways, bridges and fosses (UNDP). The location of Ravelin Bastion is in South west side of Walled City of Famagusta and its coordination is UTM 36 S 0585956 3887629.

- *Significant Material*

The material which was used in Ravelin Bastion is ashlar stone. This material can be the significant material for this bastion.

- *Physical Features*

As the view point of Cosmescu (2015) “before the town's 20th century expansion, the Ravelin formed the principal landmark of the region, and could be seen from a



long distance across the flat country near Famagosta” (p:68). Constituting the most advanced point of the city, this fort was detached from the castle and allowed the control of most of the wall, ditch and glacis. The main feature of Ravelin Bastion is different level inside of this building, which can connect to each other through stairs and ramps.

Furthermore, according to Walsh (2012) “the Ravelin offers a unique perspective: over the embrasures, visitors can see the insides of the structure, since the roof of the lower story is missing. Chamber walls, ventilation shafts, stairways, and ramps are all visible at bird's-eye level” (Walsh, 2012, p:194).

The other important feature of this bastion is that tourists can take a panoramic view of the whole old city from on the top of this bastion. Gothic Cathedral of St. Nicholas, that is called today mosque Lala Mustafa Pasha, can be visited from roof of the fortress.

- *Components of The Building:*

As it is mentioned, the main city access to Famagusta was the Land Gate structure and also the bridges juttet out of the flanks of the Ravelin. The slots which is above the gateway can be seen. Ravelin Bastion has an entrance, with a groin vault, fronting the town with an immense archway (30 ft.), to this building along with the pons over the ditch which was built in 19<sup>th</sup> Century as well, that the grooves above the gate into the town can be seen still which leaded chains of the portcullis and bridge (Walsh, 2012). Today, the Ravelin’s visitors, can still wander through the tortuosity of the pass, and think what was happened there in 450 years ago of a medieval siege. In one side of the gate, there are frescoes of arms that can be dated

back to the Venetians. On the other side, there is small Ottomans mosque which was built in 1619 and used by the city guards (Walsh, 2012).



Figure 3.31: Main access and entrance to Ravelin Bastion (UNDP-PFF, 2016).



Figure 3.32: Access directly from road, (UNDP-PFF, 2016)

Ravelin includes a labyrinth of ramps, steps and rooms. In the other side of Ravelin located next to office, the sloping ramp to the walls which are used in the past as ways to take away cannons, can be seen. A delicately engraved verse from Koran is seen when you enter to the bastion. The underground network of this building contains some objects that have made through past people until today.

Cosmescu (2015) stated that "the Ravelin was connected to the gate by a small drawbridge over a narrow ditch, and from the flanks of the Ravelin, two bridges were thrown over the moat. Additionally, a wide gun platform was built on top of the gate, with a tall archway on the town side, slightly unaligned with the earlier access structures of the gate" (p:68).



Figure 3.33: Metal bridge that has been replaced with drawbridge (UNDP-PFF, 2016)

The Gate cavalier of the Ravelin Bastion is equally impressive, the highest structure in the fortified inclusion and formed like a trefoil. Walsh (2012) introduce the cavalies that;

“The cavalier not only overlooks the gate complex, but also flanks the ditch up to the Andruzzi bastion, to the east, and to Martinengo, to the north. From the height of the cavalier, the Venetian guns would sweep virtually the entire glacis, left and right, and mortar would throw hot shot over the enemy trenches” (p: 194).

This building includes upper level, intermediate level and also lower level which their pictures and plans are shown below. The (Figure 3.34), presents this levels as references section.

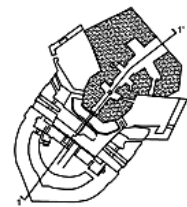
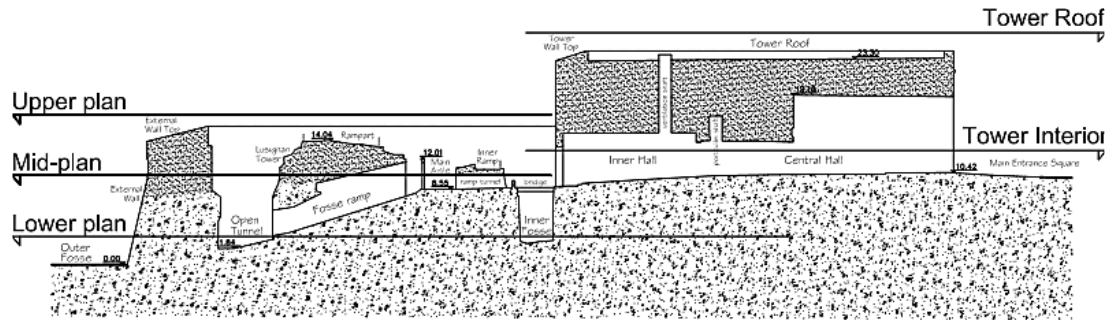


Figure 3.34: Section of different levels of Ravelin Bastion, (UNDP-PFF, Ravelin Bastion project, 2016).

In Figure below (Figure 4.35), the plan of upper level of the Ravelin Bastion is presented. In this Figure, different parts of this building are remarked by red circles. Each circle has number that related to its specific picture.

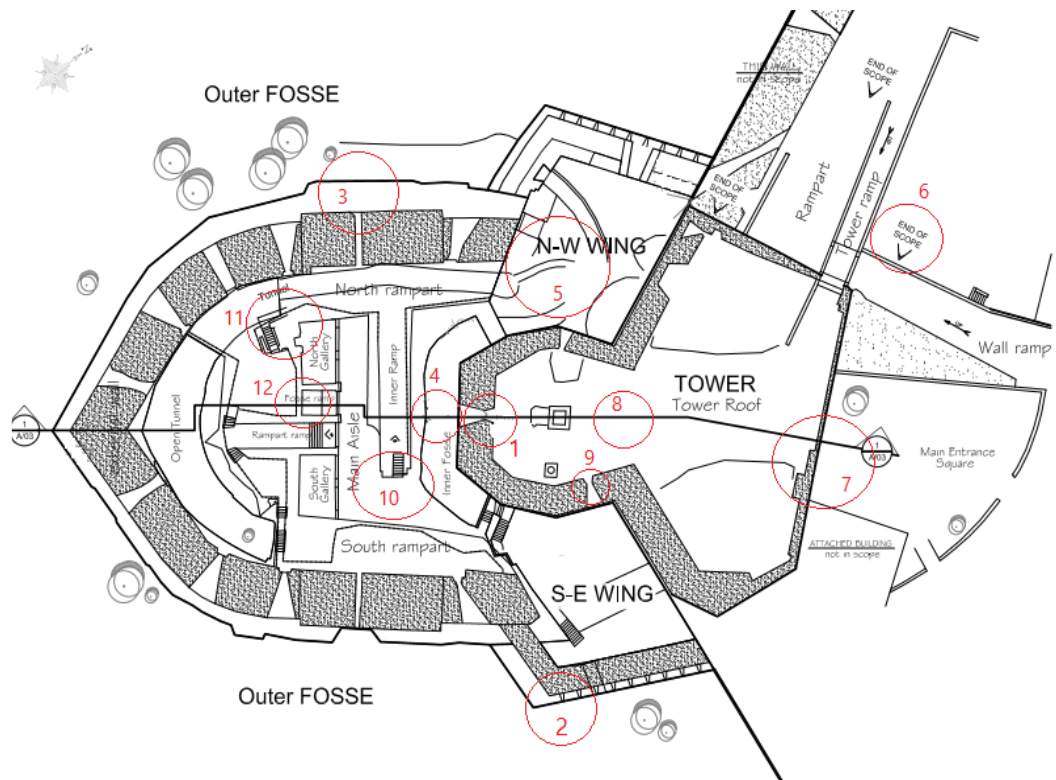


Figure 3.35: Schematic upper plan of Ravelin Bastion, photo from (UNDP, 2016).





Figure 3.36: Different parts of upper level of Ravelin Bastion, (UNDP-PFF, Ravelin Bastion project, 2016).

The inner part of the Ravelin has been formed with labyrinth full of guard houses and rooms. Visiting the whole site including rooms, ramps, steps and dungeons takes time because inside of this building includes various spaces. The round holes on the roof for smoke escape and recesses on the wall for gunpowder barrels have still remained from the warfare days. In the figure below (Figure 3.37) longitudinal section of this building is illustrated.

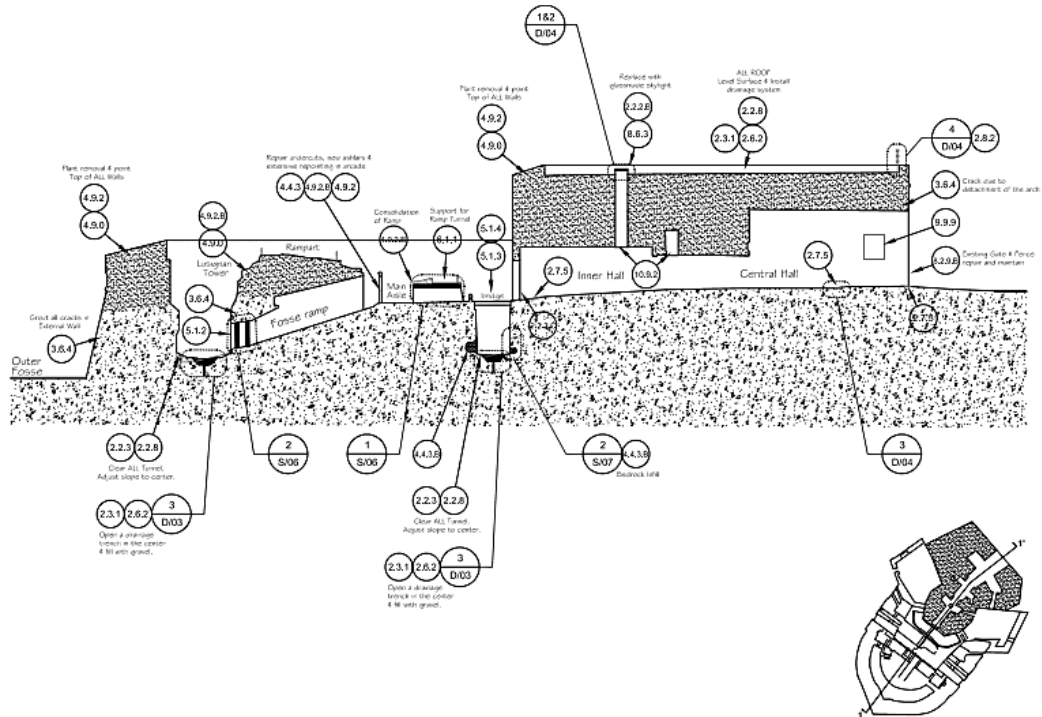


Figure 3.37: Longitudinal section of Ravelin Bastion, (UNDP-PFF, Ravelin Bastion project, 2016).

The figure below (Figure 3.38) is shown the intermediate of the Ravelin Bastion. In this Figure, different parts of this building are remarked by red circles. Each circle has number that related to its specific picture.

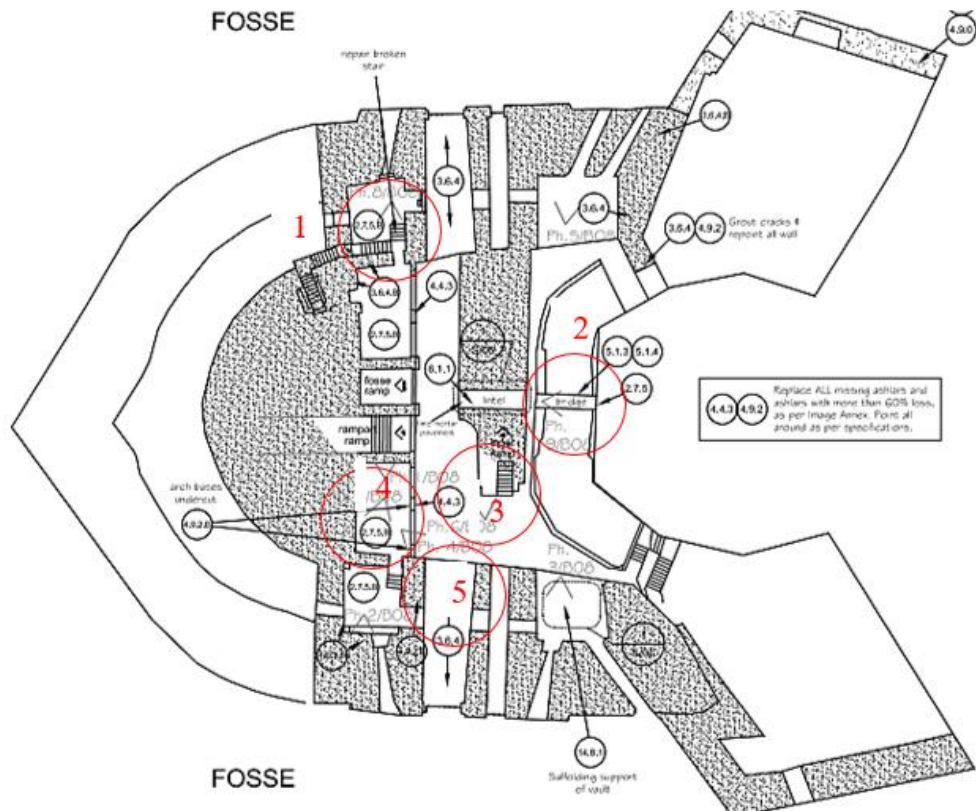


Figure 3.38: Schematic intermediate plan of Ravelin Bastion, (UNDP-PFF, 2016).



Figure 3.39: Different parts of intermediate level of Ravelin Bastion, (UNDP-PFF, Ravelin Bastion project, 2016).

The figure below (Figure 3.40) is shown the lower level of the Ravelin Bastion. In this Figure, different parts of this building are remarked by red circles. Each circle has number that related to its specific picture.

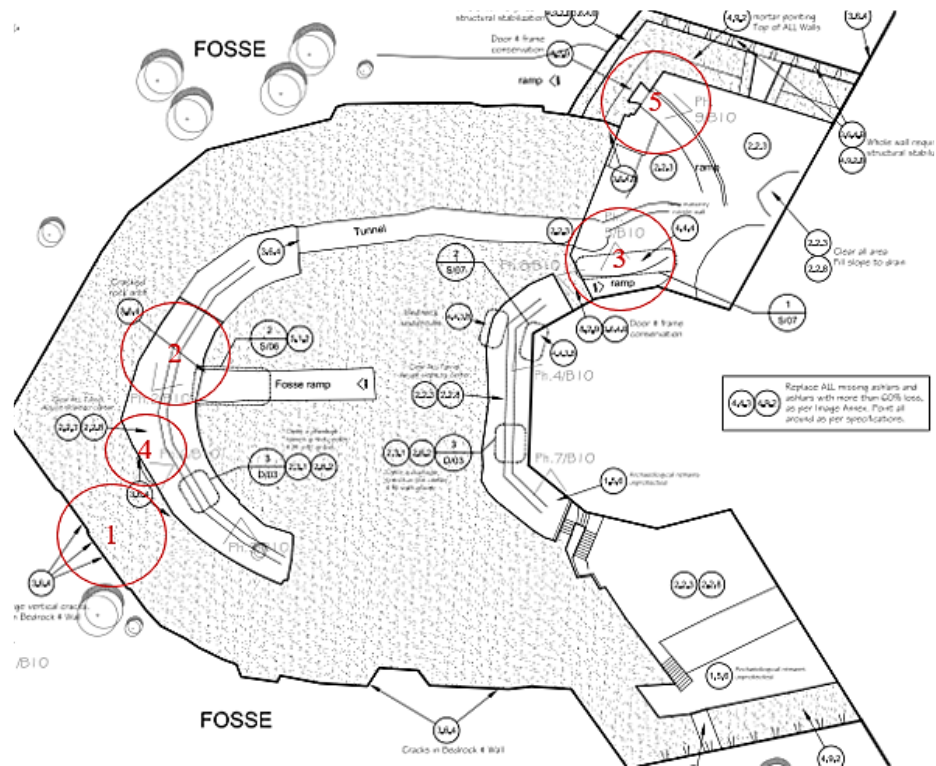


Figure 3.40: Schematic lower plan of Ravelin Bastion, (UNDP-PFF, 2016).



Figure 3.41: Different parts of lower level of Ravelin Bastion, (UNDP-PFF, Ravelin Bastion project, 2016).



Interestingly, since iron was so a rare substance, Venetian soldiers had to sneak out of the city at night to bring back cannon balls as much as they can gain (Walsh, 2012).



Figure 3.42: Tunnels and rooms inside Ravelin Bastion, photo from (UNDP, 2016)

- *Integrity of the Plan:*

The Ravelin Bastion has a complex plan, which includes rooms, ramps, steps, tunnels, two wings and narrow complex. Although, this building has open, semi-open and closed areas, the most parts of this building include open areas. As it can be seen in figure below (Figure 3.43), Ravelin is near the main street of Istiklal Cd and Ramiz Gökçe Sk.



Figure 3.43: Accessibility to Ravelin Bastion from streets, (adapted by author, 2016 from URL 2)

- *Buildings Functions:*

The main function of Ravelin Bastion was to guard the main entrance to the Famagusta that was nearby. Today some small part of Ravelin Bastion is used as Tourist Information office for Famagusta.

### 3.3.3.3 Value Analysis of Ravelin Bastion

According to the heritage values in conservation part of this chapter (2.1), the (Table 2.3) is drawn. Table below shows that table which analysis of the values of Ravelin Bastion. The segments which are ticked present each value of this bastion. As it is clear, each monument does not have all of values. The analysis of this part is based on historical and architectural analysis of Ravelin Bastion.

Table 3.4: Value analysis of Ravelin Bastion, adapted and analyzed by Author (2016), from Feilden (2007) and Mason (2002).

Values Ravelin Bastion															
Wonder	Artistic	Spiritual& Symbolic	Continuity	Documentation	Historic & Identity	Archaeological, Age & Scarcity	Aesthetic	Architectural	Townscape, Ecological & Landscape	Technological, Scientific & Educational	Functional	Economical	Social	Political & Ethnicity	Universal
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- ✓ **Wonder Value:** The bastion awakens the feeling of curiosity.
- ✓ **Artistic Value:** according to Mason (2012), artistic value refers to heritages with a good instance so, it can be concluded that Ravelin Bastion has artistic value because it is a good example of military architecture in 15<sup>th</sup> Century with a complex plan and unique architectural elements of the period.
- ✓ **Spiritual & Symbolic Value:** The Ravelin Bastion is a symbol of the defense of Venation against the Ottoman and also this building was one of the two main ways for entrance to Famagusta in that period. It is also the symbol of Walled City perceived from outside the city-walls.
- ✓ **Continuity Value:** The monument carries traces of time to today.

- ✓ **Documentation Value:** The knowledge about defense architecture of the period and war technology can be gain from this building. In addition, there have remained some evidence from the drawbridge that was only way for entrance into Ravelin.
  
- ✓ **Historical & Identity Value:** There are many layers of history from the original Lusignan original tower to the Venetian Ravelin to the later changes by the Ottomans and finally British conservation efforts.
  
- ✓ **Archeological, Age & Scarcity Value:** The Ravelin Bastion is remained from Venation period so it can be said that it has age value.
  
- ✓ **Aesthetic Value:** Ravelin Bastion according to the visual qualities, is really huge, designed and decorated by venetian architectural elements. Moreover, the complex space organization, spatial ratios and different heights in this building made it a monument with aesthetic values.
  
- ✓ **Architectural Value:** Inside of Ravelin Bastion, the arches, vaulted and Venetian architectural elements can be seen and also some intervention in Ottoman period and also in British period in 19<sup>th</sup> Century.
  
- ✓ **Townscape, Ecological and Landscape Value:** There is a wide visual town scape and picturesque towards both Walled City (new city) and moat, can be seen from top of Ravelin Bastion.

- ✓ **Technological, scientific and Educational Value:** The methods which were used for the structure of this building can give us the evidence from past lifestyle and architectural military techniques and defense architecture in previous periods.
- ✓ **Functional Value:** This building had various functions during different periods as military function and tourists' information office.
- ✓ **Economic / resource Value:** This building can attract the cultural tourism and made income for Famagusta because of the history and being unique.
- ✓ **Social Value:** Since Ravelin Bastion is one of the main gate of Famagusta in the past, and any trade and social cohesion occurred from this gate, it can be concluded that this monument always had social value. The wide open spaces, semi-open spaces and limited closed spaces together with the location next to new entrance to the Walled City, the monument carry potential for social connection.
- ✓ **Universal Value:** The EU funded and UNDP implemented "Support to cultural heritage monuments of great importance for Cyprus" project, a study "Survey, Investigations, Assessment. Project Design was carried out between April and January 2015.
- ✓ **Political and Ethnics:** The monument is an evidence of Venetians existence on the island as well as the war proportion against Ottomans.

### **3.4 Evaluation of Analysis of Three Monuments**

Based on researches that have been done on adaptive reuse and finding the best options for new life of historic buildings during this debate, it is explicit that there are some criteria which should be implemented in this type of monuments. These criteria include; presenting the identity, culture and tradition of the region in new functions; new life should be compatible with contemporary life of residence; and should make a place that can attract the cultural tourists.

In the regards of the features of new function in adaptive reuse project, the new functions of three monuments in this thesis, must be the types of public functions to reveal the social values; and show the historical background and heritage values of these monuments in the best way. In addition, according to the international Charters, the new functions should represent the original life of each building. In the light of this, the appropriate suggestions for new functions should embrace the tangible and intangible values of these heritages.

As it is stated before, there are various types of festivals held in North Cyprus based on the culture in cities and agricultural products, climate and history rural areas. It is advised that the new performance can be relation to these festivals as well as suggesting new theater festivals; music festivals and etc.

Oral story telling is stated as an intangible heritage of North Cyprus, such as Shakespeare's play, 'Othello'; how Famagusta was captured by the Ottomans through Ravelin Bastion; renaming the Martinengo bastion after death of famous commander of the Venetian 'Martinengo' or the earthquake which caused to destroy most of the old buildings in this area and so on. This rich and multi-layered heritage can be

presented and shared by the new functions including museum, cinema, theater, galleries, community center, library, performance spaces and etc.

Instead of using these main functions alone, some other supportive functions can be considered in these buildings to create them as multi-functional places and to bring income for maintenance. The recommendation for these type of functions can be forum where traditional food or goods; or contemporary interpretation of traditional stores can be found. Eating functions, accommodation functions, art or research institute or offices are possible functional options for reuse of three monuments.

It can be deduced from evaluation of historical values, architectural values and heritage values of Othello Tower, Martinengo Bastion and Ravelin Bastion that, any kind of functions are not appropriate for these buildings. The new function of these three monuments should respect to their culture and historical background and also should be compatible with the architecture of these buildings.

#### **3.4.1 Recommendation for New Functions Based on Historical Evaluation**

According to the historic analysis of these buildings, all these cases have rich history as well as deep meanings for each member of the Cyprus society. These are the monuments which inspire artists, architects and designers. The history of these three buildings able to present evidences; how have the architectural elements been changed over time; how has the Cyprus society been evolved and progressed throughout the time; what has happened there in different periods and; what was the technology and material in the past for constructing these buildings. Consequently, the functions which introduce cases' history would be ideal.

For instance, as it is expressed previously, one of the important historic part of Othello Tower is that, the name of the Shakespeare's play was adapted from this castle, and it is about the life of commander who killed his love because of jealous that lived in this castle in Venetian period. This history can be introduced to the visitors and tourists through holding ballet and dance show in cultural center, theater in theater hall and movie in open cinema. Based on what is recommended in the field study, it can be a part of Cyprus culture and show the importance and history of this building. Furthermore, based on the history of Martinengo Bastion, the reason of building this bastion was fortification purposes to defense against Ottoman's attack. The function which is recommended for the new function of this buildings should show this history via galleries, museum as well as songs, dance and etc. Since Ravelin Bastion's famous history is about attacking Ottomans to Famagusta through this gate that cause to conquest of this city, the function which is show this history should be recommended as well as Martinengo Bastion.

#### **3.4.2 Recommendation for New Functions Based on Architectural Evaluation**

Based on literature review, one of the important part in adaptive reuse activities, is additions. This extending needs to gain knowledge about different parts of buildings by architectural analysis of them. Furthermore, re-functioning historic buildings requires to know about various architectural features of each area of these buildings. on this analysis, wonderful and complex plan of these building can provide setting to make flexible appropriate new functions. Moreover, historical and architectural elements, openings and also mass of these buildings are the important information that lead designers to find ideal functions. Variety spaces and different level of these buildings lead to create a situation for them to become multi-functional buildings. For instance, in the light of narrow or wide spaces in these buildings, functions



should be proposed which are suitable for these types of spaces; like museum and gallery for Martinengo and Ravelin bastion because of their narrow spaces, can be appropriate, on the other hand, these buildings are not ideal to be open cinema or open theater hall, because these functions need wide spaces. On the other hand, for proposing ideal supportive functions, heavy use such as restaurant needs to have large cooking spaces and special infrastructure spaces, but these three buildings do not have wide spaces to be appropriate for this function. Besides, installation of the industrial cooking systems can threaten the integrity of the buildings.

### **3.4.3 Recommendation for New Functions Based on Heritage Value Evaluation**

The heritage value analysis in this chapter, show the importance and worth of these building. Consequently, this value should be preserved during re-functioning process. In addition, the new functions should be caused to improve these values. Proposing functions which reduce or threaten these values are not appropriate. As example, it can be said that, some functions can block the view of these building so they can decrease the townscape value of them; some types of functions cannot introduce the history of the old buildings, since it can reduce the historical and cultural value of them. On the other side, for supportive function some kinds of functions are nor ideal, for instance, making hotels and motels as supportive function can destroy this building and their values because this type of function needs heavy interventions.

**Conclusion of The Chapter:** Although, all these advices can be responded in order to proposed for successful re-functioning three selected cases, at least, the important part of proposed appropriate function is preference of actors who are tourists, locals and experts. As it is mentioned in methodology of this thesis, what is done in this respect is, asking about actors' opinions about their preferences for these three

monuments' new life through questionnaires. In the light of these discussions two charts are prepared for reuse options. First one is for the main function and the second one is for supportive functions which are inserted in actors' questionnaires for this study. The information about the questionnaires, used method for questionnaire survey and questionnaires' results will be discussed in the next chapter (Chapter 4).

Supportive Function			Main Function		
Traditional Shop / Store (Bazar)	Forum	Commercial Building Use	Marine Museum	Cultural Building Use	
			Artillery Museum		
			Food Museum		
			Archaeology Museum		
Contemporary Store / Shop	Forum		City Museum		Museum
Handmade Food (Local Food)			Contemporary Museum		
Traditional Food			Fashion Museum		
			Collection (Dime, Tumb, Accessories)		
Restaurant	Eating Function		National History Museum		Gallery
Café / Hookah (Nargila)			Art Gallery (Jewel, Pastal, Sculpture, Graphic Paintig)		
Bar			Costume Gallery		
			Hotel		
Motel	Accommodation Functions	Design Studio / Atelier	Community Center		
Botique Hotel		Youth Club			
Art Institute		Multi-Religious Center			
		Research Institute		Cultural Center	
private Offices	Offices	City Hall	Library		
governmental offices		Community Art Center (Poem, Novel)			
		Conference Hall	Performance Spaces		
		Academic Library			
		Public Library			
		Special Library			
		Media Library	Performance Spaces		
		Music Library			
		Dance Hall			
		Theater Hall			
		Central Hall	Performance Spaces		
		Cinema			
		Opera House			
		Concert Hall			

Figure 3.44: prepared main functions and supportive functions' tables for re-use options, prepared by Author (2016)

## Chapter 4

### ANALYZING SURVEY QUESTIONNAIRES

**Introduction of the Chapter:** According to the information in chapter 2, which is about the importance of participation of stakeholders in adaptive reuse projects and also following successful cultural tourism programs, in this chapter, the preferences of locals, tourist and experts about the future functions of cases are presented. The opinions of actors via questionnaire method is collected and the results are shown in a table. In addition, the questionnaires are prepared in the light of Chapter 3 which examines the possible functional options for reuse.

#### 4.1 Methods for Collecting Data

Based on what Kwan (2001) stated about the impacts of different types of buildings in adaptive reuse decision-making, choosing suitable type of building for finding appropriate new function in adaptive reuse project is important. As it is mentioned previously, the new function for case studies should preserve the identity and culture of a region. In addition, the new functions should maintain collective memories, sense of place and sense of attachment for locals and visitors as well as present the history of those places.

Moreover, based on Williams (1988), Hughes (1996), Prentice (1993), Myerscough (1988), Office of National Tourism (1997), Csapó (2012) and also Kim, Cheng & O’Leary (2007), in order to attract cultural tourists to a region, cultural activities should be use in tourism programs.

Based on what is defined recently, the functions, which are stated in questionnaire of this study, are the components of cultural activities such as visiting galleries, museums, community centers, libraries and performance hall. Each of these functions have sub-functions and they are proposed as a main function for case studies. The other types of functions such as forums, eating functions, accommodation functions, institute, offices and their sub-functions are proposed as supportive functions.

Survey questionnaire was utilized to collect data in the thesis with the purpose of investigating actors' opinions. In order to distribute this questionnaire, locals and tourists are selected randomly, while experts are members of Technical Committee on Cultural Heritage of Cyprus (TCCH), Department of Antiquities, conservation experts in EMU Faculty of Architecture, and UNDP-PFF conservation project designers. TCCH is selected since it is international recognized authority on conservation decisions. Department of Antiquities is selected since it is the central governmental authority in North Cyprus on conservation decisions. Conservation experts in EMU Faculty of Architecture are selected since EMU is the only university in Famagusta with the related faculty. UNDP-PFF conservation project designers are selected since they have designed three conservation projects of the selected monuments.

In this study, the questionnaires are prepared in both Turkish and English languages. The Turkish version (Appendix F) is given to locals and English version (Figure 4.1) is given to experts and tourists. Besides, a more detailed version which includes value analysis (Figure 4.2) is given to experts. These questionnaires can be seen in below:

## Deciding The Appropriate Functions in Reuse of Heritage Buildings

### Questionnaire Consent Form

**Purpose:** This study is being conducted for a master dissertation of Farnaz Joudifar, a student in Department of Interior Architecture at Eastern Mediterranean University. The purpose of this study is to investigate appropriate functions for heritage buildings in Walled City of Famagusta, North Cyprus.

**Date:**     /     /

**Age:**    Below 18    18-25    26-35    36-45    46-55    Over 55

**Sex:**    male        female

**Nationality:**

**Are you aware about the original function of these buildings mentioned below?**

Othello tower (Otello)

Yes    No (Reference: <http://www.el-mar.ru/excursion/bashnya-otello>)



view from exterior



view from interior

Matrinengo bastion (Çifte Mazgallar)

Yes    No (References: UNDP-PFF, Matrinengo Bastion)



view from exterior



view from interior

Ravelin bastion (Akkule)

Yes    No (References: UNDP-PFF, ravelin/Land Gate)



view from exterior



view from interior

**Do you think that these monument buildings have to be sustained for future generations?**

Yes    No

**Part 2: do you think that these monument buildings have to ...**

- Be restored and preserved as they are.
- Be restored and give a new function (please continue part 3).

**Part 3: Which one do you prefer to be these buildings' new function:**

Please select first five choices by mentioning from 1(the most appropriate) to 5 (the least appropriate) in the Main Functions Table and first five preferences in Supportive Function Table.

PLEASE DO NOT MAKE EVALUATION IF YOU DO NOT KNOW THAT SPECIFIC BUILDING.

Figure 4.1: Questionnaires for locals and tourist (page 1), prepared by Author (2016), photos from UNDP-PFF projects sheets (2016)

		Supportive Function						
Ohello		Traditional Shop / Store (Bazar)	Forum	Commercial Building Use				
Martinengo						Contemporary Store / Shop	Eating Function	
Ravelin						Handmade Food (Local Food)		Restaurant
						Traditional Food		
			Café / Hookah (Nargila)			Accommodation Functions		
		Bar						
		Hotel						
		Motel	Institute			Educational Building Use		
		Botique Hotel						
		Art Institute	Offices			Office		
		Research Institute						
		private Offices	Other Options					
		governmental offices						
		Ravelin :	Ohello :					
		Martinengo :						

		Main Function					
Ohello		Marine Museum	Museum	Cultural Building Use			
Martinengo						Artillery Museum	Gallery
Ravelin						Food Museum	
						Archaeology Museum	Community Center
						City Museum	
						Contemporary Museum	Library
						Fashion Museum	
						Collection (Dime, Tumb, Accessories)	Performance Spaces
						National History Museum	
						Art Gallery (Jewel, Pastal, Sculpture, Graphic Paintig)	Other Options
		Costume Gallery					
		Photography Gallery					
		Design Studio / Atelier					
		Youth Club					
		Social Center					
		Multi-Religious Center					
		Cultural Center					
		City Hall					
		Community Art Center (Poem, Novel)					
		Conference Hall					
		Academic Library					
		Public Library					
		Special Library					
		Media Library					
		Music Library					
		Dance Hall					
		Theater Hall					
		Central Hall					
		Cinema					
		Opera House					
		Concert Hall					
		Ravelin :	Ohello :				
		Martinengo :					

Figure 4.2: Questionnaires for locals and tourist (page 2), prepared by Author (2016) from Douglas (2006), Plevoets & Van Cleempoel (2012), URL 6 and URL 7

## Deciding The Appropriate Functions in Reuse of Heritage Buildings

**Questionnaire Consent Form**

**Purpose:** This study is being conducted for a master dissertation of Farnaz Joudifar, a student in Department of Interior Architecture at Eastern Mediterranean University. The purpose of this study is to investigate appropriate functions for heritage buildings in Walled City of Famagusta, North Cyprus.

Date:      /      /

Age:       Below 18     18-25     26-35     36-45     46-55     Over 55

Sex:       male       female

Nationality:

**Are you aware about the original function of these buildings mentioned below?**

Othello tower (Otello)                                     Yes       No

Martinengo bastion (Çifte Mazgallar)               Yes       No

Ravelin bastion (Akkule)                               Yes       No

**Do you think that these monument buildings have to be sustained for future generations?**

Yes       No

**Part 1: which of the values do you think these three monuments carry? (you can make more than one value for each buildings)**

	Emotional value				Cultural value							Use value			
	Wonder	Identity	Spiritual & symbolic	Continuity	Documentary	Historic (Educational & Artistic)	Archaeological, Age & Scarcity	Aesthetic & Symbolic	Architectural	Townscape, Ecological & Landscape	Technological & Scientific	functional	Economical	Social	Political & ethnics
Othello															
Martinengo															
Ravelin															

**Part 2: do you think that these monument buildings have to ...**

- Be restored and preserved as they are.
- Be restored and given a new function (please continue part 3).

**Part 3: Which one do you prefer to be these buildings' new function:**

Please select first five choices by mentioning from 1(the most appropriate) to 5 (the least appropriate) in the Main Functions Table and first five preferences in Supportive Function Table.

Figure 4.3: Questionnaires for Experts (page 1), prepared by Author (2016) from Feilden (2007) and Mason (2002).

These questionnaires are spread among tourists in the Walled City of Famagusta and in order to determine the tourists that are going to be interviewed are cultural tourists, they are asked to explain the reason of their visits and after making sure that they are cultural tourists, they are asked to fill up the questionnaires.

The ever raising demand for studies has made a need for an efficient method of determining the sample size needed to be representative of a given population. Based on “Table for Determining Sample Size from a Given Population” from Daryle W. Morgan (1960, p: 99), the sample size for North Cyprus population is around 380 samples. This number of questionnaires are distributed among approximately 380 people but just 220 ones accepted to answer or filled in correctly (50 students (educational tourists), 50 cultural tourists and 100 locals). Besides, the experts’ questionnaires were set to all members of Technical Committee on Cultural Heritages, selected members of Department of Antiquities, all conservation experts in Faculty of Architecture in EMU, where only 20 experts responded back.

Before asking the participants to fill up the questionnaire, they were asked if they would like the buildings to be ‘restored and remained as they are’ or ‘restored and re-functioned’, the percentage of people who answered the first question, was calculated and mentioned in the evaluation below, the others were calculated separately.

In general, 14% of the 50 students, 10% of the 50 cultural tourists and 46% of the 100 locals, 7 experts from 20 ones preferred to restore and remain these monuments as they are. Others preferences are calculated as below:



In this questionnaire, people were asked to choose their three preferences of the main functions and three preferences for supportive functions in each case. So in order to calculate the corresponding percentage for each preference, the participants were asked to score each preference function from 1 to 3, for which 1 stands for the most preferred function which was graded with 3 points and choice 3 stands for the least preferred function which was graded with 1 point.

## **4.2 Questionnaires' Results**

In this part of Chapter 4, the results are presented separately for each actor (tourists, locals and experts), for each case, by pie charts and tables. At the end of the evaluation, total percentage of actors' preferences about new main functions and supportive functions of these three selected buildings, is provided in a table as the main result.

### **4.2.1 Othello Tower Questionnaires' Results**

The results which are achieved from students, cultural tourists, locals and experts' questionnaires about future function of Othello Tower are shown below. After preparing results by pie charts and tables, explanations of this results are written. This explanation includes the most three preferred functions as main function and also three ones as supportive function. In addition, their least preference is illustrated as well.

- Students

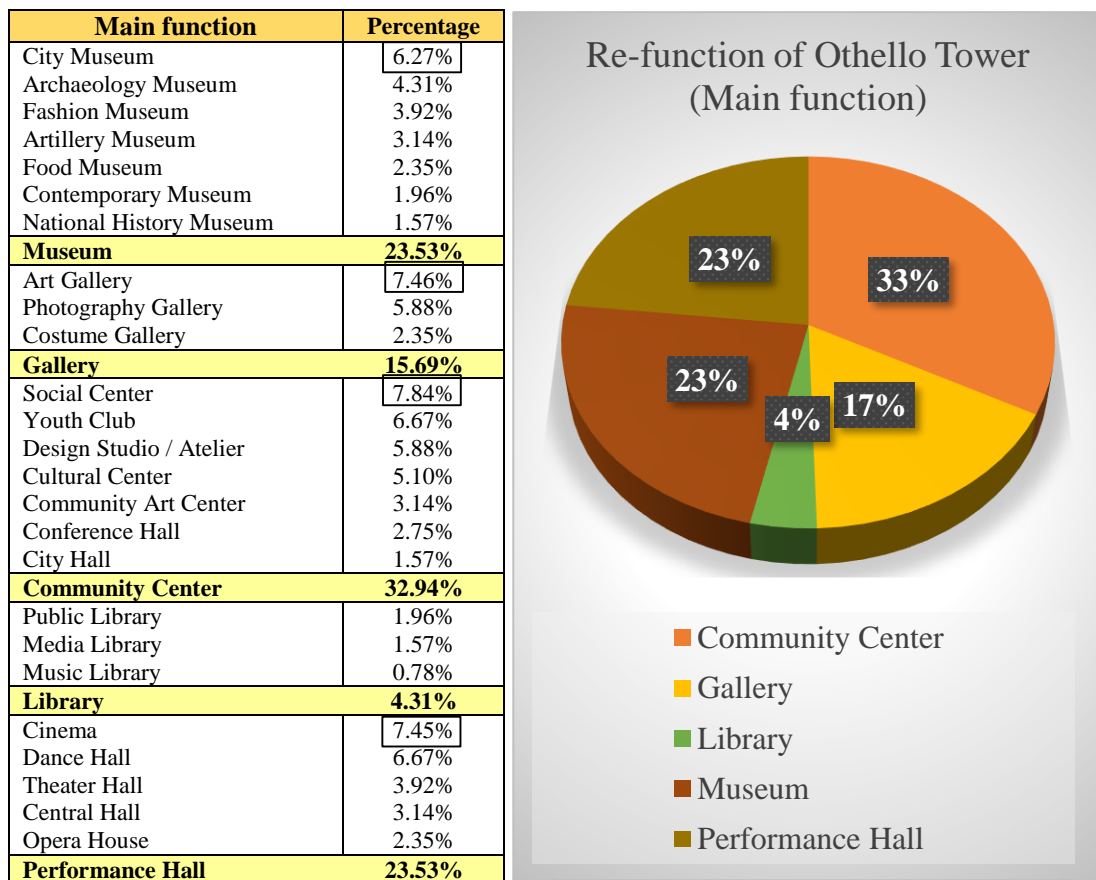


Figure 4.4: Results of new functions (main function) for Othello Tower from students' questionnaires, report through Excel

The pie chart and table in Figure 4.4 show the first students' preference of the main functions for Othello Tower. They prefer to alter the Othello Tower into community center, where the highest preference is for social center (7.84%). Although, the second preferred upper function of students are museum and performance hall (equally 23%), where the city museum (6.27%) and cinema (7.45%) are the highest voted, the second preference of specific function of them is art gallery (7.46%). On the other hand, the least preferred function for this building is library (0%) which is chosen by students.

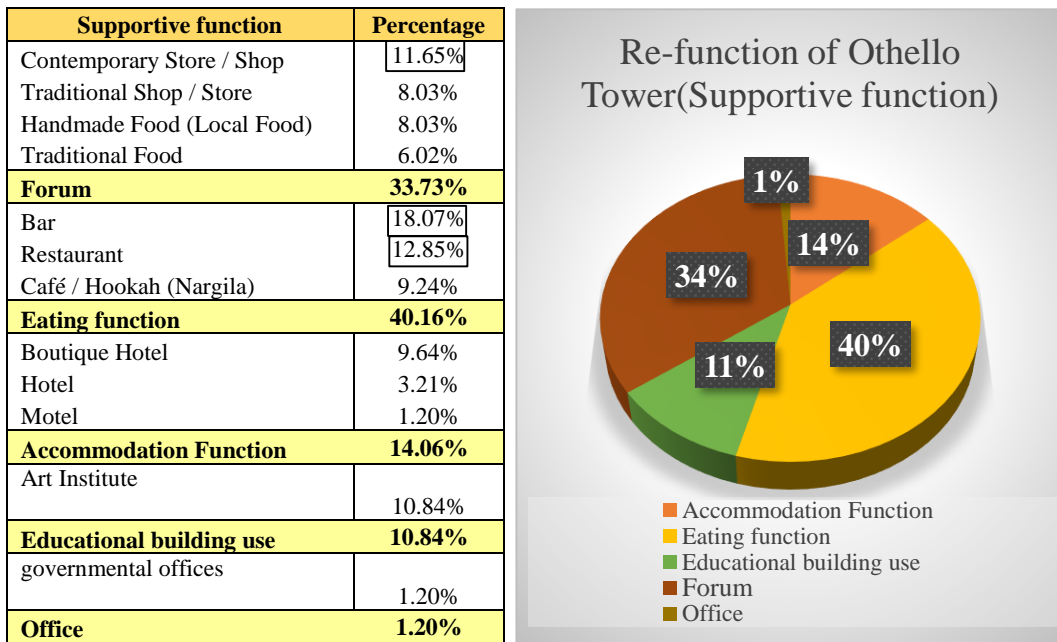


Figure 4.5: Results of new functions (supportive function) for Othello Tower from students' questionnaires, report through Excel

In Figure 4.5, the pie chart shows that, students prefer to have eating function (40%) as the first preferred upper supportive function for Othello Tower, their second and third upper preferred functions are forum (34%) and accommodation function (14%). The table in figure above illustrates that the most preferred specific function as supportive function is bar (18.07%), and the second and third ones are restaurant (12.85%) and contemporary store/shop (11.65%). Moreover, they do not need an office building there (1.2%).

- **Cultural Tourists**

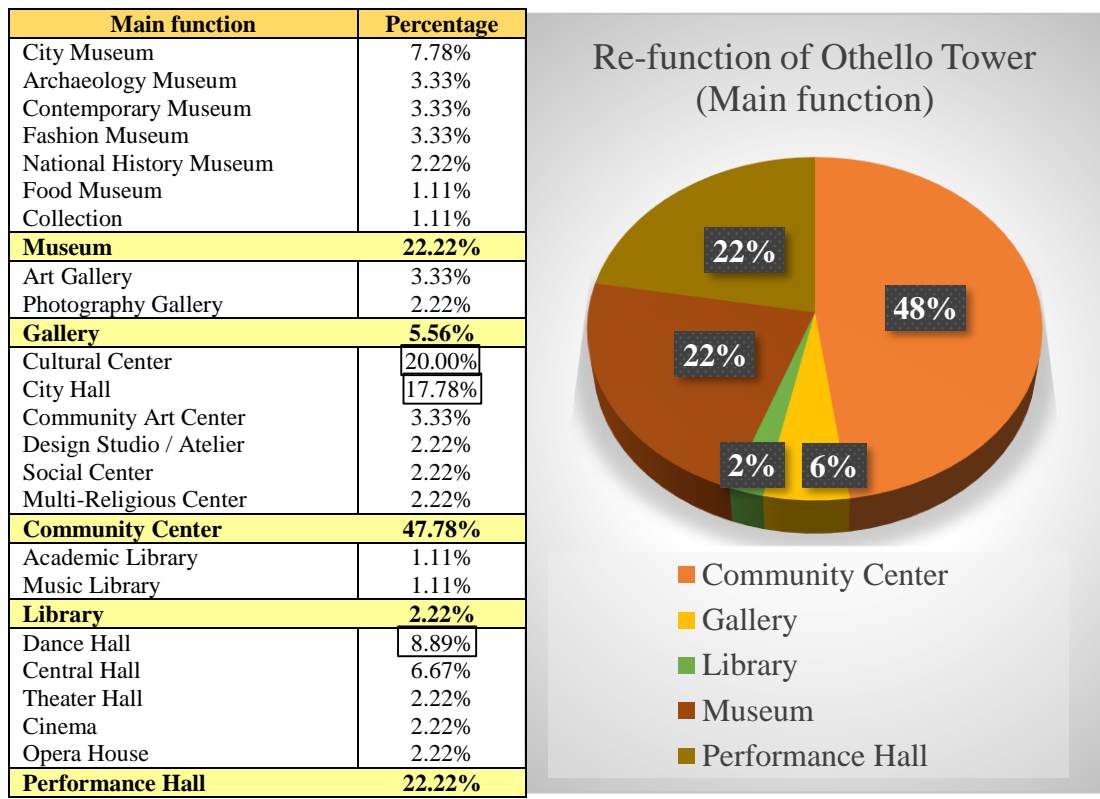


Figure 4.6: Results of new functions (main function) for Othello Tower from cultural tourists' questionnaires, report through Excel

3-The information presented by pie chart above (Figure 4.6), given from cultural tourists' questionnaire about upper main function of Othello Tower, which community center is chosen by 48% of them and the second and third tourists' preferences are performance hall (22%) and museum (22%). The table above also shows the most specific preferred function of this group. Cultural center (20%), city hall (17.78%) and dance hall (8.89%) respectively are the most preferences of this group. The library building (2%) is the least preference of cultural tourists as well as students.

Supportive function	Percentage
Traditional Food	12.36%
Handmade Food (Local Food)	10.11%
Traditional Shop / Store	6.74%
Contemporary Store / Shop	2.25%
<b>Forum</b>	<b>31.46%</b>
Restaurant	17.98%
Café / Hookah (Nargila)	13.48%
Bar	11.24%
<b>Eating function</b>	<b>42.70%</b>
Motel	7.87%
Boutique Hotel	5.62%
Hotel	0.00%
<b>Accommodation Function</b>	<b>13.48%</b>
Research Institute	5.62%
Art Institute	3.37%
<b>Educational building use</b>	<b>8.99%</b>
governmental offices	3.37%
private Offices	0.00%
<b>Office</b>	<b>3.37%</b>

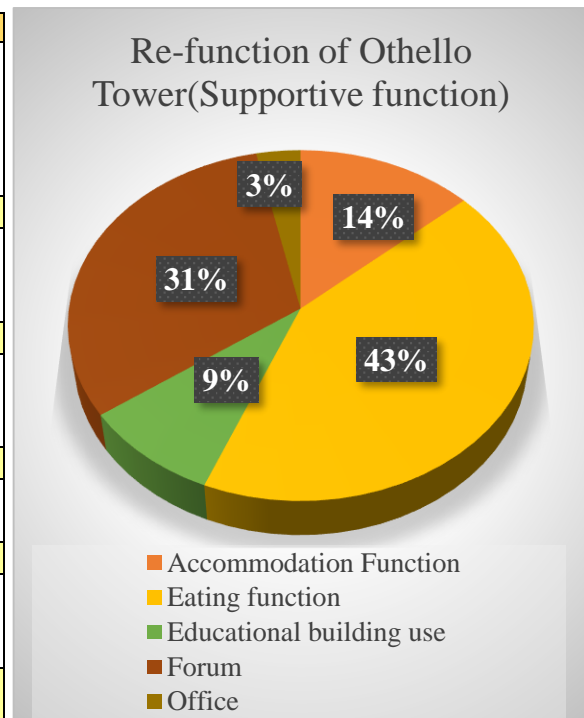


Figure 4.7: Results of new functions (supportive function) for Othello Tower from cultural tourists' questionnaires, report through Excel

In the supportive function pie chart in Figure 4.7, eating function (43%) have given the high rate of choosing by cultural tourists where the restaurant is most preference (17.98%). As upper functions, forum (31%) and accommodation function (14%) respectively are the second and third preferences of this people. In addition, café/ hookah (13.48%) and traditional food (12.36%) are the second and third specific preferred supportive functions which are chosen by cultural tourists.

- **Locals**

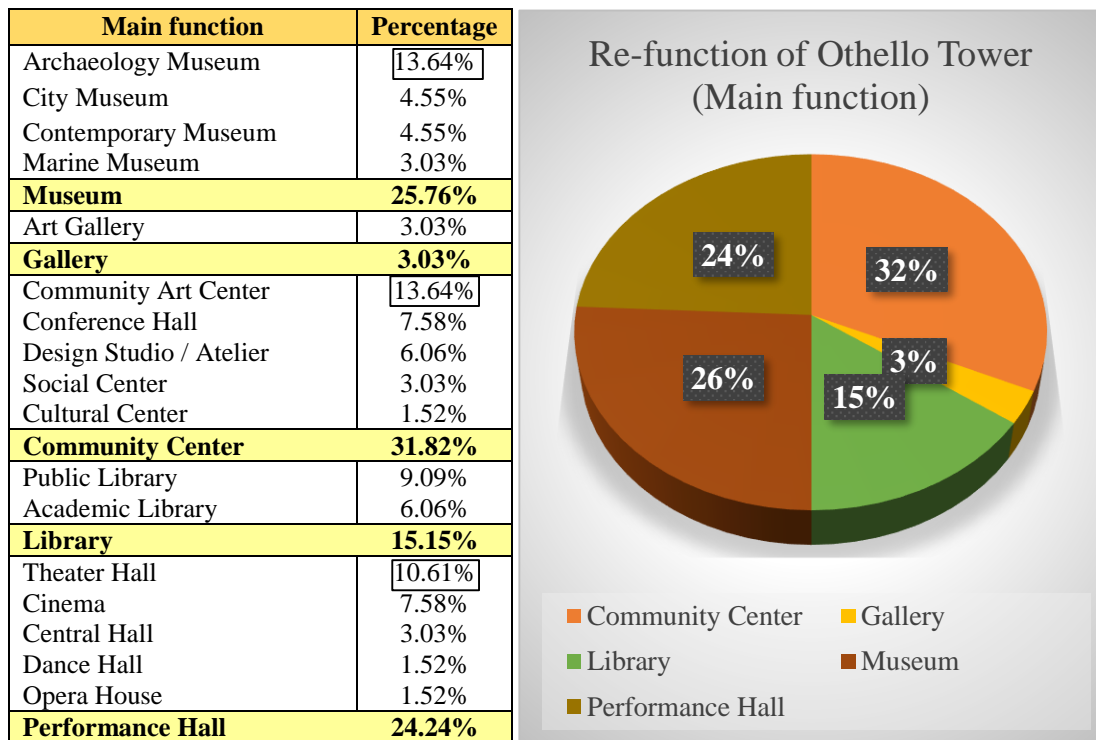


Figure 4.8: Results of new functions (main function) for Othello Tower from locals' questionnaires, report through Excel

Based on the charts above (Figure 4.8), it is obvious that community center is the most preferred selection of Cypriot people for the Othello Tower with 32% as upper function. Moreover, museum (26%) and performance hall (24%) are the second and third locals' preferences. Table above presets that, the highest preference of locals are archeological museum and community art center (equally 13.64%). After these functions, theater hall (10.61%) is the third locals' preferences as specific function.

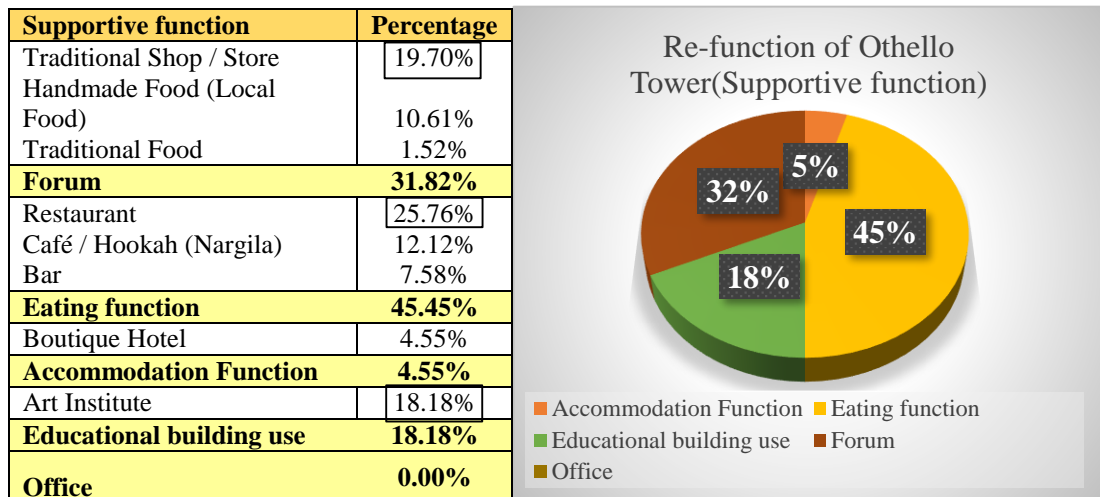


Figure 4.9: Results of new functions (supportive function) for Othello Tower from locals' questionnaires, report through Excel

Based on Figure 4.9, locals opt to have eating function (45%), forum (32%) and also educational building use (18%) as upper supportive functions, where restaurant is the highest preferred (25.76%) as specific function, and also traditional shop (19.7%) and art institute (18.18%) are the second and third preferences.

- Experts

Main Function	Percentage
Contemporary Museum	5.88%
Marine Museum	4.41%
Artillery Museum	2.94%
<b>Museum</b>	<b>13.24%</b>
Photography Gallery	11.76%
Art Gallery	10.29%
<b>Gallery</b>	<b>22.06%</b>
Conference Hall	5.88%
City Hall	4.41%
Cultural Center	1.47%
<b>Community Center</b>	<b>11.76%</b>
<b>Library</b>	<b>0.00%</b>
Theater Hall	29.41%
Concert Hall	13.24%
Opera House	8.82%
Dance Hall	1.47%
<b>Performance Hall</b>	<b>52.94%</b>

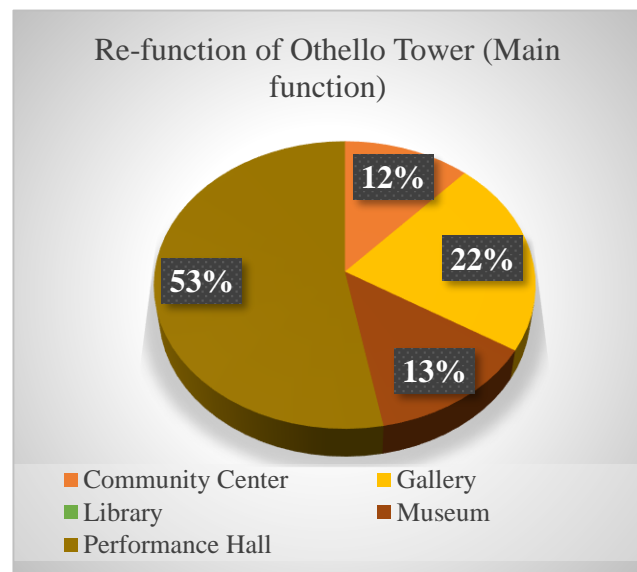


Figure 4.10: Results of new functions (main function) for Othello Tower from experts' questionnaires, report through Excel

On the basis of pie charts in figure 4.10, it is deduced that experts prefer to convert the Othello Tower into performance hall (53%) as its main function where contemporary theatre hall has the highest rate (29.41%). In addition, concert hall with (13.24%) is the second specific preference of experts. Moreover, photography gallery is the third choice of experts for new function of Othello Tower as specific function. According to pie chart above, gallery with (22%) votes and museum with (13%) votes are the second and third upper preferred function by experts.



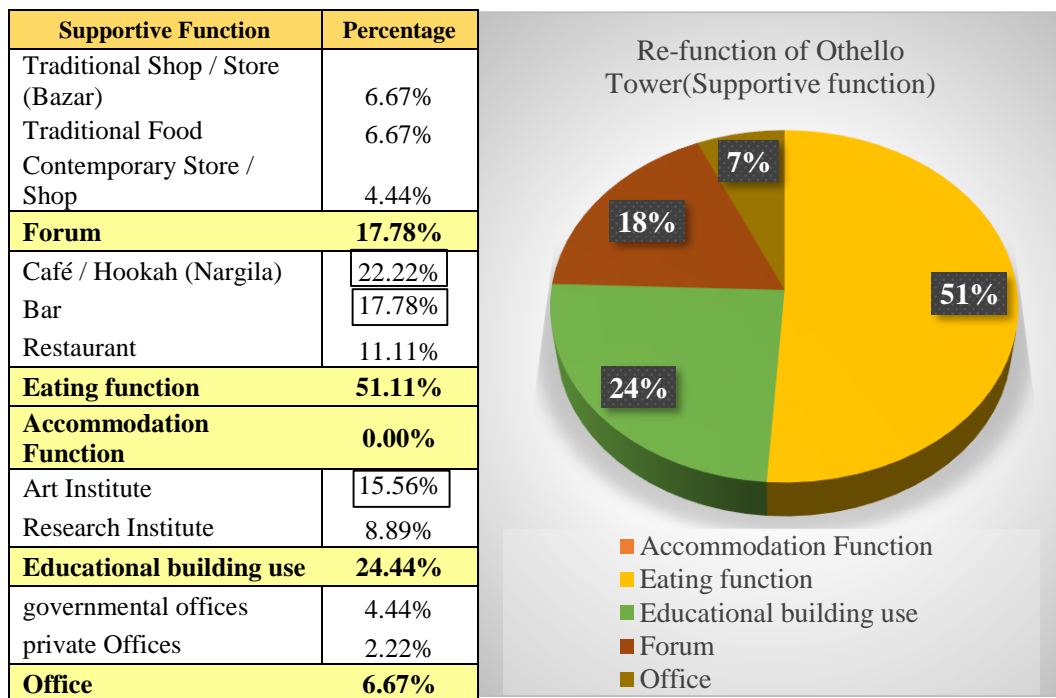


Figure 4.11: Results of new functions (supportive function) for Othello Tower from experts' questionnaires, report through Excel

As it is shown in Figure 4.11, experts prefer to change the Othello tower's function into eating function as supportive function (51%). The second experts' preference is educational function (24%) and the third one is forum (18%) as upper function. Café/hookah (22.22%), bar (17.78%) and art institute (15.56%) respectively are the highest priority of experts as specific functions.

#### 4.2.2 Martinengo Bastion Questionnaires' Results

The results which are achieved from students, cultural tourists, locals and experts' questionnaires about future function of Martinengo Bastion are shown below. After preparing results by pie charts and tables, explanations of this results are written. These explanations are as well as explanation of Othello tower results.

- **Students**

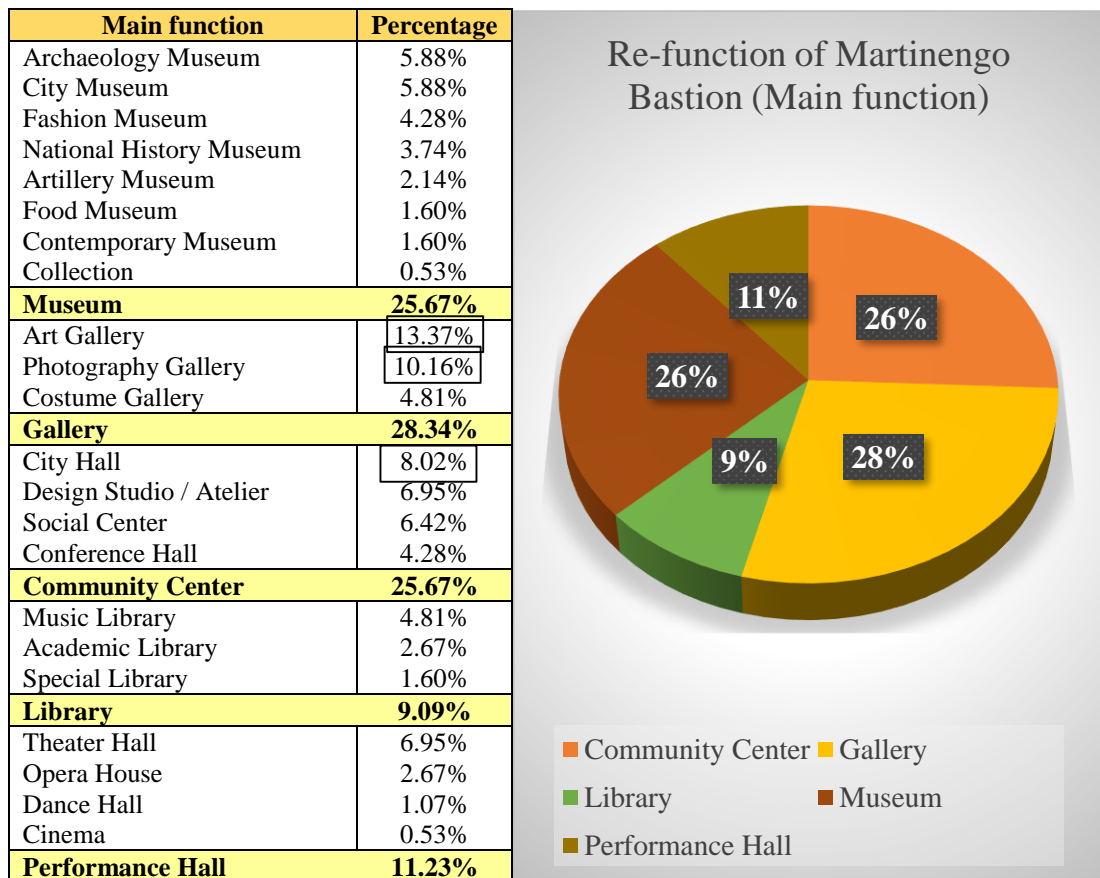


Figure 4.12: Results of new functions (main function) for Martinengo Bastion from students' questionnaires, report through Excel

The preference of student for converting Martinengo Bastion is gallery (28%) which is approximately near community center (26%) and museum (26%) as upper main function. The specific functions which are the most preferences of students for this bastions as main functions are art gallery (13.37%), photography gallery (10.16%) and city hall (8%). Being library for main function is lowest priority of this group.

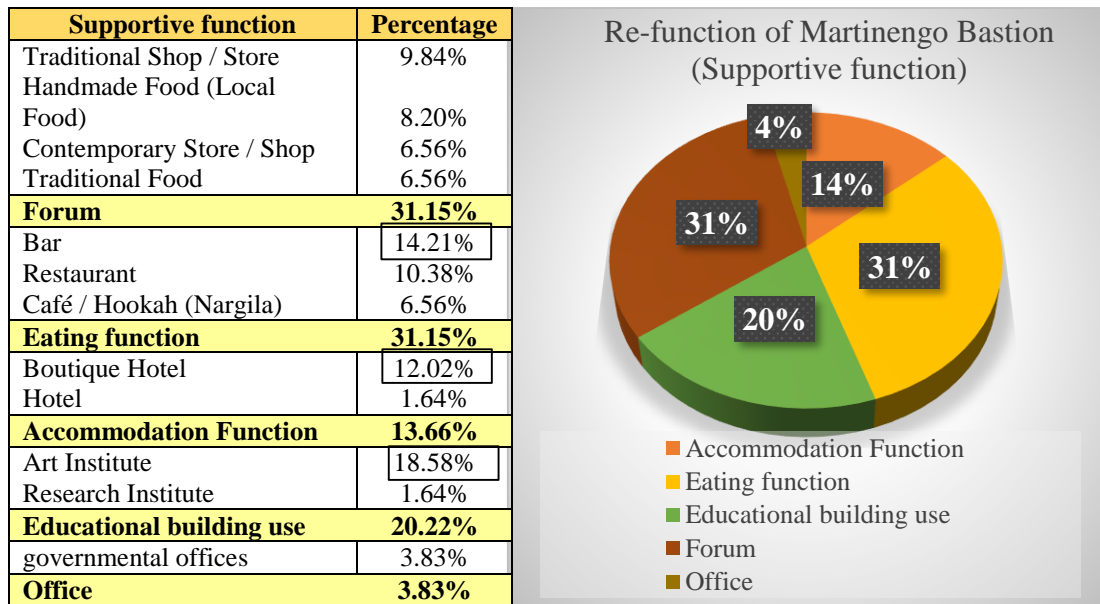


Figure 4.13: Results of new functions (supportive function) for Martinengo Bastion from students' questionnaires, report through Excel

Preferring to have eating function and forum along with main function, is the highest priority of students for this building (equally 31%). Furthermore, educational building use is the third preference of this building as upper function (20%). As specific function, it can be seen that art institute (18.58%), bar (14%) and boutique hotel (12%) respectively are the preferences of students for new function of Martinengo Bastion. Being library office building for supportive function is the lowest priority of this group.

- **Cultural Tourists**

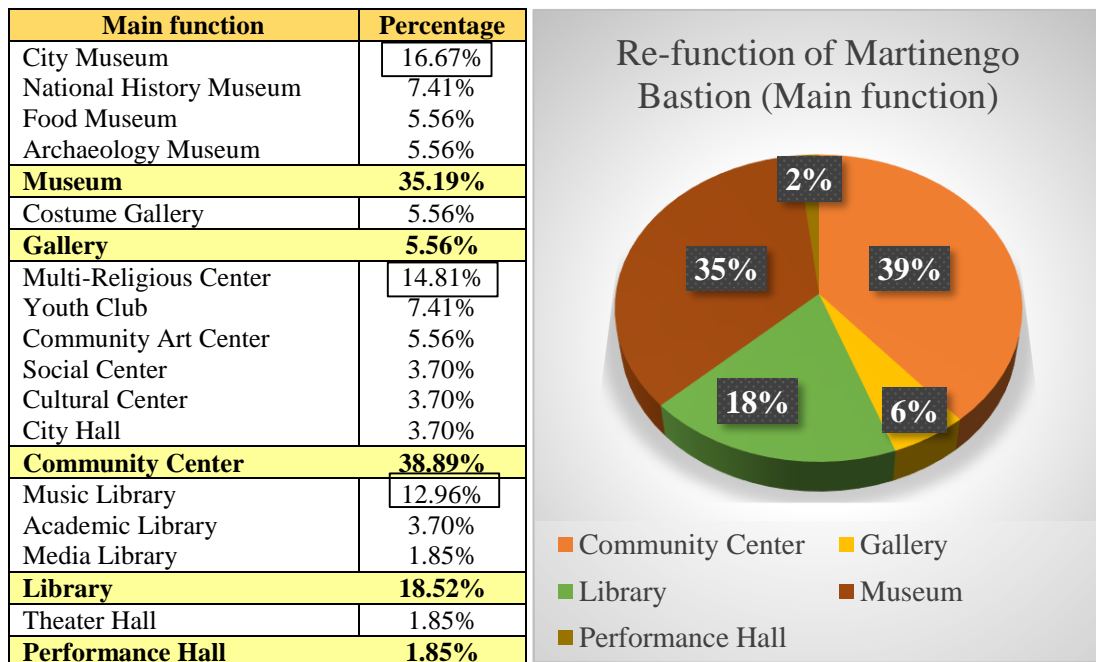


Figure 4.14: Results of new functions (main function) for Martinengo Bastion from cultural students' questionnaires, report through Excel

The evidence from above pie chart in figure 4.14 shows that most of the cultural tourists prefer to change the Martinengo Bastion's function into community center as main function (39%). In addition, they prefer to change this bastion into museum (35%) as their second preference and also library (18%) as their third preference. The table above shows the most higher specific main functions which are chosen by cultural tourists. They chose city museum (16.67%) as their first preference, multi-religious center (14.81%) as second preference and also music library (13%) as the third preference.

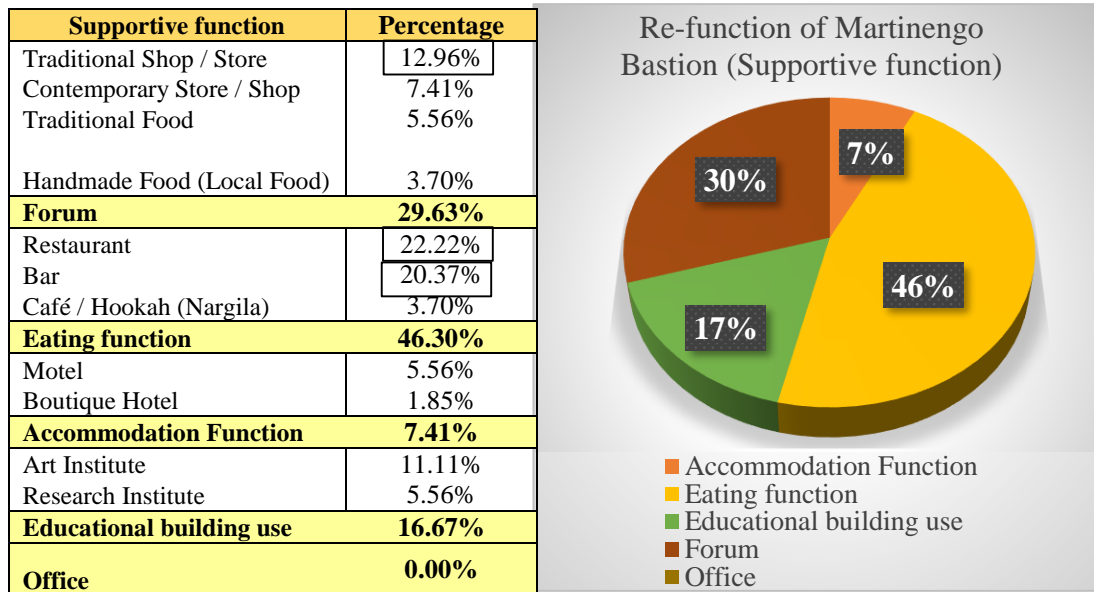


Figure 4.15: Results of new functions (supportive function) for Martinengo Bastion from cultural students' questionnaires, report through Excel

The most preferred upper function, as it is shown in Figure 4.15, is eating function (46%) for supportive function, where a restaurant with 22.22% is the most specific preferred choice by cultural tourists. The others upper functions which are the second and third choice of this group are forum (30%) and educational building use (17%). The second and third specific preferred alternative of this group for Martinengo are bar (20.37%) and traditional shop/store (13%). Surprisingly, performance hall is the lowest preferred option of cultural tourists as a new function of this bastion.

- **Locals**

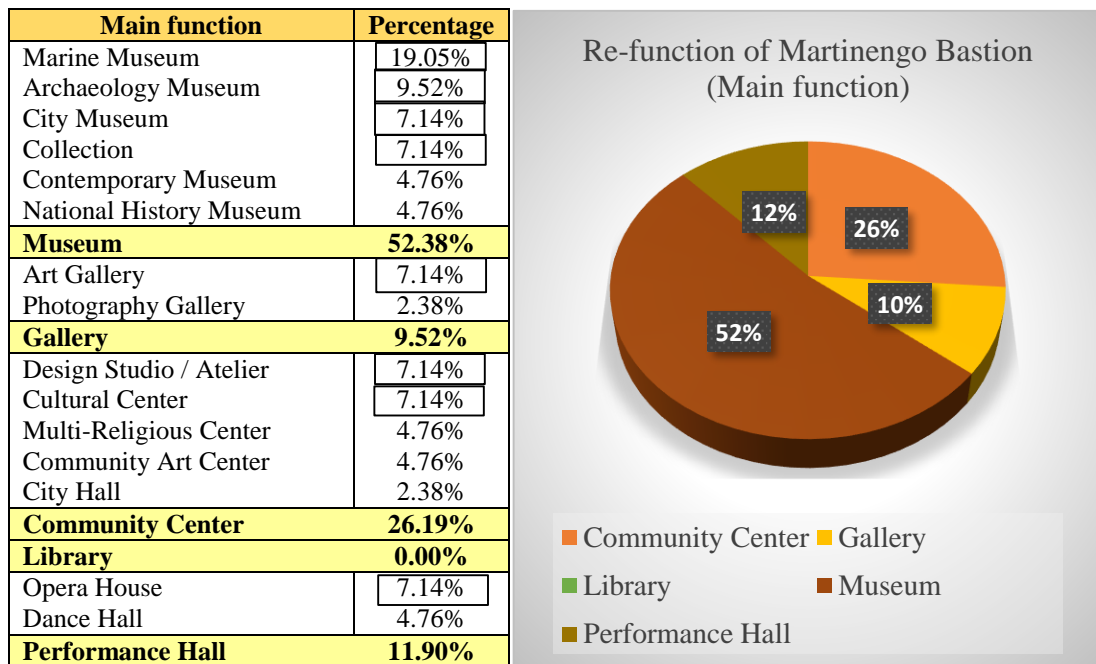


Figure 4.16: Results of new functions (main function) for Martinengo Bastion from locals' questionnaires, report through Excel

The information shown by the pie chart in Figure 4.16, presents that around half of the locals prefer Martinengo bastion to be converted into a museum (52%) as main function, where marine museum has highest vote (19%). In addition, based on pie chart above, the upper preferred functions are community center (26%) and performance hall (12%). Archaeology museum (9.5%), is the second preference of locals for Martinengo Bastion as specific function. Moreover, opera house, cultural center, design studio, art gallery collection museum and city museum have same rage (7.14%) as third choices of locals.

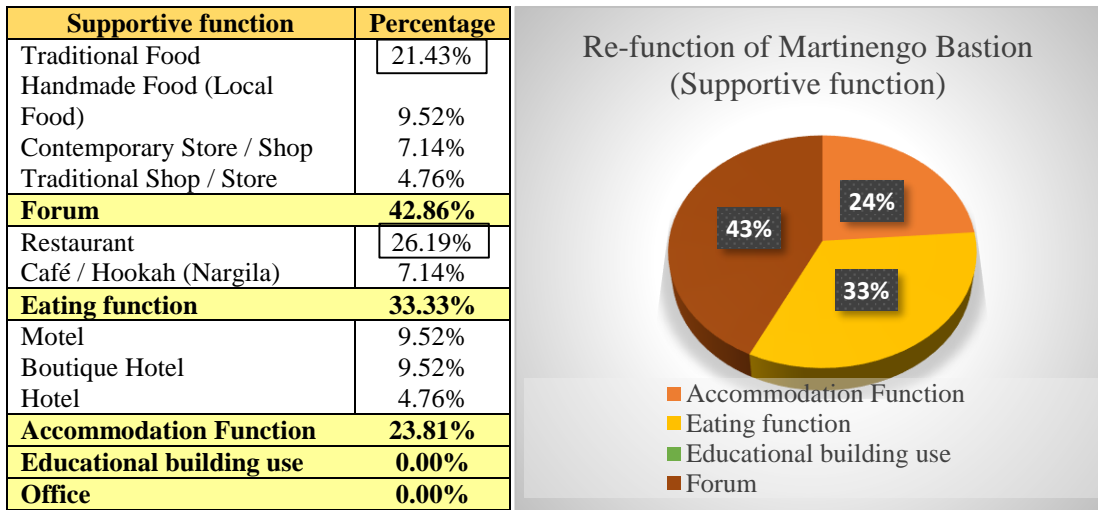


Figure 4.17: Results of new functions (supportive function) for Martinengo Bastion from locals' questionnaires, report through Excel

According to Figure 4.17, the high percentage of supportive function based on locals' opinion for this bastion, is forum building (43%), eating function (33%) and accommodation function (24%) which are the most prior to the least prior of upper function. On the other side, based on table above, restaurant (26.19%) and traditional food (21.43%) are respectively the first and second preference of locals for new function of Martinengo Bastion.

- Experts

Main Function	Percentage
Artillery Museum	11.29%
City Museum	8.07%
Contemporary Museum	6.45%
Archaeology Museum	4.84%
Marine Museum	3.23%
Fashion Museum	1.61%
<b>Museum</b>	<b>35.48%</b>
Art Gallery	19.35%
Costume Gallery	8.06%
Photography Gallery	6.45%
<b>Gallery</b>	<b>33.87%</b>
Cultural Center	6.45%
Design Studio / Atelier	3.23%
City Hall	3.23%
Community Art Center	1.61%
<b>Community Center</b>	<b>14.52%</b>
Public Library	3.23%
<b>Library</b>	<b>3.23%</b>
Concert Hall	6.45%
Theater Hall	3.23%
Cinema	3.23%
<b>Performance Hall</b>	<b>12.90%</b>

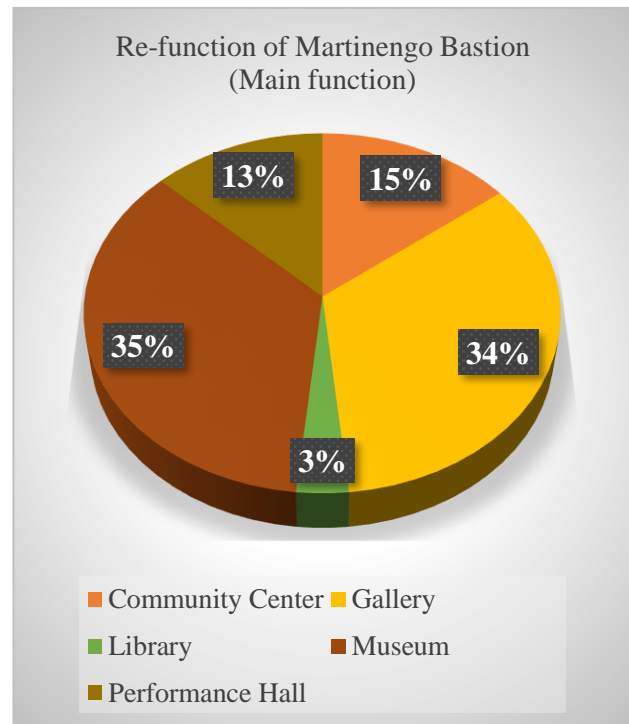


Figure 4.18: Results of new functions (main function) for Martinengo Bastion from experts' questionnaires, report through Excel

The information presented by pie chart above (Figure 4.18), given from experts' questionnaire about main function of Martinengo bastion, which museum and community center are chosen by 35% and 34% of them and community center as upper function, is the third preference with 15% votes. Art gallery from heading of galleries with 19% and artillery museum with 11% and also city museum with 8.07%, respectively are the highest preferred selections.



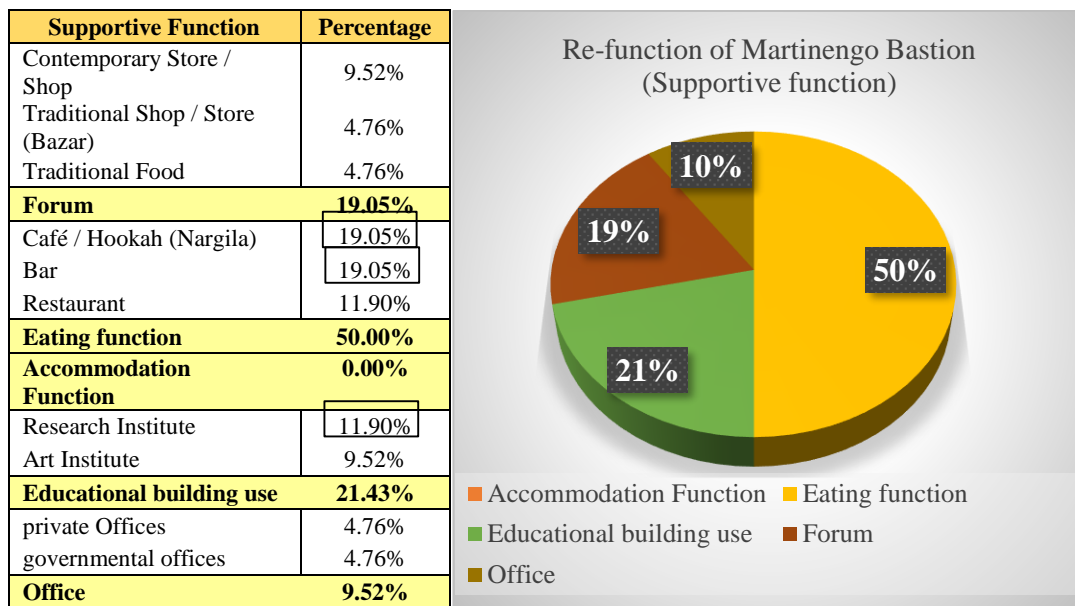


Figure 4.19: Results of new functions (supportive function) for Martinengo Bastion from experts' questionnaires, report through Excel

In the supportive function chart (Figure 4.19), eating function have given the high rate of choosing by experts (50%) where the café and bar are equally most preferences (19%); and also the second and third upper functions which are the most preferred by experts for Martinengo Bastion are educational building use (21%) and forum (19%). The other preferred supportive function that is chosen by experts is research institute (11.9%).

#### 4.2.3 Ravelin Bastion Questionnaires' Results

The results which are achieved from students, cultural tourists, locals and experts' questionnaires about future function of Ravelin Bastion are shown below. After preparing results by pie charts and tables, explanations of this results are written. These explanations are as well as explanation of Othello tower and Martinengo Bastion results.

- **Students**

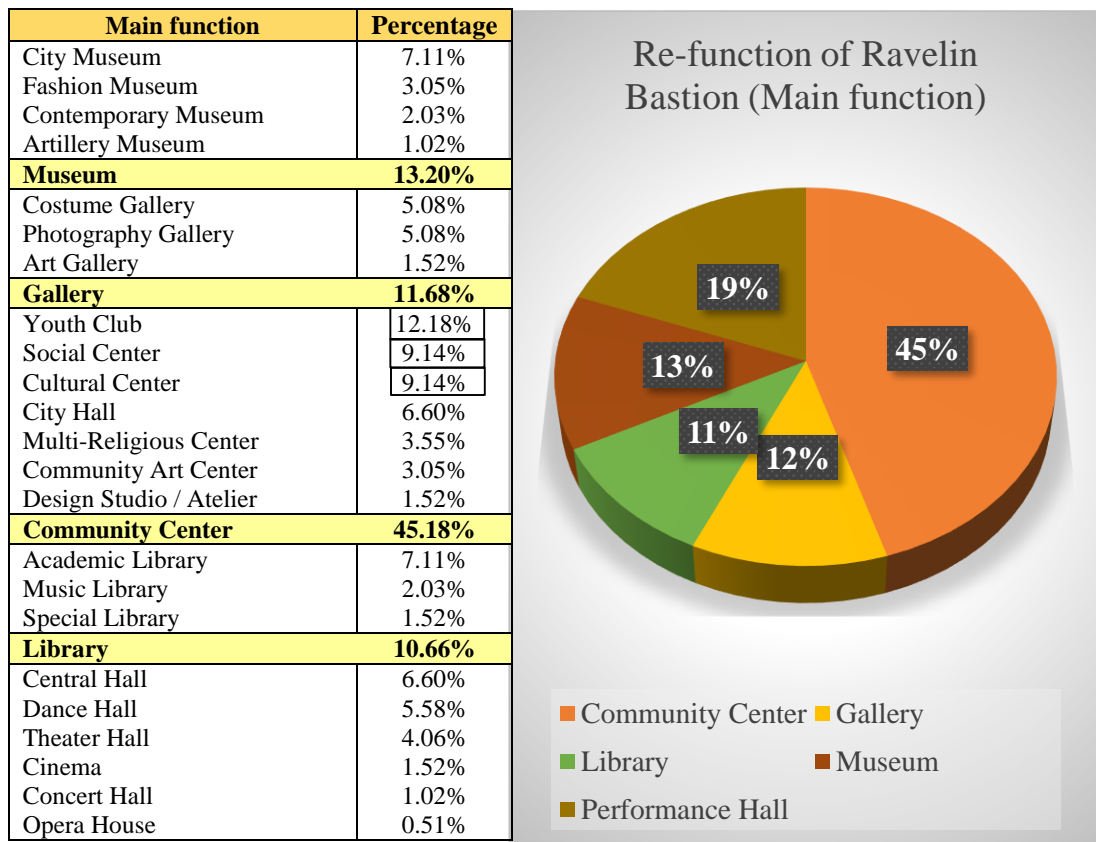


Figure 4.20: Results of new functions (main function) for Ravelin Bastion from students' questionnaires, report through Excel

The information shown by the pie chart in Figure 4.20 presents that around half of the student prefer the main function of Ravelin to be a community center (45%), where youth club is highest rate (12.18%). In addition, based on pie chart above, the upper preferred functions are performance hall (19%) and museum (13%). Social center and cultural center (equally 9%) are the second and third preference of students for Ravelin Bastion as specific function.

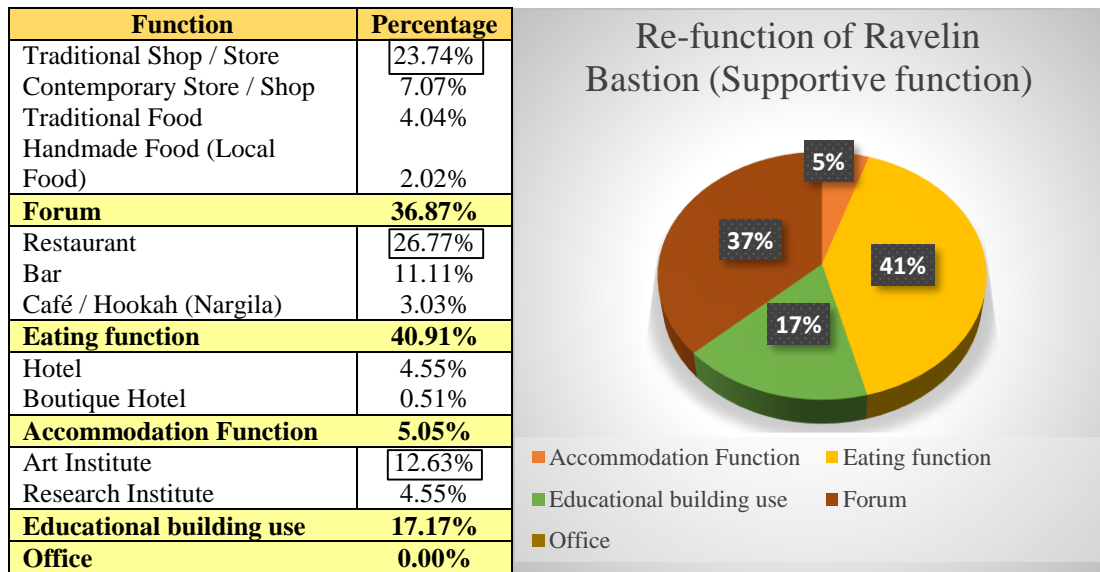


Figure 4.21: Results of new functions (supportive function) for Ravelin Bastion from students' questionnaires, report through Excel

According to Figure 4.21, the high percentage of supportive function based on students' opinion for this bastion, is eating function (41%), forum (37%) and educational building use (17%) which are the most prior to the least prior of upper functions. On the other side, based on table above, restaurant (26.77%), traditional shop/store (23.74%) and art institute (12.63%) are respectively the first, second and third preferences of locals for new function of Ravelin Bastion.

- **Cultural tourists**

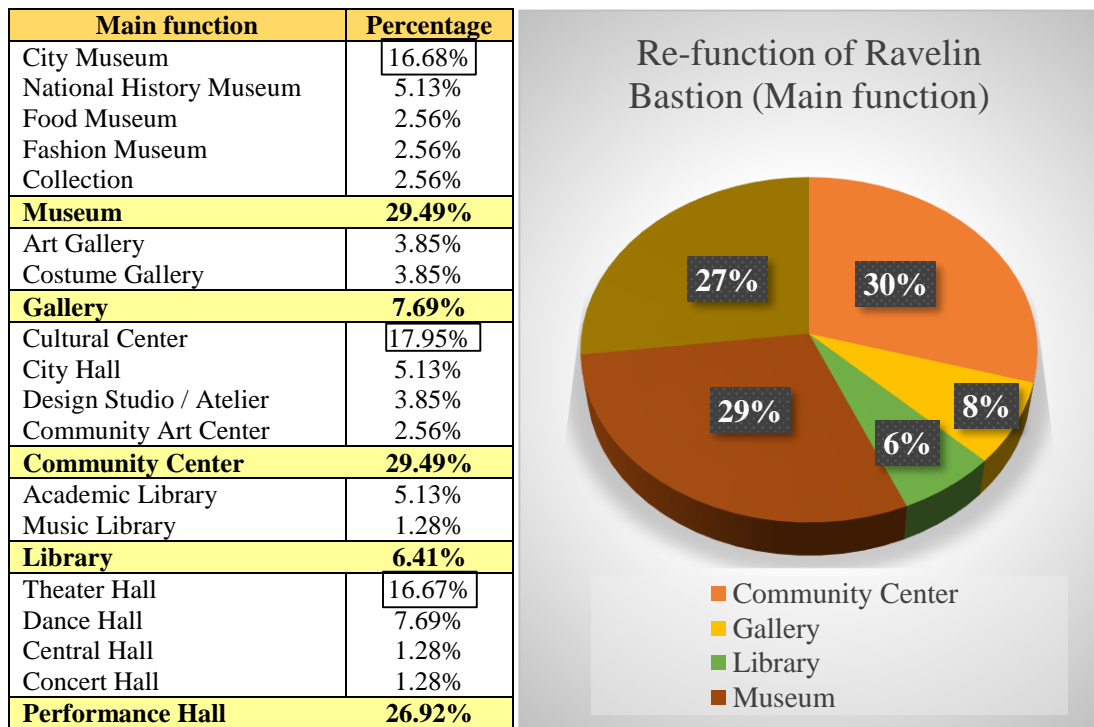


Figure 4.22: Results of new functions (main function) for Ravelin Bastion from cultural tourists' questionnaires, report through Excel

The evidence from above pie chart in Figure 4.22 shows that most of the cultural tourists prefer to change the Ravelin Bastion's function into community center as main function (30%). In addition, they prefer to change this bastion into museum (29%) as their second preference and also performance hall (27%) as their third preference. The table above shows the most higher specific main functions which are chosen by cultural tourists. They choose cultural center (18%) as their first preference, city museum (16.68%) as second preference and also theater hall (16.67%) as the third preference.

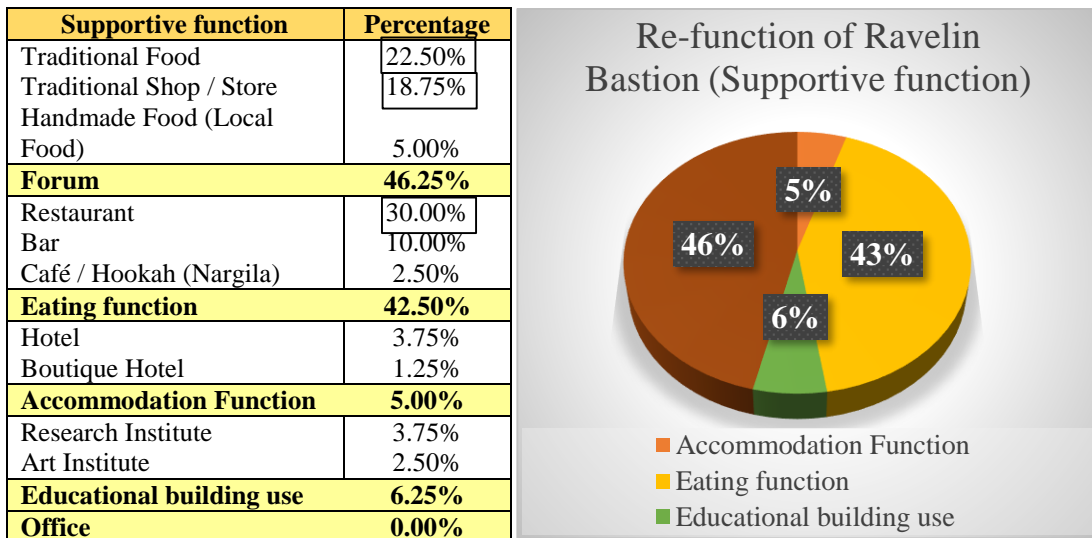


Figure 4.23: Results of new functions (supportive function) for Ravelin Bastion from cultural tourists' questionnaires, report through Excel

Based on Figure 4.23, cultural tourists opt to have forum (46%), eating function (43%), and also educational building use (6%) as upper supportive functions of Ravelin Bastion, where restaurant is the highest preferred (30%) as specific function, and also traditional food (22.5%) and traditional shop (18.75%) are the second and third preferences.

- **Locals**

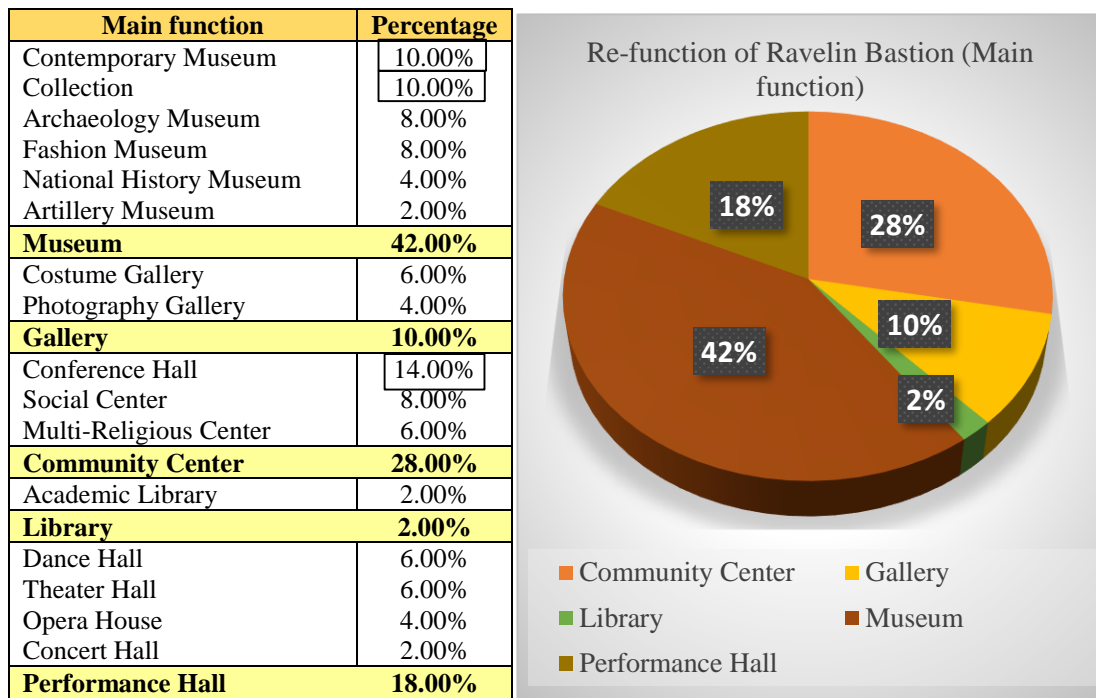


Figure 4.24: Results of new functions (main function) for Ravelin Bastion from locals' questionnaires, report through Excel

On the basis of pie charts in Figure 4.24, it is deduced that locals prefer to convert the Ravelin Bastion into museum (42%) as its main function. In addition, community center with (28%) is the second upper preference of locals. Moreover, performance hall is the third choice of locals for new function of Ravelin Bastion as upper function. According to table above, conference hall with (14%) votes, contemporary and collection museum with (10%) votes are the second and third specific preferred functions by experts.

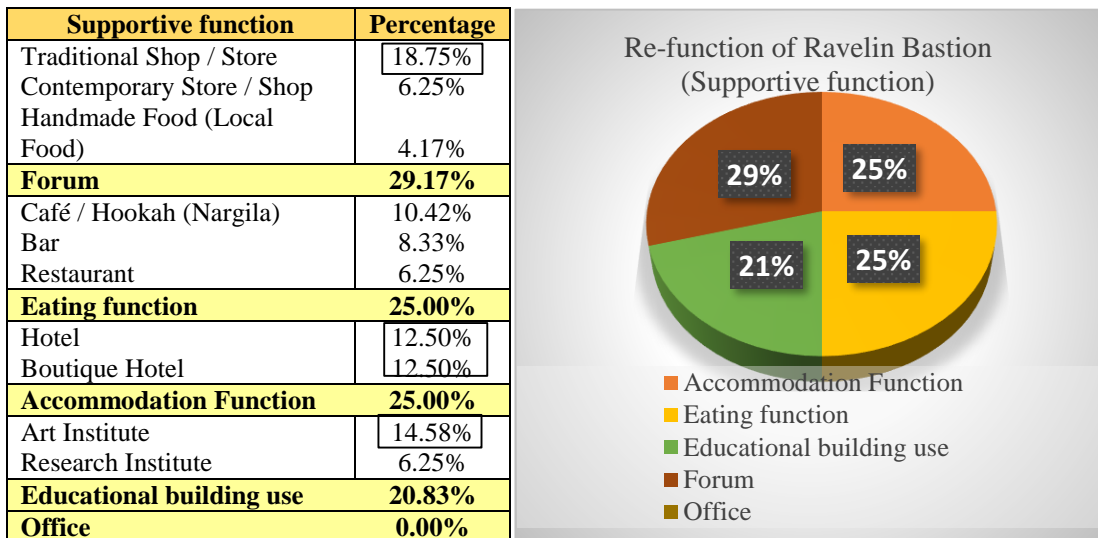


Figure 4.25: Results of new functions (supportive function) for Ravelin Bastion from locals' questionnaires, report through Excel

In Figure 4.25, the pie chart shows that local prefer to have forum (29%) as the first preferred upper supportive function for Ravelin Bastion, their second and third upper preferred functions are eating function and accommodation function (both are 25%). The table in figure above illustrates that the most preferred specific function as supportive function is traditional shop (18.75%), and also the second and third ones are art institute (14.58%) and hotel and boutique hotel (both are 12.5%). Moreover, they do not need an office building there (0%).

- Experts

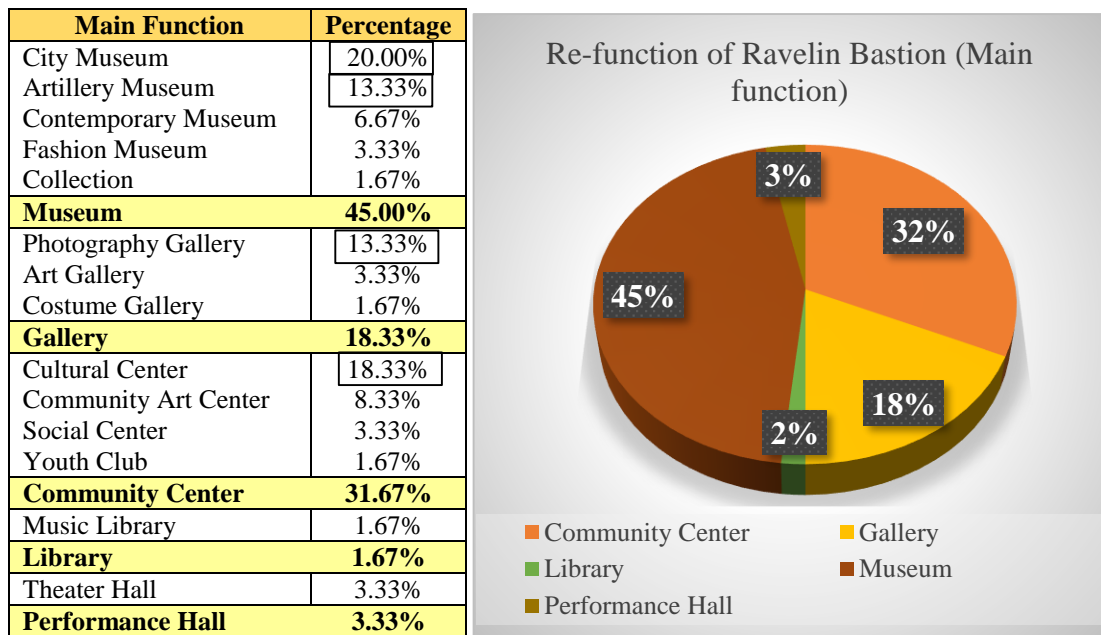


Figure 4.26: Results of new functions (main function) for Ravelin Bastion from experts' questionnaires, report through Excel

The information shown by the pie chart in Figure 4.26 presents that around half of the experts prefer the main function of Ravelin to be a museum (45%), where city museum is highest (20%). In addition, based on pie chart above, the upper preferred functions are community center (32%) and gallery (18%). Cultural center (18.33%) is the second and the third preference of experts are artillery museum and photography gallery (equally 13%) for Ravelin Bastion as specific functions.



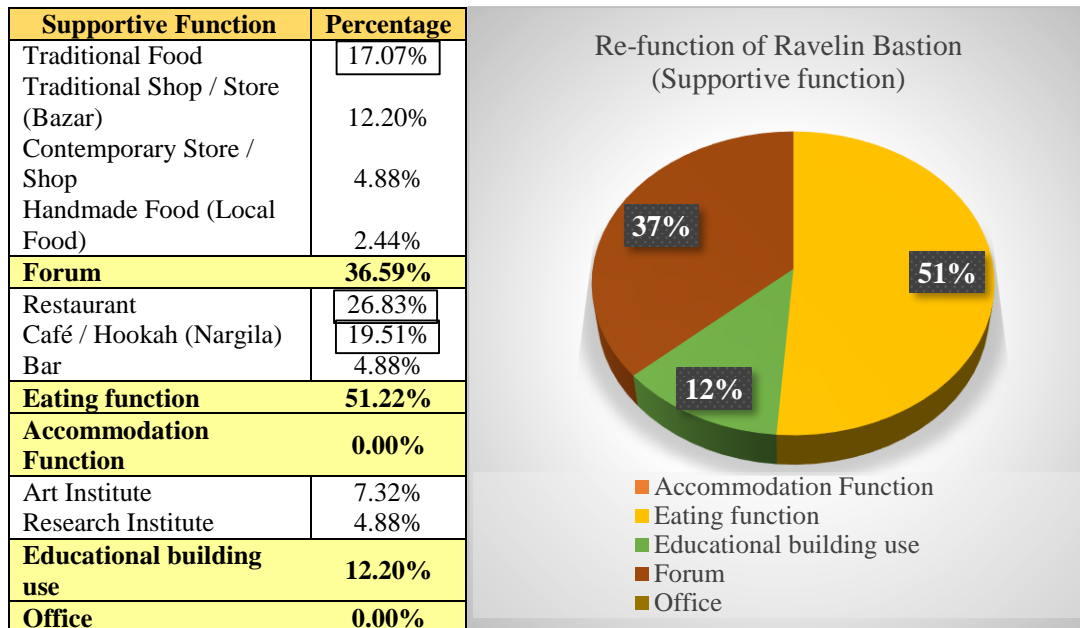


Figure 4.27: Results of new functions (supportive function) for Ravelin Bastion from experts' questionnaires, report through Excel

According to Figure 4.27, the high percentage of supportive function based on experts' opinion for this bastion, are eating function (51%), forum (37%) and educational building use (12%), which are the most prior to the least prior of upper function. On the other side, based on table above, restaurant (26.83%), café/hookah (19.51%) and traditional shop/store (17%) are respectively the first, second and third preferences of experts for new function of Ravelin Bastion.

#### 4.2.4 Total Questionnaires' Results

The results which are achieved from student, cultural tourist, locals and expert's questionnaires for each case studies are shown below as total results. After preparing results by pie charts and tables, explanations of these results are written.

- **Othello Tower**

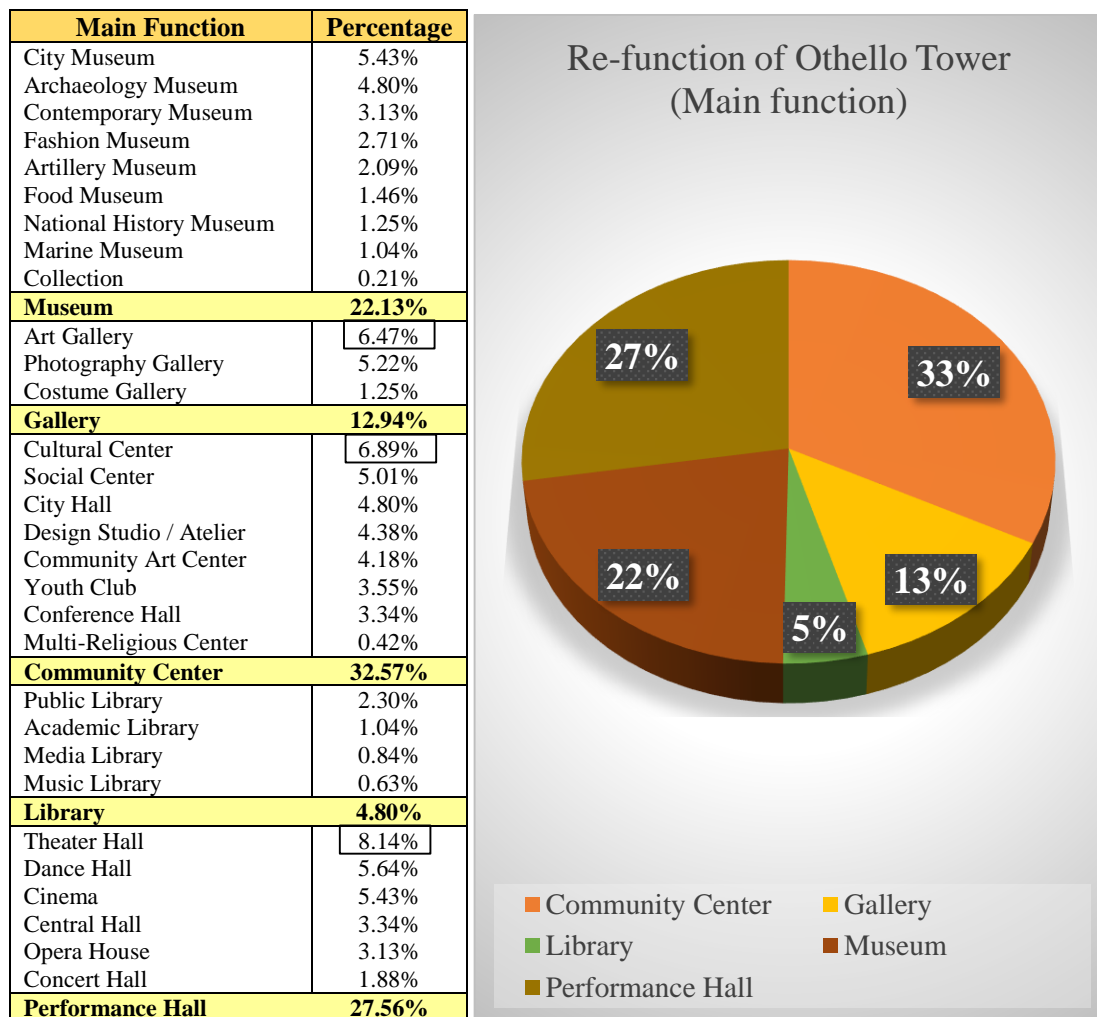


Figure 4.28: Results of actors' questionnaires for new functions (main function) of Othello Tower, report through Excel

Based on pie chart above (Figure 4.28), although 33% of all actors prefer to change the Othello Tower into community center, theatre hall has the most percentage (8%) from performance hall category, which is the second preference of total (27%). In

addition, the third upper preferred function of them is museum. The second and third specific preference of all actors are cultural center (6.9%) and art gallery (6.5%).

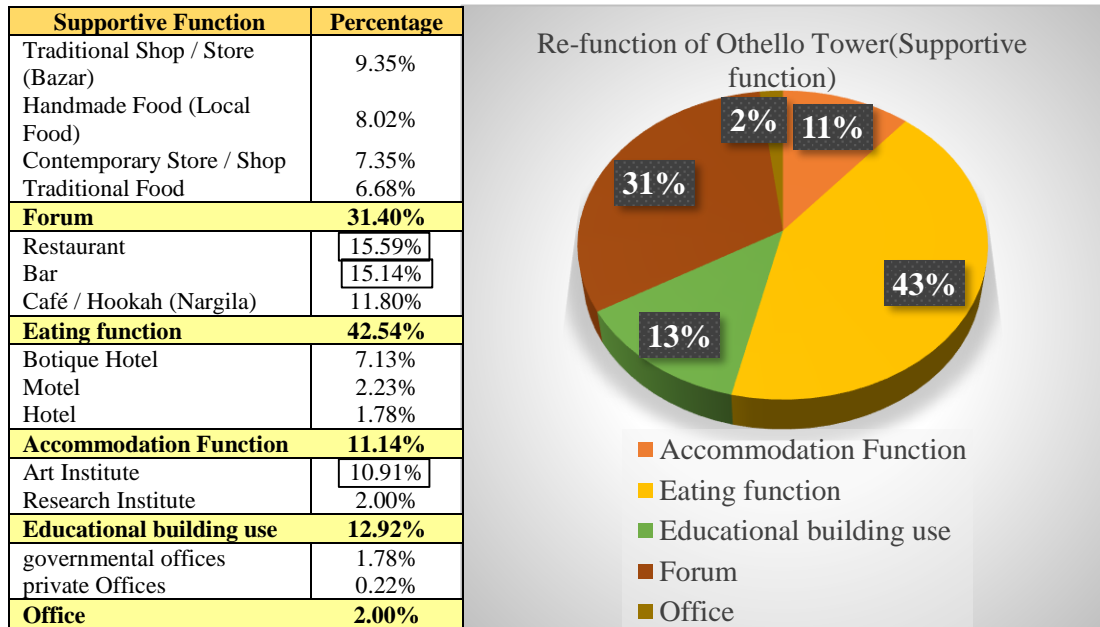


Figure 4.29: Results of actors' questionnaires for new functions (supportive function) of Othello Tower, report through Excel

In Figure 4.29, the pie chart shows that all actors prefer to have eating function (43%) as the first preferred upper supportive function for Othello Tower, their second and third upper preferred functions are forum (31%) and educational building use (13%). The table in figure above illustrates that, the most preferred specific function as supportive function is restaurant (15%), and also the second and third ones are bar (15%) and art institute (11%). Moreover, they do not need an office building there (2%).

- **Martinengo Bastion**

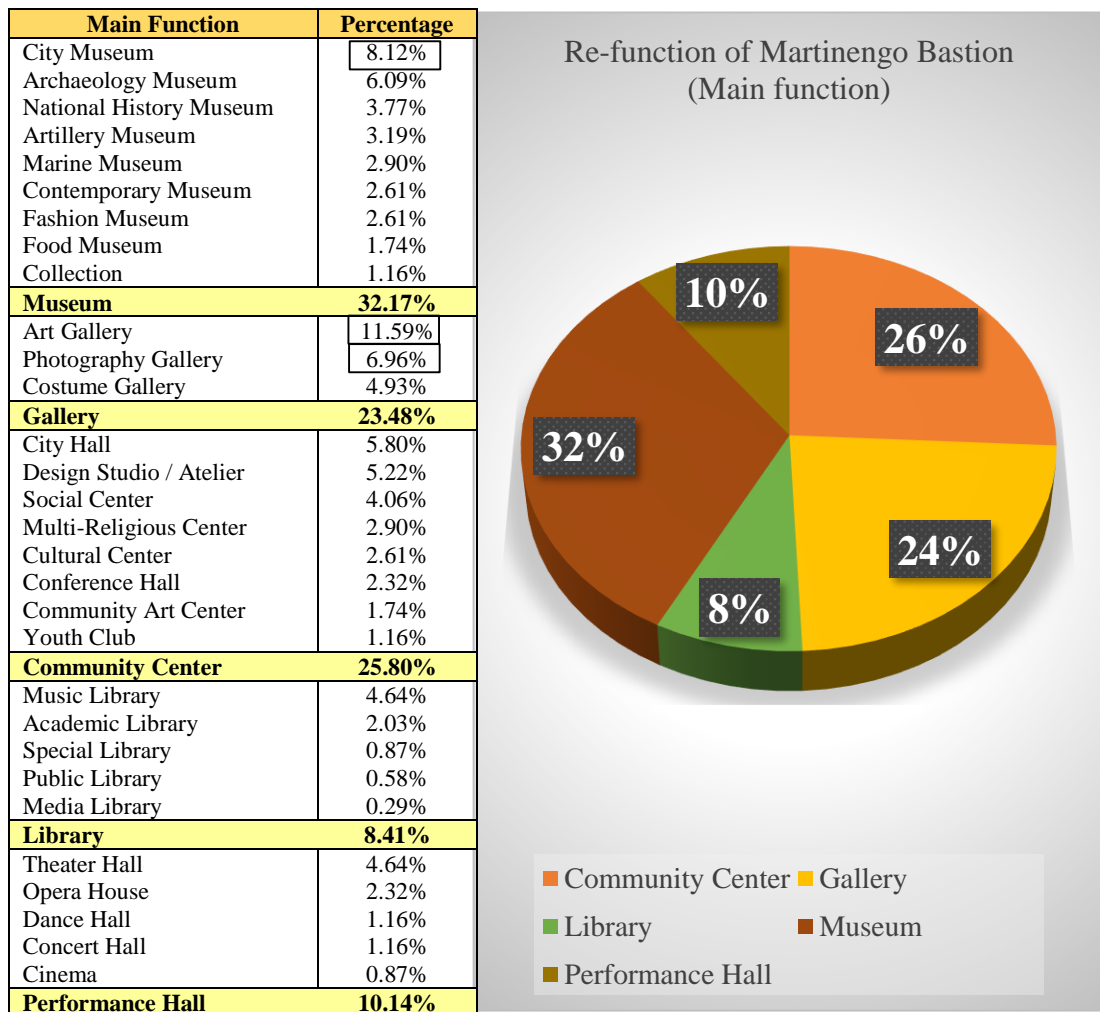


Figure 4.30: Results of actors' questionnaires for new functions (main function) of Martinengo Bastion, report through Excel

The information shown by the pie chart in Figure 4.30 presents that 32% actors prefer the main function of Martinengo to be a museum. In addition, based on pie chart above, the upper preferred functions are community center (26%) and gallery (24%). Art gallery with (11.59%), city museum (8.12%) and photography gallery (7%) are the first, second and the third preference of all actors for Martinengo Bastion as specific function.

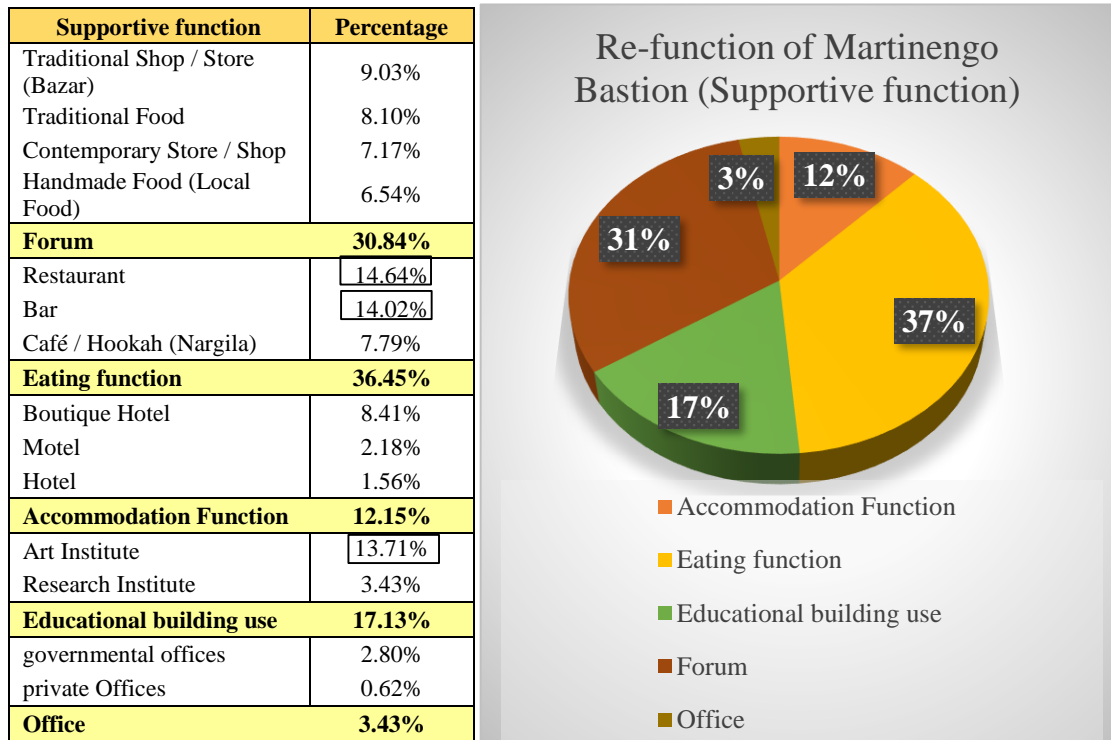


Figure 4.31: Results of actors' questionnaires for new functions (supportive function) of Martinengo Bastion, report through Excel

In Figure 4.31, the pie chart shows that all actors prefer to have eating function (37%) as the first preferred upper supportive function for Martinengo Bastion, their second and third upper preferred functions are forum (31%) and educational building use (17%). The table in figure above illustrates that the most preferred specific function as supportive function is restaurant (14.64%), and also the second and third ones are bar (14%) and art institute (13.71%).

- **Ravelin Bastion**

Main Function	Percentage
City Museum	10.21%
Fashion Museum	3.66%
Contemporary Museum	3.40%
Artillery Museum	2.88%
Collection	2.09%
National History Museum	1.57%
Archaeology Museum	1.05%
Food Museum	0.52%
<b>Museum</b>	<b>25.39%</b>
Photography Gallery	5.24%
Costume Gallery	4.45%
Art Gallery	2.09%
<b>Gallery</b>	<b>11.78%</b>
Cultural Center	11.26%
Youth Club	6.54%
Social Center	6.28%
City Hall	4.45%
Community Art Center	3.40%
Multi-Religious Center	2.62%
Conference Hall	1.83%
Design Studio / Atelier	1.57%
<b>Community Center</b>	<b>37.96%</b>
Academic Library	4.97%
Music Library	1.57%
Special Library	0.79%
<b>Library</b>	<b>7.33%</b>
Theater Hall	6.81%
Dance Hall	5.24%
Central Hall	3.66%
Concert Hall	1.05%
Cinema	0.79%
<b>Performance Hall</b>	<b>17.54%</b>

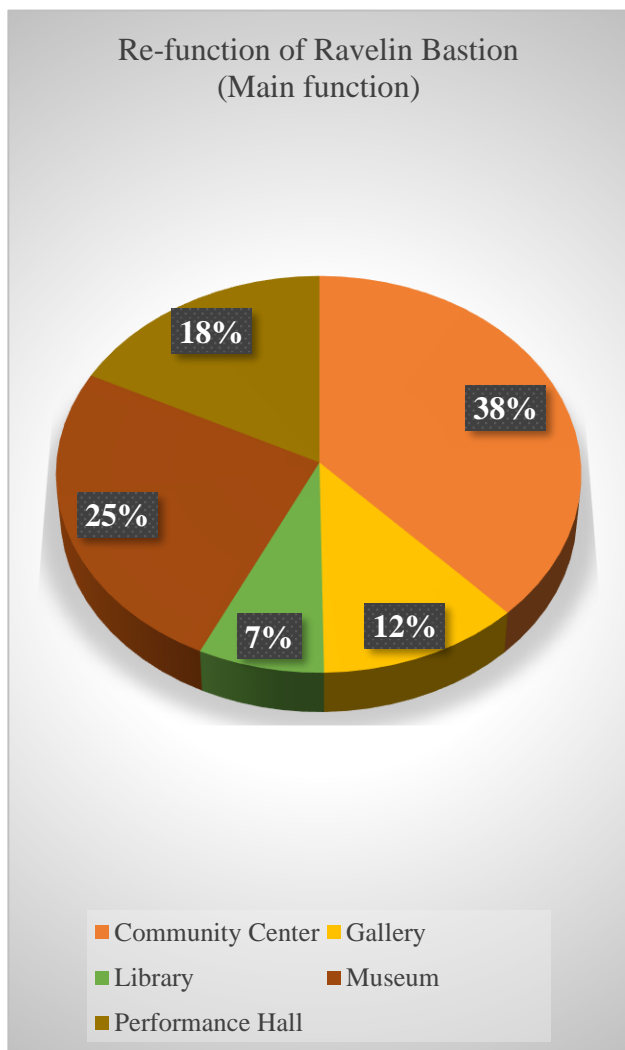


Figure 4.32: Results of actors' questionnaires for new functions (main function) of Ravelin Bastion, report through Excel

The information shown by the pie chart in Figure 4.32 presents that 38% actors prefer the main function of Ravelin to be a community center. In addition, based on pie chart above, the upper preferred functions are museum (25%) and performance hall (18%). Cultural center with (11.26%), city museum (10.21%) and theater hall (6.81%) are the first, second and the third preference of all actors for Ravelin Bastion as specific function.

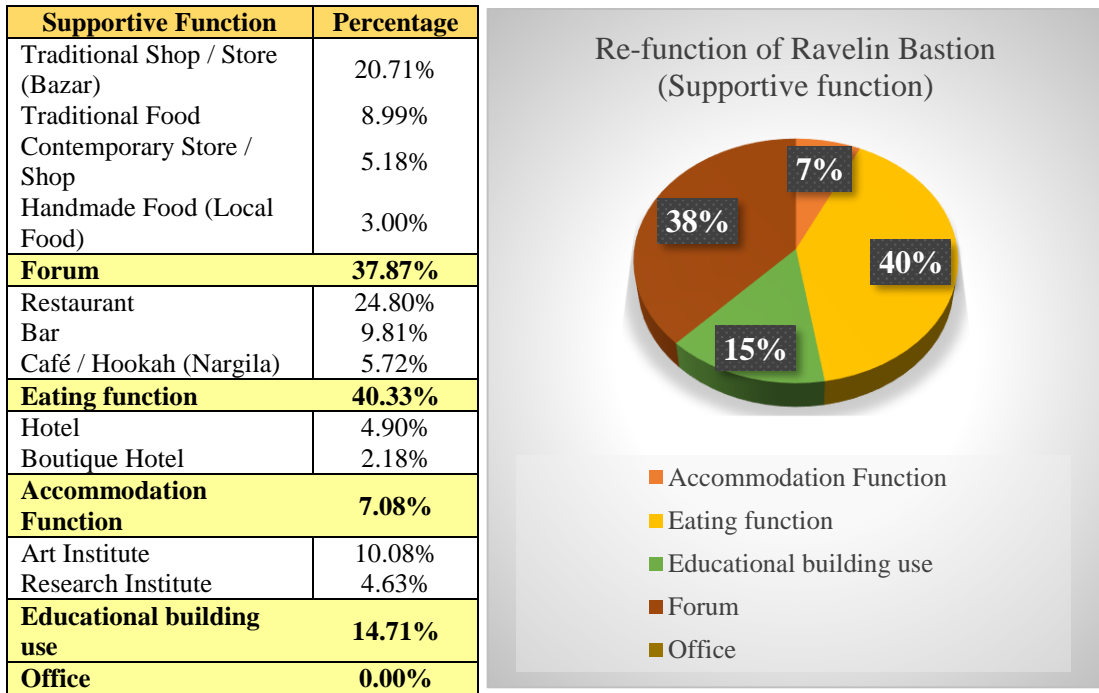


Figure 4.33: Results of actors' questionnaires for new functions (supportive function) of Ravelin Bastion, report through Excel

In Figure 4.33, the pie chart shows that all actors prefer to have eating function (40%) as the first preferred upper supportive function for Ravelin Bastion, their second and third upper preferred functions are forum (38%) and educational building use (15%). The table in figure above illustrates that the most preferred specific function as supportive function is restaurant (24%), and also the second and third ones are traditional shop (20%) and art institute (10%).

**Conclusion of The Chapter:** Generally speaking, sets of numerical results are presented as a table which are presented previously by pie charts and tables that accumulate total findings. This table can be useful for displaying data and percentages that are classified in previous explanations. The table (Table 4.1) is presented in the following page.

## A3 TABLE



As explanation of this previous table (Table 4.1) for Othello Tower, the experts have selected **'performance hall'** as the main function, with **52.94%** where **'theatre hall'** has their highest vote with **29.41%** as an individual function. On the other hand, **'performance hall'** was the second highest choice of total stakeholders with **27.56%**. The highest selected function in the overall number is **'community center'** preferred by **32.57%**.

Based on supportive functions results of Othello Tower, **'eating function'** is selected with by experts with **51.11%**, where **'café'** or **'hookah'** have the highest percentage with **22.22%**. This is also supported by the overall actors with **42.52%** where **'restaurant'** and **'bar'** are almost equally selected with **15.59%** and **15.14%** consecutively. **'Forum'** is also selected by the overall actors with an important percentage of **31.40%**.

According to the Martinengo Bastion's results, the experts have selected **'museum'** as the main function, with **35.48%** where **'art gallery'** has their highest vote with **19.35%** as an individual function. On the other hand, **'artillery museum'** was the second highest choice of experts with **11.29%**. The highest selected function in the overall number is also **'museum'** preferred by **32.17%**.

As supportive functions of Martinengo Bastion's results, **'eating function'** is selected with by experts with **50.00%**, where **'café'** or **'hookah'** have the highest percentage with **19.05%**. This is also supported by the overall actors with **42.52%** where **'restaurant'** and **'bar'** are almost equally selected with **14.64%** and **14.02%** consecutively. **'Forum'** is also selected by the overall actors with an important percentage of **30.84%**.

Given the Ravelin Bastion's results for main function, the experts have selected **'museum'** as the main function, with **45.00%** where **'city museum'** has their highest vote with **20.00%** as an individual function. On the other hand, **'community center'** was the second highest choice of overall stakeholders with **37.96%** where **'cultural center'** has the highest percentage with **11.26%**. The second highest selected function in the overall stakeholders is also **'museum'** preferred by **25.39%** where they also selected **'city museum'** with **10.21%**.

Based on supportive functions of Ravelin Bastion, **'eating function'** is selected with by experts with **51.22%**, where **'restaurant'** has the highest percentage with **26.83%**. This is also supported by the overall actors with **40.33%** where **'restaurant'** is selected with **24.80%**. **'Forum'** is also selected by the overall actors with an important percentage of **37.87%**.

## Chapter 5

### CONCLUSION AND RECOMMENDATIONS

As mentioned in Chapter 1, the main aim of this research is to propose a framework to recommend appropriate functions for three selected monument buildings in the Walled City of Famagusta in North Cyprus. Considering this target, the researches have been done in literature review to show the characters which successful adaptive reuse project should have, in order to find suitable functions for historic buildings. The achieved knowledge is collected as a framework in methodology part of Chapter 3.

Based on what is gained from analysis of Othello Tower, Martinengo Bastion and Ravelin Bastion's history, architecture and values in Chapter 3; and also considering the participation of locals, tourists and experts in order to find appropriate functions for these selected buildings in Chapter 4, results below are achieved.

- **Othello Tower**

The Othello Tower has sufficient number of closed and open spaces to accommodate mixed functions hence both main functions and supportive functions can be multiple. When the results of questionnaires are investigated together with the potentials and symbolic values of the monument, it is obvious that the proposed functions have to include a performance space for performing Shakespeare's tragedy "Othello" in the form of theatre shows, operas, ballet shows etc. In addition to local performances, the

monument can also accommodate international shows which can be organized within a cultural festival (e.g. Othello festivals; theater festival/ opera festival, music festival etc. Famagusta art and culture festival can be developed to include theater/ opera/ musical plays on Othello.

Being aware of this symbolic and social value, the experts have selected 'performance hall' as the main function, where 'theatre hall' has their highest vote as an individual function. On the other hand, 'performance hall' was the second highest choice of total stakeholders. The highest selected function in the overall number is 'community center'.

Hence, in the light of these results, the new proposed functions need to serve as a gathering point of both local community and tourists. The proposed functions can include a performance hall which can be thought as a multi-purpose hall where it can serve for various cultural activities and events in addition to performances.

As supportive functions, 'eating function' is selected with by experts, where 'café' or 'hookah' have the highest percentage. This is also supported by the overall actors, where 'restaurant' and 'bar' are almost equally selected. Since the kitchen requirements of a restaurant are more heavy than a café or bar, a café-bar can be more appropriate for serving at different times of the day. 'Forum' is also selected by the overall actors.

In the light of these results, the new function can include a contemporary design shop which can be inspired from a traditional bazaar or design objects with contemporary interpretations of cultural objects can be displayed and sold. In addition to the

contemporary one, an open bazaar for displaying and selling local arts & crafts to tourists, can be organized at certain days of the week.

- **Martinengo Bastion**

The Martinengo Bastion has both semi-closed and open spaces to accommodate mixed functions however main function needs to be a single one with a supportive function. When the results of questionnaires are investigated together with the potentials and symbolic values of the monument, it is suggested that the proposed functions can include a museum space for displaying artillery fully or partially.

Being aware of this historical and educational value, the experts have selected 'museum' as the main function, where 'art gallery' has their highest vote as an individual function. On the other hand, 'artillery museum' was the second highest choice of experts. The highest selected function in the overall number is also 'museum'.

Hence, in the light of these results, the new proposed functions need to serve as a museum. A city museum can be appropriate where a section will be for the display of artillery since Martinengo Bastion is known with its importance as a defense heritage. The proposed functions can also include an art gallery where temporary exhibitions will be hosted.

As supportive functions, 'eating function' is selected by experts, where 'café' or 'hookah' have the highest percentage. This is also supported by the overall actors where 'restaurant' and 'bar' are almost equally selected. Since the kitchen requirements of a restaurant are more heavy than a café or bar, a 'café-bar' can be

more appropriate for serving at different times of the day. 'Forum' is also selected by the overall actors.

In the light of these results, the new function can include a contemporary art shop which can display and sell art & design objects with contemporary interpretations of museum content. In addition to the permanent one, an open bazaar for displaying and selling artefacts of local artists to tourists, can be organized at certain days of the week.

- **Ravelin Bastion**

The Ravelin Bastion has less number of closed, semi-closed and more open spaces with different site levels and ramps which limits the variety of new functions. Therefore, main function needs to be a single function with a supportive function. When the results of questionnaires are investigated together with the potentials and location values of the monument, it is suggested that the proposed functions can include the continuation and development of the current function as a tourism information center where additional related facilities can be added.

Being aware of this historical, locational and picturesque value, the experts have selected 'museum' as the main function, where 'city museum' has their highest vote as an individual function. On the other hand, 'community center' was the second highest choice of overall stakeholders, where 'cultural center' has the highest percentage. The second highest selected function in the overall stakeholders is also 'museum', where they also selected 'city museum'.

Hence, in the light of these results, as the first connection point of the Walled city to the outer city, sustaining the existing tourism information center is appropriate which

will be supported by a city museum. The proposed functions can also include a multi-purpose open hall where various cultural activities such as small scale music performances can be hosted.

As supportive functions, 'eating function' is selected by experts, where 'restaurant' has the highest percentage. This is also supported by the overall actors, where 'restaurant' is selected. Since the kitchen requirements of a restaurant are heavy, catering can be more appropriate for a restaurant. 'Forum' is also selected by the overall actors.

In the light of these results, the new function can include a restaurant to serve Cyprus food in an elegant atmosphere, supported by culinary arts. In addition to these a souvenir shop which can be within the tourism information center is appropriate.

As a conclusion, in this research study, the conclusions and recommendations for proposing appropriate function for Othello Tower, Martinengo Bastion and Ravelin Bastion based on evaluation survey and interpretation survey can be seen in table (Table 5.1) below. In this table, values which are belong to Othello Tower, Martinengo Bastion and Ravelin Bastion are shown. In addition, based on evaluation of architectural features of monuments, the important architectural features are illustrated in table 5.1, which are crucial information for re-functioning in adaptive reuse projects. Besides, different historical layers of monuments are shown. In that table, the final results of questionnaire survey are presented as well.

Table 5.1: Conclusion of results from evaluation survey and interpretation survey, adapted by Author (2016)

Cases	Analysis	Value Analysis	Architectural Analysis (Important Information)	Historical Analysis	Proposed Function based on			
					Questionnaires' Results		Interpretation of Questionnaire Results	
					Upper Function	Specific Function	Upper Function	Specific Function
Orhella Tower	<ul style="list-style-type: none"> <li>-Wonder, -Artistic, -Spiritual &amp; Symbolic, -Continuity</li> <li>-Documentation, -Historic &amp; Identity, -Archeological, age &amp; scarcity -Aesthetic, -Architectural, -Townscape &amp; Ecological</li> <li>-Technological &amp; societies</li> <li>-Functional, -Economic, -Social, - Political - Universal</li> </ul>	<ul style="list-style-type: none"> <li>-Having wide spaces, -Huge courtyard that connects towers, -Open and closed spaces, -One entrance</li> </ul>	<ul style="list-style-type: none"> <li>Rich history (Lusignan, Venetian and Ottoman periods)</li> </ul>	Main	<ul style="list-style-type: none"> <li>-Community center</li> <li>-Performance hall</li> </ul>	<ul style="list-style-type: none"> <li>-Theater hall</li> <li>-Cultural center</li> </ul>	<ul style="list-style-type: none"> <li>-Performance hall</li> <li>-Community center</li> </ul>	<ul style="list-style-type: none"> <li>-Theater hall and ballet show/opera/musical</li> <li>-Cultural activities</li> </ul>
Martimengo Bastion	<ul style="list-style-type: none"> <li>-Wonder, -Artistic, -Spiritual &amp; Symbolic, -Continuity</li> <li>-Documentation, -Historic &amp; Identity, -Archeological, age &amp; scarcity -Aesthetic, -Architectural, -Townscape &amp; Ecological</li> <li>-Technological &amp; societies</li> <li>-Functional, -Economic, -Social, - Political - Universal</li> </ul>	<ul style="list-style-type: none"> <li>-Have two wings which are connected with vaulted tunnel, -Having narrow rooms and tunnels, -Open, semi-open and, -Many openings</li> </ul>	<ul style="list-style-type: none"> <li>Rich history (Venetian and Ottoman periods)</li> </ul>	Main	<ul style="list-style-type: none"> <li>-Museum</li> <li>-Community center</li> </ul>	<ul style="list-style-type: none"> <li>-Art gallery</li> <li>-City Museum</li> </ul>	<ul style="list-style-type: none"> <li>-Museum</li> <li>-Art gallery</li> </ul>	<ul style="list-style-type: none"> <li>-Artillery museum</li> <li>-Temporary exhibitions</li> </ul>
Ravelin Bastion	<ul style="list-style-type: none"> <li>-Wonder, -Artistic, -Spiritual &amp; Symbolic, -Continuity</li> <li>-Documentation, -Historic &amp; Identity, -Archeological, age &amp; scarcity -Aesthetic, -Architectural, -Townscape &amp; Ecological</li> <li>-Technological &amp; societies</li> <li>-Functional, -Economic, -Social, - Political - Universal</li> </ul>	<ul style="list-style-type: none"> <li>-There are various ramps that connects spaces, -Open, semi-open and close spaces, -One entrance, -Complex plan and spaces</li> </ul>	<ul style="list-style-type: none"> <li>Rich history (Venetian and Ottoman and British periods)</li> </ul>	Main	<ul style="list-style-type: none"> <li>-Community center</li> <li>-Museum</li> </ul>	<ul style="list-style-type: none"> <li>-Cultural center</li> <li>-City museum</li> </ul>	<ul style="list-style-type: none"> <li>-Community center</li> <li>-Museum</li> </ul>	<ul style="list-style-type: none"> <li>-Tourism information center/cultural center</li> <li>-City museum</li> </ul>
				Supportive	<ul style="list-style-type: none"> <li>-Eating function</li> <li>-Forum</li> </ul>	<ul style="list-style-type: none"> <li>-Restaurant</li> <li>-Bar</li> </ul>	<ul style="list-style-type: none"> <li>-Eating function</li> <li>-Forum</li> </ul>	<ul style="list-style-type: none"> <li>-Café-bar/ café hookah</li> <li>-Contemporary art shop/open bazar</li> </ul>
				Supportive	<ul style="list-style-type: none"> <li>-Eating function</li> <li>-Forum</li> </ul>	<ul style="list-style-type: none"> <li>-Restaurant</li> <li>-Bar</li> </ul>	<ul style="list-style-type: none"> <li>-Eating function</li> <li>-Forum</li> </ul>	<ul style="list-style-type: none"> <li>-Restaurant (catering Cypriot food)</li> <li>-Souvenir shop</li> </ul>



**Future Work:** Adaptive reuse activity is known as a strong alternative for old buildings, which can deliver benefits in economic, social and environmental aspects. Adaptive reuse is a crucial issue in people's future, in a region of climate alternation, where enlarging wealth and utility have been tempered, versus keeping down resources and environmental effects. It is discussed that the “green adaptive reuse” perspective is a credible strategy to develop the life of facility, as well as increasing its carbon footprint, as long as supporting to conservation of significant heritage values. Compatibility of intervention of adaptive reuse with "greening" inventions can provide chances for cost efficiency. In this regards, considering and finding ways to green adaptive reuse in conservation projects in the Walled City of Famagusta can be an important study for future.

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## **APPENDICES**

## **Appendix A: International Charters and Conservation Conferences from Gillon. Jk (n.d.)**

- International Charter for the Conservation and Restoration of Monuments and Sites (*The Venice Charter*) - 1964 [French] [Spanish]
- Historic Gardens (*The Florence Charter*) - 1981 [French] [Spanish]
- Charter for the Conservation of Historic Towns and Urban Areas (*The Washington Charter*) - 1987 [French] [Spanish]
- Charter for the Protection and Management of the Archaeological Heritage - 1990 [French] [Spanish]
- Charter on the Protection and Management of the Underwater Cultural Heritage - 1996 [French] [Spanish]
- International Cultural Tourism Charter - Managing Tourism at Places of Heritage Significance - 2013
- Principles for the Preservation of Historic Timber Structures - 1999 [French] [Spanish]
- Charter on the Built Vernacular Heritage - 1999 [French] [Spanish]
- ICOMOS Charter – Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage - 2003 [French] [Spanish]
- ICOMOS Principles for the Preservation and Conservation-Restoration of Wall Paintings- 2003 [French] [Spanish]
- ICOMOS Charter on Cultural Routes - 2008 [French] [Spanish]
- ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites - 2008 [French] [Spanish] [Chinese]

- Joint ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes - 2011 [French]
- The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas – 2011”
- *International Congress of Architecture in Madrid Spain (Ruggles & Silverman, 2009).*
- *Athens Conference of 1931*
- *Carta del Restauro (1931)*
- *Venice Charter (1964)*
- *Washington Charter (1987)*
- *Archaeological Heritage (1990)*
- *Ancient Groups of Buildings (1972)*
- *Declaration of Amsterdam (Congress on the European Architectural Heritage, 1975)*
- *Cultural Tourism (1976) which was later adapted in Mexico, October (1999).*
- *Burra Charter (1981)*
- *Cultural Heritage Value (ICOMOS New Zealand, 1992)*



## Appendix B: Different Terminologies of Conservation and Their Explanations from Türker (2002)

<b>Conservation</b>
<b>1- preservation</b>
<b>Protection:</b> The legal use of this term Involves the provision of legal restraints or controls on the destruction or damaging of buildings etc. with a view to ensuring their survival or preservation for the future Physical protection may be either temporary or permanent (Douglas 2006). As a summary 't simply listing and preserving the building as It is.
<b>Liberation:</b> Refining the monuments and urban sites from the additions that disturb the general effect or silhouette and that have no aesthetical value.
<b>Façade cleaning:</b> Cleaning the effects of physical external factors as air pollution / acid rains, etc. Careful applications of mechanical, chemical or heat based techniques. are necessary.
<b>Maintenance:</b> It is a 'combination of all technical and administrative actions, including supervision actions, intended to retain an item in or restore it to, a state in which it can perform a required function' Maintenance involves routine work necessary to keep the fabric of a building, the mobbing parts of machinery. etc. in good order. In other words, it consists of regular ongoing work to ensure that the fabric and engineering services are retained to minimum standards. It may Include cleaning, liberation and regular upholding of historical buildings.
<b>2- Restoration</b>
<b>Repair:</b> <b>Consolidation:</b> Basic adaptation and maintenance works to ensure a building is ongoing beneficial use Consolidation is one of the repair techniques, which takes place at three levels. building materials. •constructional system; •and ground where the building stands on Also known as 'fortification' this action used for elongating the life of the original building by using special chemicals to consolidate the texture of materials.
<b>Re-integrating:</b> This is the process of completing deteriorated buildings and elements by using traditional or contemporary materials to reach Its original unity.
<b>Renewal:</b> Substantial repair and important. The word of renewal is only used in associated with the word urban, always with negative connotation.
<b>Replication:</b> When new buildings are built in modern period through coping the original and exacting building by new technology.
<b>Carrying:</b> is the process when a monument or historical settlement is forced to be carried and to sustain Its Life in a new setting).
<b>Reconstitution:</b> Is the piece -by-piece re-assembly of a building either at its original Site or on a new Site.
<b>Reconstruction:</b> substantial rebuilding part or parts of buildings.

### 3- Adaptation

**adaptive reuse:** Conversion of a facility or part of a facility to a Use which is significantly different from that for which it was originally designed.

**Re-function:** Re-functioning is a tool for old buildings to be saved from being demolished.

**Transformation:**

**Conservation:** Preserving a building purposefully for accommodating a degree of beneficial change. It includes any 'action to secure the survival or preservation of buildings, cultural artefacts, natural resources, energy or other thing of acknowledged value for the future.

**Conversion:** Making a building more suitable for a similar use or for another type of occupancy, either mixed or single use. Conversion is the adaptation of a building to a new function or use by modernization and it is a new design based on the historical accumulation of a structure as a cultural property.

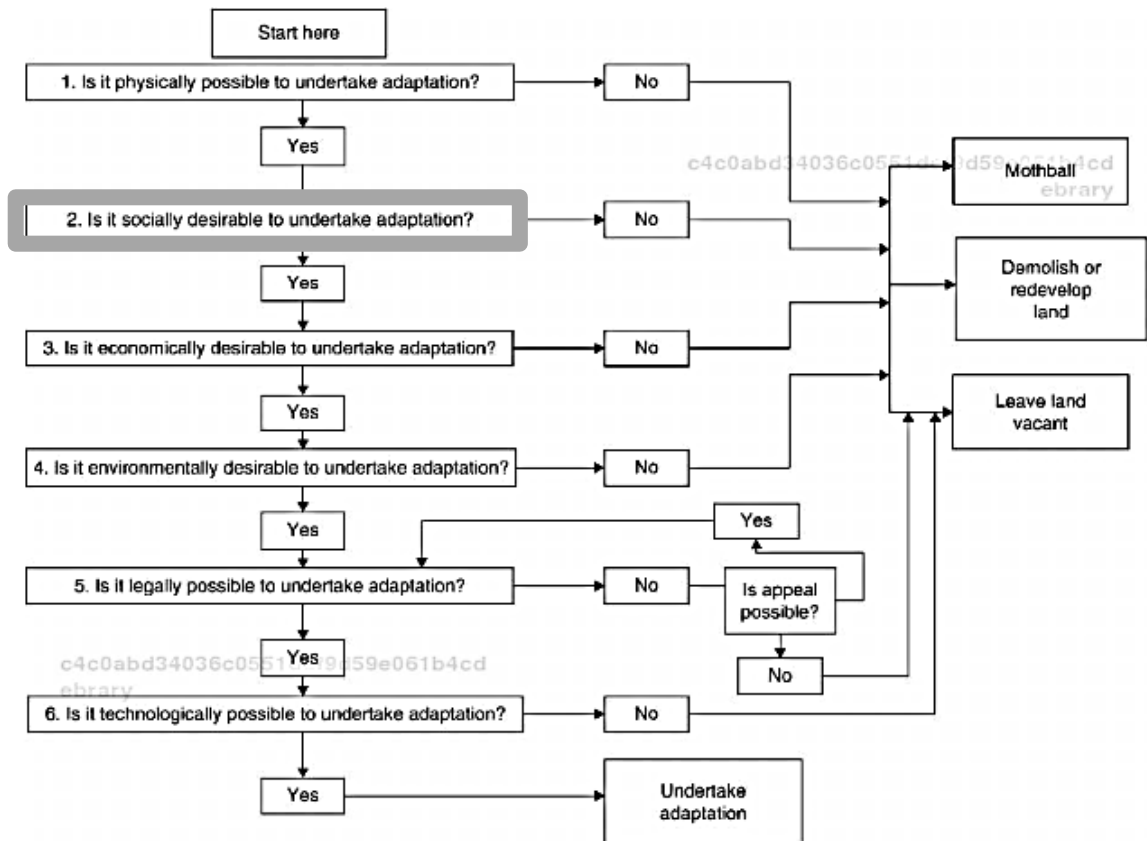
**Renovation:** Upgrading and repairing an old building to an acceptable condition which may include works of conversion (Douglas, 2006). It is also giving a new look to a structure marked by years of use.

**Rehabilitation:**

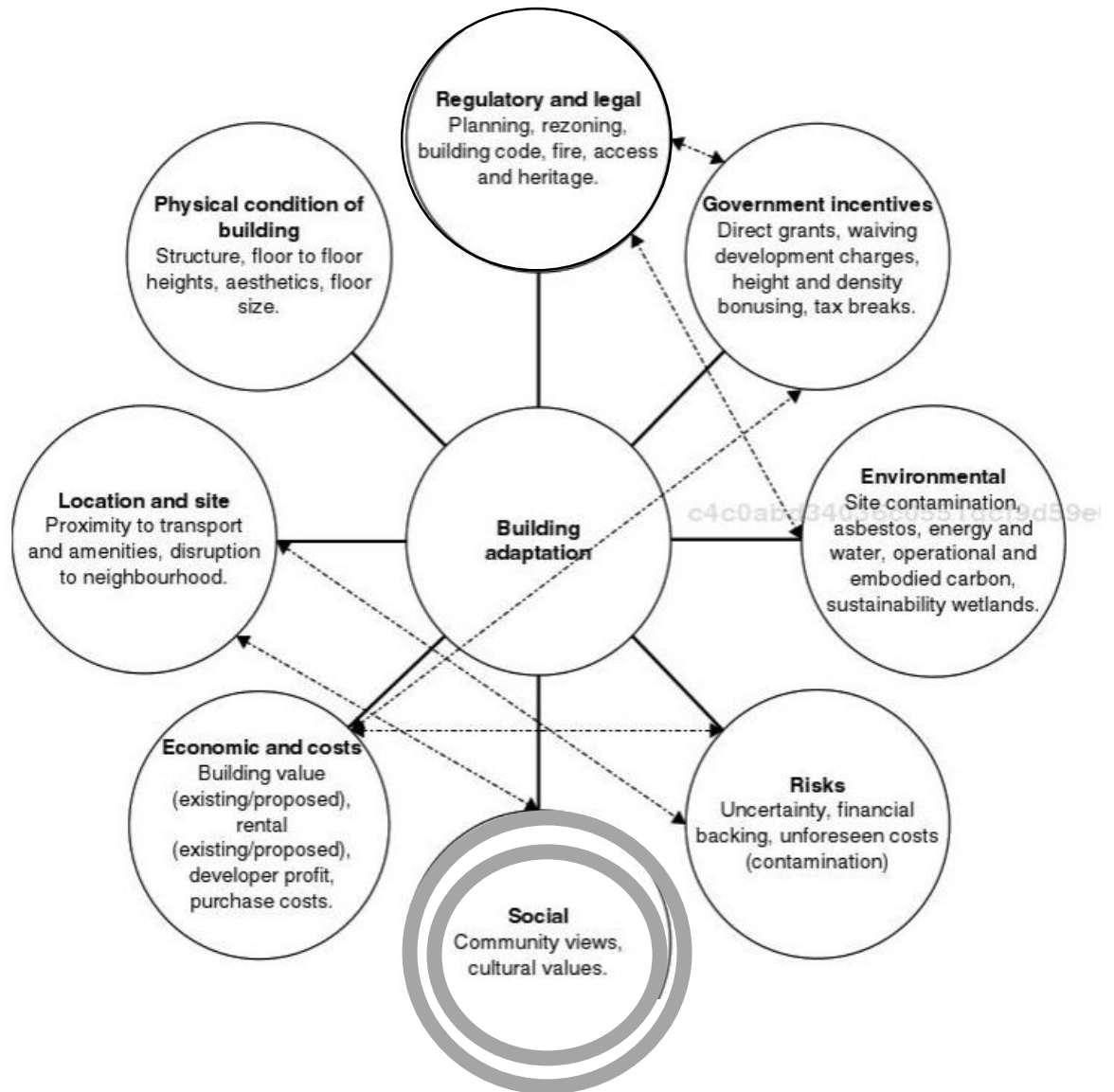
'Rehabilitation' is "the action of restoring a thing to a previous condition or status". "Rehabilitation in comparison with restoration is more concerned with the practical responses which are made to the needs of using the structure, rather than responding to the historical image of the building". (6)

The other definition for rehabilitation is, Work beyond the scope of planned maintenance to extend the life of a building, which IS socially desirable and economically viable. It is more concerned with the practical responses which are made to the needs of using the structure rather than responding to the historical image of the building.

## Appendix C: Chudley (1981) definition and steps for finding the best functions for adaptive reuse projects



**Appendix D: Kincaid (2002) definition and steps for finding the best functions for adaptive reuse projects.**



## Appendix E: Different Types of Tangible Heritages in North

### Cyprus, from URL 8

Types of tangible heritages	Situations
Cultural heritage sites	Antique cities/ruins; archeological sites: Salamis antique ruins, Vouni, Soli, Kaleburnu
Historic cities	Historic urban quarters in major Cities – Nicosia, Famagusta, Kyrenia, Lefka, Güzelyurt: Walled city of Nicosia, Walled city of Gazimağusa, Kyrenia Limanarkası Turkish district & Kyrenia old Harbour area, Lefke city center (Ottoman quarter).
Historic monuments	o Religious architecture, e. g. abbeys, churches, cathedrals, mosques, chapels; o City walls, gates and the moats – in Nicosia & in Famagusta, o Castles- Kyrenia castle, St. Hillarion, Kantara, Buffovento o Public civilian architecture, e. g. remains of palaces, state buildings, town halls, hans, hamams, bedestens, etc. o Private civilian architecture, e. g. vernacular architecture, urban houses, konaks, etc.;
Agricultural and industrial architecture, e. g. farms, mills, factories, etc. Examples of architecture of the Modern movement	Houses in Maraş quarter in Famagusta and in Nicosia, architect Ahmed Behaeddin's houses, etc.
Vernacular settlements	all villages in the Messario plate and in Karpaz region; also in Güzelyurt region, etc
Underwater cultural heritage	Remaining ruins of the antique city of Salamis under the sea. Natural heritage in NC
	Natural site of Dipkarpaz
	Alakâdi beach

## Appendix F: Turkish version of questionnaire for locals (page 1)

### Miras Binaların Uygun İşlevlerinin Yeniden Kullanılma Kararı

#### Anket Onay Formu

Amaç: Bu çalışma,Doğu Akdeniz Üniversitesi İç Mimarlık Bölümü öğrencisi Farnaz Joudifar'ın Yüksek Lisans Tezi için yapılmaktadır. Bu çalışmanın amacı,Kuzey Kıbrıs Gazimağusa Sur içindeki Miras binaların uygun yeni işlevlerini araştırmaktır.

Tarih: / /

Yaş:  18 Yaş Altı  18-25  26-35  36-45  46-55  55 Yaş Üzeri

Cinsiyet:  Erkek  Kadın

Uyruk:

Aşağıda belirtilen bu binaların orjinal işlevleri hakkında bilginiz varmı?

Othello Kulesi (Otello)

Evet  Hayır (Reference: <http://www.el-mar.ru/excursion/bashnya-otello>)



dış görünüm



iç görünüm

Matrinengo Kalesi (Çifte Mazgallar)

Evet  Hayır (References: UNDP-PFF, Martinengo Bastion)



dış görünüm



iç görünüm

Ravelin Kalesi (Akkule)

Evet  Hayır (References: UNDP-PFF, ravelin/Land Gate)



dış görünüm



iç görünüm

Bu anıt binaların gelecek nesiller için sürdürülebilir olması gerektiğini düşünüyor musunuz?

Evet  Hayır

Bölüm 2: Sizce, bu Anıt binalar . . . . mi?

- Oldukları gibi restore ve muhafaza edilmeli.  
 Restore edilmeli ve yeni bir işlev verilmeli (Bölüm 3'e devam edin).

Bölüm 3: Bu binalar için hangi yeni işlevi tercih ederdiniz:

Hem Ana İşlevler Tablosu hemde Destekleyici İşlevler Tablosundan ilk beş seçeneği 1'den (en uygun), 5'e (en az uygun) puanlayarak en uygun ilk beş tercihinizi yapın.


**BU ÖZEL YAPILARI BİLMİYORSANIZ LÜTFEN DEĞERLENDİRME YAPMAYINIZ.**

Turkish version of questionnaire for locals (page 2)

Kültürel Yapı Kullanımı		Diğer Seçenekler			
Ana İşlev	Müze	Toplum Merkezi	Kütüphane	Performans Mekanları	Diğer Seçenekler
Otello	Çifte Mazgallar	Akkule			
Demircilik Müzesi Topçu Müzesi Yiyecek Müzesi Arkeoloji Müzesi Şehir Müzesi Çağdaş Sanat Müzesi Moda Müzesi Koleksiyon (Onluk sent, Tumb, Aksesuarlar) Ulusal Tarih Müzesi Sanat Galerisi (Mücevher, Pastel, Heykel, Grafik Resim) Kostüm Galerisi Fotoğraf Galerisi Tasarım Stüdyosu/Atölye Gençlik Kulübü Sosyal Merkez Dinler Merkezi Kültür Merkezi Belediye Binası Sanat Merkezi (Şiir, Roman) Konferans Salonu Akademik Kütüphane Halk Kütüphanesi Özel Kütüphane Medya Kütüphanesi Müzik Kütüphanesi Dans Salonu Tiyatro Salonu Merkezi Salon Sinema Opera Binası Konser Salonu					


Ticari Bina Kullanımı		Diğer Seçenekler				
Destekleyici İşlev	Forum	Konaklama İşlevleri	Ofis	Eğitim Binası Kullanımı	Ofisler	Diğer Seçenekler
Otello	Çifte Mazgallar	Akkule				
Çelenkçel Dükkan / Mağaza (Pazar) Çağdaş Mağaza/Dükkan Ev Yapımı Yiyecek (Yerel Yiyecek) Geleneksel Yiyecek Restoran Cafe/Nargile Cafe Bar Otel Motel Butik Otel Sanat Enstitüsü Araştırma Enstitüsü Özel Ofisler Devlet Daireleri						

# Appendix G: Cover Photo of the Martinengo Bastion Project




**United Nations Development Programme  
Partnership for the Future**  
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PS 02 2014 87575  
**SURVEY, INVESTIGATION, ASSESSMENT AND PROJECT DESIGNS**  
**Martinengo Bastion**  
**Famagusta City Walls, Cyprus**

project designers by  



**Intervention Project: Conservation & Structural**  
This set of drawings comprises only a part of the documents. Technical Specifications & Bill of Materials are necessary to carry out the work and serve as guides for the successful conservation of the monument.




The opinions expressed are purely those of Tecnalia and shall not in any circumstances be regarded as stating an official position of the United Nations Development Programme and the European Commission.

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The European Union  
 Partnership for the Future  
 This Programme is funded by the EUROPEAN UNION



Project Designer: **tecnalia**  
 TECNALIA S.p.A.  
 Via S. Maria Maddalena, 10  
**Martinengo Bastion**  
 Famagusta, Cyprus. Conservation and Restoration

Date	February 27, 2015	Scale	1:1000 (A3)
Drawing name	<b>Title Sheet</b>		
Drawing no.	<b>T/01</b>		



# Cover Photo of the Ravelin Bastion Project



United Nations Development Programme  
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PS 02 2014-87575  
SURVEY, INVESTIGATION, ASSESSMENT AND PROJECT DESIGNS  
**Ravelin / Land Gate**  
Famagusta City Walls, Cyprus

project designs by  
**tecnalia**

**Intervention Project: Conservation & Structural**

This set of drawings comprises only a part of the documents. Technical Specifications & Bill of Quantities are necessary to carry out the work and serve as guides for the successful conservation of the monument.



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Project Designed By: **tecnalia**

Project Name: **Ravelin / Land Gate**  
Famagusta, Cyprus Conservation and Restoration

Date:	February 27, 2015	Scale:	1:1	Including:	Drawing no.:
Drawings name:	<b>Title Sheet</b>				<b>T/01</b>

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