# An Evaluation of Re-functioning Opportunities of Historical Churches in Walled-City Famagusta

**Amir Peyravi** 

Submitted to the Institute of Graduate Studies and Research in partial fulfillment of the requirements for the Degree of

> Master of Science in Architecture

Eastern Mediterranean University August 2010 Gazimağusa, North Cyprus Approval of the Institute of Graduate Studies and Research

Prof. Dr. Elvan Yılmaz Director (a)

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of science in Architecture

Assist. Prof. Dr. Munther Moh`d Chair, Department of Architecture

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of science in Architecture

Dr. Hülya Yüceer Co-Supervisor Assoc. Prof. Dr. Özlem Olgaç Türker Supervisor

Examining Committee

1. Prof. Dr. Kutsal Öztürk

2. Assoc. Prof. Dr.Özlem Olgaç Türker

3. Assoc. Prof. Dr. Özgür Dinçyürek

4. Assist. Prof. Dr. Zehra Öngül

5. Dr. Hülya Yüceer

### ABSTRACT

The historical buildings are the witnesses of our cultural past and they show the characteristics and philosophy of our lives. These buildings have high conservation values that must be conserved and cared about. The historical churches are very sensitive monuments that must be conveyed to the future because of their symbolic value. Walled-City Famagusta encloses a variety of churches from huge Cathedrals to small chapels. This thesis is an evaluation of the re-functioning opportunities for the historical churches of Walled-City Famagusta. Most of these churches are without function because they are in a secular country which has a majority of Muslim residents and they do not use these churches for worship. Some of these churches are re- functioned already.

In the first chapter, the aim, methodology, problem definition, and limitation of study are given in details. Chapter 2 gives general information about conservation of historical monuments and adaptive re-use of historical churches with successful examples from the world. Chapter 3 provides a determination of historical analysis and interior architectural space analysis criteria of these churches. The historical analysis provides in detail the conservation values of these historical churches and the architectural space analysis will also be given in detail. Chapter 4 determines the historical and architectural analysis of churches which are preserved. The inventories are filled by data both found from sources and site analyses. This chapter also contains the community survey which was done with people from two different backgrounds, the residents and tourists, and it includes the evaluation of these analyses. In the conclusion the appropriate function recommendations for these churches are determined according to interior architectural space analysis, historical space analysis and survey results.

**Keywords:** Conservation, Re-functioning, Conservation Values, Famagusta, Churches.

Tarihi binalarımız kültürel geçmişimizin tanığıdır ve geçmişteki yaşam şekillerimizi, yaşam felsefemizi gösterir ve bu binalar mutlaka korunması ve gözetilmesi gereken değerlere sahiptir.Tarihi kiliseler sembolik değerleri nedeniyle geleceğe taşınması gereken çok hassas eserlerdir. Gazimağusa suriçi büyük katedrallerden küçük tapınaklara kadar birçok kiliseyi içinde barındırır. Bu tezin amacı, Gazimağusa Suriçi'ndeki tarihi kiliselere yeniden işlev kazandırılması olanaklarının değerlendirilmesidir, bu kiliseler çoğunluğu müslüman laik bir ükede bulunması sebebiyle ibadet amacıyla kullanılmamaktadır ve bu kiliselerden bazıları boş, bazılarına ise yeni bir işlev kazandırılmıştır.

Birinci bölümde amaç, yöntem, problem tanımı, araştımanın sınırları detaylarıyla verilmiştir.İkinci bölümde, tarihi eserlerin korunması ile ilgili genel bilgi ve dünyadan tarihi kiliselerin yeniden kullanımı ile ilgili uyarlanabilir başarılı örnekler verilmektedir. Üçüncü bölüm bu kiliselerin tarihi ve mimari mekan analizi esaslarının tanımlanmasıdır. Tarihi analizler bu kiliselerin korunma değerlerini detaylarıyla sağlar ve kiliselerin mimari analizleri ayrıca detaylı olarak verilecektir. Dördüncü Bölüm; kiliselerin tarihi ve mimari analizlerini, kaynaklardan bulunan envanterlerle tanımlar, kentte yaşayan sakinler ve turistler ile yapılan anketi, bu analizlerin değerlendirmelerini içerir. Sonuç bölümünde, iç mekan analizlerine, tarihi analizlere ve anket sonuçlarına bakılarak bu kiliseler için uygun fonksiyon önerileri belirtilmiştir.

Anahtar Kelimeler: Koruma, Yeni işlev, Koruma değerleri, Gazimağusa, Kiliseler.

My greatest depth goes to my family: my father Reza Peyravi, my mother Batoul Arablou, my brother Bahman Peyravi and my sweet girl friend Hanife Yıldız for their tolerance, help and spiritual supports and for not letting me alone throughout the long studies until late hours.

## ACKNOWLEDGMENTS

I would like to thank my supervisor Assoc. Prof. Dr. Özlem Olgaç Türker for introducing and helping me to a new field of research that I have thoroughly enjoyed working on. I will never forget her continuous support and guidance in the preparation of this study.

I would also like to express my sincere gratitude to Chair of my jury Assoc. Prof. Dr. Özgür Dinçyürek, Prof. Dr. Kutsal Öztürk, Assist. Prof. Dr. Zehra Öngül and my cosupervisor Dr. Hülya Yüceer, for their valuable contributions and also thank to the all the members of Faculty of Architecture.

# **TABLE OF CONTENTS**

ABSTRACTiii
ÖZ v
DEDICATION
ACKNOWLEDGMENTS
LIST OF TABLES
LIST OF FIGURES
1 INTRODUCTION
1.1 Problem Definition
1.2 Aim and Scope
1.3 Limitation of Study
1.4 Methodology7
2 CONTEMPORARY OPPORTUNITIES FOR ADAPTIVE RE-USE OF
HISTORICAL BUILDINGS
2.1 The Place of Adaptive Re-use in Contemporary Conservation Approaches 9
2.2 Adaptive Re-use of Churches
3 DETERMINATION OF ANALYSES CRITERIA
3.1 Historical Analysis Criteria
3.1.1 Emotional Values
3.1.2 Cultural values
3.1.3 Use values
3.2 Architectural Space Analyses Criteria

3.2.1 Spatial Definition of Space	
3.2.2 Depths and Densities of Space	30
3.2.3 Geometry of Space	
3.2.4 Space Defining Elements	
3.2.4.1 Floor	
3.2.4.2 Wall	
3.2.4.3 Ceiling	
3.2.5 Openings of Space and Natural Lighting	
3.2.5.1 Windows	
3.2.5.2 Doors	
3.2.5.3 Natural Lighting	
4 ADAPTIVE RE-USE POTENTIAL OF CHURCHES IN FAMAGUSTA.	
4.1 Historical Background of Churches in Famagusta	39
4.2 Historical Analysis and Architectural Space Analysis of Churches of V	Walled-
City Famagusta and Public Response Survey	44
5 CONCLUSION	
REFERENCES	100

# LIST OF TABLES

Table 1: Example of adaptive re-use of church to accommodation function [URL 1]
Table 2: Example of adaptive re-use of church to cultural function [URL 1]
Table 3: Example of adaptive re-use of church to community function [URL 1] 17
Table 4: Example of adaptive re-use of church to commercial function [URL 1] 18
Table 5: Example of adaptive re-use of church to office function [latham, (2000)] 19
Table 6: Historical Analysis of the Cathedral of St. Nicholas    46
Table 7: Architectural Space Analysis of the Cathedral of St. Nicholas
Table 8: Historical Analysis of The Church of St. Peter and Paul    50
Table 9: Architectural Space Analysis of the Church of St. Peter and Paul
Table 10: Historical Analysis of the Nestorian Church    54
Table 11: Architectural Space Analysis of The Nestorian Church
Table 12: Historical Analysis of the Twin Churches    58
Table 13: Architectural Space Analysis of The Twin Churches
Table 14: Historical Analysis of the Church of St. Anne    66
Table 15: Architectural Space Analysis of the Church of St. Anne    67
Table 16: Historical Analysis of The Tanner`s Mosque    73
Table 17: Architectural Space Analysis of the Tanner`s Mosque
Table 18: Historical Analysis of the Church of Stavros    80
Table 19: Architectural Space Analysis of the Church of Stavros    81
Table 20: Historical Analysis of The Armenian Church    87
Table 21: Architectural Space Analysis of The Armenian Church    88

# LIST OF FIGURES

Figure 1: Example of Inventory sheet	7
Figure 2: Example of Inventory sheet	
Figure 3: Example of questionnaire for public opinion Survey	
Figure 4: The map of Cyprus	
Figure 5: The Walled-City Famagusta Plan	43

# **Chapter 1**

## **INTRODUCTION**

Historical buildings with their unique cultural pasts reflect the characteristics and life philosophy of people during the specific times in which they were built in and keeping this in mind the conservation of these structures is very important. These historical buildings are part of the world heritage; they are the concern of all countries and all societies. All these unique buildings have had some kind of function in the past, and even though some of them are now obsolete, these buildings act exclusively as sculptures.

The historical buildings which are found in North Cyprus are very valuable and unique because many civilizations have passed through this little island and have left lots of rich layers upon Cyprus. In North Cyprus, there are many historical churches which were built in different periods of time and in various styles. Most of these buildings are not used any more. The civilizations which built these buildings are no longer living on the island. Because of the financial deficiencies as well as other reasons, there was not enough motivation to restore them, for this reason these churches have slowly deteriorated during the period of time due to wars and natural factors. However these unique historical buildings have a different status because of the fact that they are living without a community and for this reason not much cared for. Famagusta Walled-City is one of the cities in North Cyprus with an amount of historical churches varying from huge Cathedrals to small chapels. The Walled-City of Famagusta is listed in the World Heritage list of UNESCO [URL3, (2009)] and because of this the churches which stay in this place must be conserved, but because of the financial problems in North Cyprus the conservation of these churches have become almost impossible. The North Cyprus's economy mainly depends on tourism but there are lots of articles [Altınay, M. Et al. (1994), Türker & Dinçyürek (2007) ] that say the tourism activities of North Cyprus have remained limited.

There are many historical churches in Famagusta without their religious community. Limited people use these churches for worship nowadays; many of these buildings are empty; some of them are used for different functions; but most of them are abandoned. It is a well-known fact that unused buildings deteriorate faster hence, it is very important to sustain the churches in the Walled-City Famagusta as part of the world heritage by giving them new functions.

These churches are unique and they must be conveyed and preserved for the future. The Walled-City of Famagusta is a place which includes various sorts of historical monuments and artifacts in it. These churches have great potential for having a new and different function because the architectural spaces of these monuments are very useful and unique. Some of these buildings are preserved but unfortunately some of them have deteriorated. There are many successful examples of adaptive re-use from the world in which old historical buildings have been given lots of different functions, such examples of this re-use can be seen in the new functions given to churches which have been developed and renovated into public or private functions. Some of these churches have been re-used for example St. Nicholas Cathedral is used as a mosque (Lala Mustafa paşa camii) and another church which has been reused is the Nestorian church which is being used as a cultural center.

The important reason for the re-functioning of these churches is that they urgently need to be conserved because these unique historical buildings have managed to survive from very old periods. They were built in between 13<sup>th</sup> Century and 16<sup>th</sup> Century and they show the cultural past of the Island and will continue doing so to future generations if preserved correctly.

By concerning on the case as it is stated in The Venice Charter, (1964): "historical buildings permeate with a message from the past; the historic monuments of generation of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more aware of the unity of human values they regard historical buildings as a common heritage" [Marconi, & D' Amato, (2006)]. After the Second World War, conservation of historical urban buildings achieved an important role [Kuban, (2000) p: 25].

The conservation can be classified in to different groups, which include adaptive reuse, rehabilitation and re-functioning. This thesis will determine an evaluation of refunctioning opportunities of historical churches in the Walled-City of Famagusta and the analysis of the adaptive re-use of churches.

#### **1.1 Problem Definition**

Historical churches in the Walled-City Famagusta are unique, because they have high cultural values and they should be conveyed into future in their original way so the future generations can also see their unique beauty, because these unique buildings are tools to show architectural heritage as a reflection of the cultural past of the country. There are sixteen historical churches in Famagusta, which come from previous times. These churches are deteriorated during the period of time and they need conservation. These unique buildings also have a different situation, because they are living without a community. Only a limited number of people use some of the churches for religious practices and for this reason most of them are obsolete. It is not easy to preserve them as an open air museum because there are limited financial possibilities to restore all of them. Restoring a building but not utilizing it is not a long term lasting precaution, to be able to sustain these churches for the future, it is recommended to give a new function to the abandoned ones. The following questions arise:

- 1. Can we use these churches by proposing different functions other than worship?
- 2. How can we determine the ideal function for these historical churches in the Walled-City of Famagusta?
- 3. How can we change their function within the contemporary conservation criteria and values?

#### 1.2 Aim and Scope

Walled-City of Famagusta is listed in the World Heritage List of historical churches varying from huge Cathedral to small Chapels which data back to 13<sup>th</sup> Century to 16<sup>th</sup> Century.

The churches in the Walled-City of Famagusta are deteriorated during the period of time; due to many reasons. Most of them have great potential to be renovated with different functions. This research aims to determine an evaluation of re-functioning opportunities of historical churches in Walled-City Famagusta by investigating the architectural features and the historical background of these churches. Besides the architectural and historical determinations, public opinion will be considered through the search of appropriate functions.

#### **1.3 Limitation of Study**

This study will cover the historical Churches within the Walled-City of Famagusta. Walled-City of Famagusta is listed in the World Heritage List of UNESCO that needs to be conserved. There are many architectural layers from different civilizations. This study will determine the churches, which are standing in the Walled-city of Famagusta, because these churches are without community and most of them are abandoned.

 The churches are selected from the Walled-City Famagusta because, this place is in the world heritage list of UNESCO and this place reflects the historical and cultural past of Cyprus.

- 2. The churches are separated into two groups:
  - A. preserved
  - B. deteriorated
- 3. The historical and architectural space analysis will be made for preserved churches.
- 4. The churches with a preserved character are classified by the number of units in terms of their volumes. The churches are chosen according to the number of units of architectural space of the churches which is covered and defined by a cross vault.
- 5. The Cathedral of St. Nicholas and The Church of St. Peter and Paul includes more then 15 units. They are located in the center of Walled-City Famagusta and they include high symbolic values. Recommendation of new functions for these historical buildings need a professional team work and therefore will not be included in the recommendations.
- 6. The Nestorian Church has already been re-functioned appropriately and therefore this church will not be in recommendations.
- 7. The public response assessments which are done for the churches to be proposed new functions will be included in the recommendations.

#### **1.4 Methodology**

The data are collected from primary sources such as books, journals, articles, and internet sources. Besides this the churches are photographed and sketched. The historical analysis is conveyed through the literature; whereas the architectural space analysis is performed on the schematic drawings. The plans and sections, which are not found from sources are measured and drawn as sketches. The analysis will be shown on inventory sheets specially designed for this thesis. The public opinion is measured by using the questionnaire forms and for supporting the result of the inventory forms, the data is handled by semantic rating scale method. These interviews are done with 60 people from two different groups: Firstly the residents, those who live in the Walled city of Famagusta; and secondly tourists, those who come to visit these places.

СН		1	Historica l analy	sis of churches	5		
Data recorded	ec orded:			Building name:			
Addresses:				Construction	n date/peri	od:	
Map Section no:			Plot no:	Architectura	al style:		
Current Functio	m			Buildingma	terial :		
				Values			
E mot ional values	wor	uder 📘	identity	continuity		spinitus	l and symbolic
Cultural values		umentary	historic	archaeologic			c and symbolic
Cultural values			0.000000000000	age and scap	city	100000000000	
	arch	nitectural	Townscape, 1 ecological	andscape and		Technol scientif	logical and
Use values	fund	tional	economic	social		political	l and ethnic
	-		Mainte na	nce Condition			
		Structural	External	Upper	Intern		Omamenta
Very good	A	System	structure	struc ture	struct	128	Element
Good	B	<u> </u>		-	-		
Poor	C	<u> </u>	-	-	-		
Ruine d destro yea				-			-
Repairs in	E			-	+		-
NORTH ELEV	ATIO	N		SOUTHEL	EVATION	ł	
EASTELEV A	TION			SITE PLAN			

Figure 1: Example of Inventory sheet for Historical Analysis

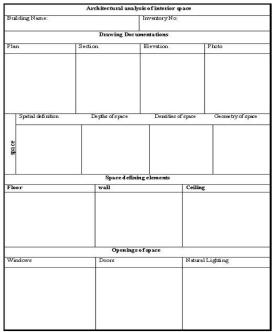


Figure 2: Example of Inventory sheet for Architectural Space Analysis

Eastern Mediterranean University

Amir PEYRAVI

This questionnaire is prepared for academic purposes for the Master Thesis in Department Architecture

SEX:	MALE	FEMALE		
AGE: 0-18	18-25 26-4	0 40-60 over 60		
EDUCATI	ON: primary school	secondary school	high school	university 🗌
MS/PHD				
NATIONA	LITY: UK 🗌 Russ	ian 🗌 Spanish 🗍 Italian	Germany	Other

 Which functions are more appropriate for re-functioning of small historical churches of walled city of Famagusta?

photo photo		photo	photo	photo
Rendential	Cultural	Community inclusious	Composis	Office
Neust	Mascam	Community	Shop	Werkshop
	Exhibition hall	Center	Store	Tourism
	Concent hall	Namoy	Shewroom	information
	Multi Functional	Community	Acataurant	Office
	Hall .	Service	Pub or Bar	Architeetural
		Church	Cafe	effec
	Dance studie	Meague		
		Synagogue		

Figure 3: Example of questionnaire for public opinion Survey

## **Chapter 2**

# CONTEMPORARY OPPORTUNITIES FOR ADAPTIVE RE-USE OF HISTORICAL BUILDINGS

This chapter aims to show the potential of re-use in historical monuments and the careful planning needed for this process to obtain successful results. Another topic, which will be discussed in the following chapters, is the evaluation of the re-use opportunities of historical churches.

# 2.1 The Place of Adaptive Re-use in Contemporary Conservation Approaches

Conservation is an important process, which aims to prevent decay in the object conserved, this term is used in all actions, which prolong the life of cultural and natural heritage. The main aim of conservation is to be able to present the people and the future generations a look at historical objects, and so these people can enjoy the artistic wonder and messages the buildings convey [Feilden, (1994), p:3], Conservation is an element, which arises from wanting to protect and portray to our future generations the history, social, cultural, economic and physical synthesis of elements, which shine a light to the future for new forms of culture, so therefore it is not wrong to say that the act of conservation has social and educative purposes [Önal, Numan, (2002), p:50]. When architectural monuments stop serving the purpose they were actually built for, their conservations ceases to be a practical necessity but becomes a cultural mission. The importance given to the issue of

preservations by future generations will be based on their knowledge of their cultural heritage and their cultural maturity [Ahunbay, (2007), p: 8].

The minimum effective action is always the best, which means, minimal action as possible and not harming the building. The primary way of conserving historical building sites and monuments is by legislation, these buildings are inspected and examined and after being deemed as historical and are then listed as untouchable, therefore minimizing the inevitable decay of the buildings by using them [Feilden, (1994), p:3].

Jukka Jokilehto stated in his book [Jokilehto, (1999), p:174] "the essence of modern conservation is founded in the new historical conciousness and in the resulting perception of cultural diversity".

On the other hand as M.Fitch mentioned, "one of the most characteristic aspects of historical conservation today is that its domain is being constantly extended in two distinct ways. On the one hand, the scale of the artifact being considered as requiring conservation is being pushed upward to include very large ones as well as downward, to include very small ones" [Fitch, (1990), p:39].

Conservation in terms of building and architecture is a little different from restoration, even though these processes are both carried out without damaging the building or destroying and falsifying the historical evidence either. Conservation in architectural terms simply means changing the function of the building in order to prevent it from being decayed or wrecked, usually in these circumstances minor or major structural changes take place in order to prevent the decay of the building while supporting its new function [Asoobar, (2009), p:12].

Our duty to the future generations is to protect ancient monuments and pass them down in their full glamour and beauty, however, today it is known that any sort of conservation or restoration on these ancient monuments based on partial historical knowledge is an act of alteration, whereas, accurate conservation techniques produce interpretive materials which reflect the complex pattern of change across the ages into the present [Marconi, & D'Amato, (2006), pp: 734,735].

#### 2.2 Adaptive Re-use of Churches

Adaptive re-use of historical monuments is defined as "the re-use is more than just the conservation or rehabilitation of a property for a new or continued use" [Latham, (2000)]. Usually with these older buildings, there is the opportunity to change the primary function of the structure, while retaining some of the existing architectural details that make the building unique.

The re-use of historical buildings must be accepted and evaluated as a highly potential market because in this modern time, building areas have decreased immensely due to development and expansion but because these developments were not properly planned, there are a lot of things missing, these unused historical monuments can be used more than just a tourist attraction [(Wang & Zeng, (2009), p: 1242] they can once again have functions as stated by Kiley "Some buildings are easier to re-use than others. Multi use buildings like warehouses and schools can be fairly easily converted to a wide range of uses like apartments, offices or commercial

spaces, while churches and other single purpose buildings like jails typically prove challenging to adapt to different uses''[(Kiley, (1994), p: 57].

This view is also supported by Wang and Zeng, who question that "Does a need yet for the proposed new function. The social and demographic characteristics of local areas are still applied. What type of development has occurred and will it be competing with local areas?" [Wang & Zeng, (2009), p: 1242].

During the re-use it is important to establish the needs of all users so therefore in the working stage of the re-use. a professional team must work with each other in complete unison. In re-use of a building, the overall design is always constant and detailed designs can be developed [Latham, (2000), pp: 56.57].

The adaptive re-use of churches is a very sensitive topic, because of the religious values and elements in consideration. The re-use of churches must be considered and planned very carefully in order not to spark any fury with religious activists this is quite a problem because the designs of the churches are considered to be very similar. But the designs have always been kept secret and therefore there is inadequate information for a standard explanation. The divine and earthly features of a church must be expressed but unfortunately statements about the combination of these two elements have been numbered. [Wilkinson, (2002)].

The re-use potential of churches is based mainly on the building characteristics, location and structural situation. As stated by [Kiley, (1994) p: 57] "Reuse potential for churches can also be declared by researching and documenting examples of previously successful re-use tactics." If carefully planned the re-use of churches may

be possible. Looking at churches and cathedrals from a structural point of view, in general they are built with the aim of seating many people. Their architectural styles vary according to the period of time in which they were built, these vary from gothic to Victorian styles, these structures lead to a broad variety of solutions in designing a new function for these buildings [Kiley, (1994), p: 71]. Church activities are largely intangible products and their roles in the lives of people in the community are to provide a public benefit [Kiley, (1994), p: 105].

As Derek Latham said [Latham, (2000), p:78] "Re-use offers opportunities for churches to be nurtured and evolved rather than abandoned. In support of this, such congregations should consider injecting new life into these unsatisfactory structures with sensitive modern adaptations. This decision is not always a voluntary one, and the time may come when a beleaguered congregation considers repair costs are no longer sustainable". Another compelling statement on this subject was stated by James Douglas he said that [Douglas, (2006), p: 164] "The stock of church building is now well in excess of demand. It is not surprising therefore that many church buildings are redundant. Even in times of prosperity church buildings were underused because of fewer activities within the church prompted by smaller congregation numbers. As congregations dwindle old church buildings offer an attraction to other faiths".

There are lots of successful examples from the world of adaptive re-use of churches. They will be examined to support the aim of this thesis to show that re functioning of churches is very important to convey these unique buildings to future. There are 5 examples of churches which have been re-functioned; these examples include accommodation functions, cultural functions, community functions, commercial functions, and office functions. These historical churches are good examples of the contemporary conservation approach, because in all these examples, modern interior designs have not affected the original architectural style of buildings. These buildings conserved their materials, form and design.

Table 1: Example of adaptive re-use of church to accommodation function [URL 1]

Name of building:	Actual name of building:	Location: Maastricht,		
Kruisheren Church	Kruisheren Hotel	Holland		
Adaptive re-use function: Church to Hotel				

Notes: This building is a good example of contemporary conservation approach regarding the use of materials, form and design. This hotel is a renovated Gothic monastery in the centre of Maastricht, completed from a church to hotel. This monastery built in 15<sup>th</sup> century.

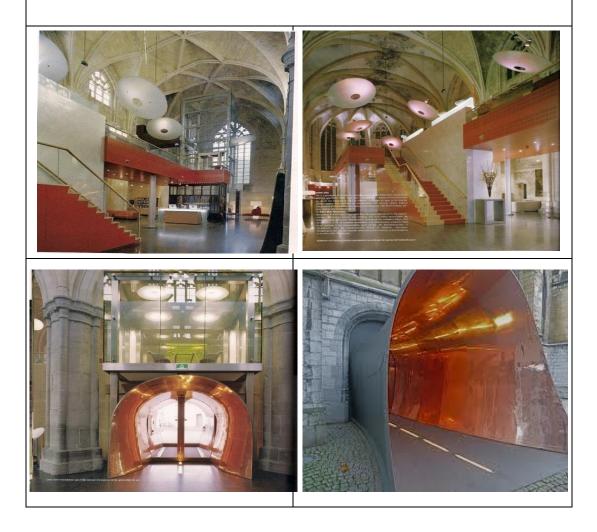


 Table 2: Example of adaptive re-use of church to cultural function [URL 1]
 Image: Comparison of the second sec

Name of building: St.	Actual name of building:	Location: Lambeth,	
Mary-at-Lambath Church	Garden Museum	London.Uk	
Adaptive re-use function: Church to Museum			

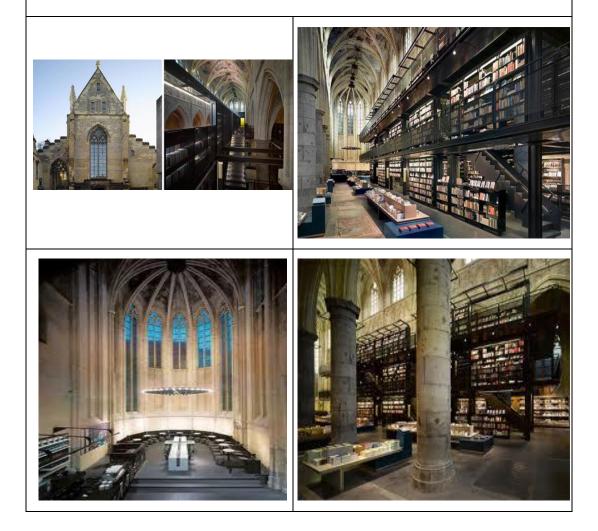
Notes: This building is a good example of contemporary conservation regarding the use of materials and modern design in a historical church. The museum welcome visitors to a newly designed interior with a sequence of individual spaces for exhibitions, the permanent collection, education, café and shop. The architect projected a free standing timber structure that fits into the existing church like an unexpected modernist puzzle box. The colors of the wood match the stone walls, camouflaging the just-arrived nature of the construction.



Table 3: Example of adaptive re-use of church to community function [URL 1]

Table 5. Example of adaptive to use of endien to community function [ORE 1]				
Name of building:	Actual name of building: A	Location: Maastricht,		
Dominican Church	Bookstore in Dominican a	Netherland		
	church			
Adaptive re-use function: C	Church to Bookstore			
Notes: This building created a good contemporary bookshop in a former				
Dominican Church, preserving the unique landmark setting. The church has been				
restored to its former glory and the utilities equipment has been housed in the				

extended cellar. In order to preserve the character of the church while achieving the desired commercial square footage, the architects erected a two-storey structure in black steel on one side, where the books are kept.



Name of building:	Actual name of building: The White Rabbit	Location: Singapore- Dempsey		
	Restaurant			
Adaptive re-use function: Church to Restaurant				

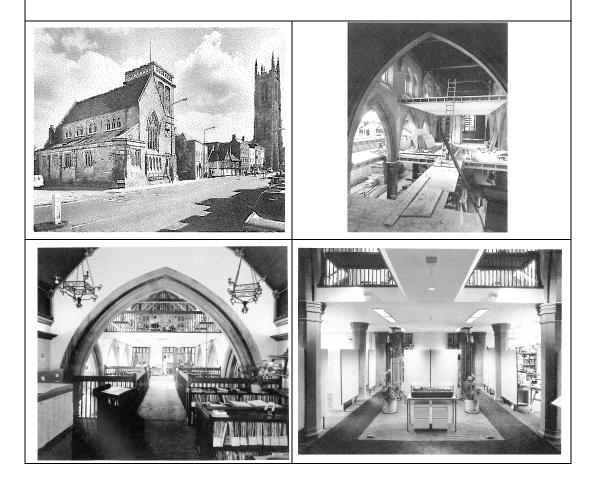
Notes: This building is another good example of contemporary conservation which is converted from church to restaurant. The primary goal was to restore as many of the existing details as possible, drawing a clear line between the old and new parts of the building through detaching the new elements away from the existing. Natural materials such as copper, steel, marble and timber, treated as raw as possible to complement the patina of the existing building were selected.



Table 5: Example of adaptive re-use of church to office function [Latham, (2000)]

	Name of building:	Actual name of building:	Location: Derby, UK
	St. Michael`s Church	Architectural office	
		conversion	
	Adaptive re-use function: Church to Office		

Notes: This building is a good example of contemporary conservation which is converted from church to architectural office. Aside from providing two upper floors of drawing offices for 25 architectural employees, the conversion created leasable space on the ground lour for eight work space unite that house a variety of businesses.



The re-use of historical monuments became a necessity in order to convey these unique buildings to future generations, because these buildings are going to lose their characteristic ideas and symbols due to the fact that they are not used for worship. If these buildings are not used, they can not be alive; they start to lose their values. The emotional values of churches are high because of their spiritual and symbolic characters, people can be sensitive about the re-use of these monuments but they must understand that the conservation of these monuments is more important.

Next chapter will be determining the analysis criteria that will be used for analysis of churches in Walled-City of Famagusta to suggest the appropriate functions for theses unique monuments.

## Chapter 3

## **DETERMINATION OF ANALYSES CRITERIA**

This chapter will determine the criteria, which will be used to analyze the churches that are covered in this thesis. The walled city of Famagusta includes 16 churches within it and these churches are from various periods of time and all of them are from different achitectural periods in history. The interior architectural analysis will be based on the interior space analyses of the churches, all vertical and horizontal elements within the buildings, the natural lighting of the churches and the structural elements of the churches. The historical anlysis of the churches will be based on the architectural periods and the styles they were built.

#### **3.1 Historical Analysis Criteria**

The historical analysis criteria will include the values of historical buildings and will analyze each building according to the different period of time it was made. These values show the characteristic, social and cultural background of buildings.

According to Bernard M. Feilden, conservation of buildings must increase the value of cultural characteristic; these values in turn help to determine general priorities systematically. He stated that "The assignment of priority values will inevitably reflect the cultural context of each historic building. For example, a small wooden domestic structure from the late eighteenth century in Australia would be considered a national landmark because so little architecture has survived from that period. In Italy, on the other hand, with its thousands of ancient monuments, a comparable structure would have a relatively low priority in the overall conservation needs of the community" [Feilden, (1994), PP: 5.6].

Feilden stated that values are separated into three major headings which are; *emotional values, cultural values* and *use values*. When looked at separately, these headings are also separated into sub-categories;

- (1) *Emotional values:* (a) wonder; (b) identity; (c) continuity; (d) spiritual and symbolic.
- (2) *Cultural values:* (a) documentary; (b) historic; (c) archaeological, age and scarcity; (d) aesthetic and symbolic; (e) architectural; (f) townscape, landscape and ecological; (g) technological and scientific.
- (3) Use values: (a) functional; (b) economic; (c) social; (d) political and ethnic.

The wonder in the Emotional values is defined as the feeling that people feel when observing the structure and how much curiosity it awakens in them.

The identity of buildings can creates a sense that people can understand the historical background of country.

The continuity of historical buildings shows the permanence of buildings that must be conveyed to the future.

The spiritual and symbolic senses in Emotional values are the most important values because they are directly connected with the religious feelings of people. The documentary is the one of the important factors in cultural values because the documentaries help us to understand the historical backgrounds of the buildings.

Historic values can be appreciated and understood with the historical documentary of buildings.

Archaeological, age and scarcity show the spatial and uniqueness of buildings.

Another value in cultural values is the architectural value which is shows the characteristics and environmental purposes of the buildings.

Therefore the townscape, landscape and ecological values are also important factors in cultural values.

The last important factor in cultural values which affect the value of buildings are technological and scientific factors which are determined by looking at the structural and architectural technique of buildings.

The use values determine the activities of the buildings which were originally aimed on.

Economic value is related with the function of the buildings because the building`s function creates a way for the continuity of the buildings.

The social factor, is also a very important factor because social values decided the functions of historical buildings, apart from this the political and ethnic values also

23

affect the function of these historical buildings because both are related with social causes of the country.

As Dr. Jukka Jokilehto stated in his book which is supported by UNESCO (1972) "The outstanding universal value means cultural and natural significance, which is as exceptional as to transcend national boundaries and to be of common importance for present and future generation of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole. The committee defines the criteria for the inscription of properties on the World Heritage List'' [Jokilehto, (2007), p: 2].

The values of properties are crucial at the briefing and feasibility stage. Derek Latham said "The agents, who specialize in historic buildings and conservation work usually, advise upon properties to be marketed nationally. Local historic properties and sites may therefore require special advice" [Latham, (2000), p: 107].

#### **3.1.1 Emotional Values**

The emotional values of historical buildings are the most important aspects to dwell on in the adaptive reuse of churches because churches have religious and sacred backgrounds.

Emotional ties of the society to specific objects and sites are closely integrated in the analysis of values, this analysis includes features such as; age, tradition, continuity, memorial, legendary, wonder, sentiment, spiritual, religious, and symbolic, political, patriotic, and nationalistic values[Feilden, & Jokilehto, (1998), P.18].

These values determine everything and have a great impact on the safeguarding, conservation and restoration of the analyzed resource. This value assessment may have a good impact on the treatment of the resource but may sometimes lead to unwanted effects such as over-restoration or neglect and destruction and therefore these values must be carefully analyzed by people who have the proper education and training [Feilden, & Jokilehto, (1998), p: 19].

### **3.1.2 Cultural Values**

Historical buildings have to be conserved because they are unique buildings which show the cultural background of countries. There are lots of examples from different civilizations and these are shown and analyzed to learn about their cultural heritage. The historical buildings can be easily damaged by natural factors and even more easily by human factors.

Cultural values, which are associated with heritage resources and their present day status to observers, are subjective which is necessary for the assessments, they determine the degree of general interest in the object and its settings, the interpretation of its intrinsic cultural character and the development of treatment policies. The recognition in world heritage sites and their resultant treatment show how important these assessments are [Feilden, & Jokilehto, (1998), P.18].

25

### 3.1.3 Use Values

The function of historical buildings can also be looked from the economical situation of the building. If the building can earn money the preservation of building is easier.

The evaluation of the economic use and the building's economic potential are essential to understand the basic principles of economic analysis on heritage values. It is also stated that, since economics encourage the best allocation of resources, the economical value is not restricted solely on a financial value but also cultural heritage is focused upon while evaluating [Provins, et al. (2008), p:134].

The economical revenue of a historical building may come from one, or more, of four sources which are; tourism, commerce, use and amenities but the mismanagement of just one of these sources could lead to negative results or even destruction of the building [Feilden, & Jokilehto, (1998), P.19].

The functional reuse of buildings can create new jobs. The historical buildings have a different energy and atmosphere which attract people and because of this resource the functional values can change sometimes. It is also stated that the functional value is closely related to the economic value because it involves the proper use of the building according to its original type or area. One example is ruined structures, the original functional value is lost but this loss opens up a new door for the area, it may be used as a venue for visual and performing arts giving the area a new and profitable function, although this is a good concept it may have some unwanted results as stated by Feilden and Jokilehto "Continuity of traditional functions reinforces the meaning of sites in a manner that can never be accomplished by interpretative exhibits. An appropriate use will favor conservation; an inappropriate

or ill-conceived adaptive use may cause degradation, undesirable changes or demolition" [Feilden, & Jokilehto, (1998), P.20].

### **3.2 Architectural Space Analyses Criteria**

The architectural space analysis criterion in this section will be determined in categorizations that were brought forward by Pierre von Meiss (1998) also references from [Lawson (2003), Tuan (2003), Miller, Schlitt (1985), Rengel (2003)] who worked on the concept of space organization and space definition which determined a philosophy of space and feeling of space but the most important factor that will be determined in this thesis is architectural space. The criteria that Meiss has used in his book will be used in this thesis and these will be also supported with other sources [Unwin(1997), Krier(1988)] to emphasize the points of view within the thesis.

Space is the container of elements it limits us and sets boundaries for us to work in, Meiss(1998) refers to Aristotle, who defined space as "space is what is within the limits of the sky to the very smallest, rather like Russian dolls. Space is, therefore, of necessity a hollow, limited externally and filled up internally". There is no such thing as an empty space because however empty it may look every single object and element has a specific position within this space, therefore it cannot be empty, on the contrary for architects this seemingly empty space between the ground, walls and ceilings is the very reason for their activity, to be able to create a hollow, which will contain [Meiss, (1998), p: 101].

Simon Unwin(1997) states "Places can be identified by a range of basic elements: defined areas of ground, walls, platforms, columns, roof, door..." [unwin, (1997) p:19]. When defined as a physical term, architecture is defined as the conditions of

which elements operate within a confined space, these conditions can be divided into two main components, firstly the ground; this is the starting point from which architects start their work from and build on therefore a very important component. Secondly there is the space above this surface, this is where the architects magic takes place, it is the medium in which the architect moulds and creates places, gravity, light and time [Unwin, (1997)].

In the following section of the thesis the architectural space criteria will be listed, defined and explained in this order:

- Spatial definition of space
- Depths and Densities of space
- Geometry of space
- Space Defining Element
- Floor, wall, and ceiling
- Opening of space and natural lighting

### **3.2.1 Spatial Definition of Space**

Architectural space is formed from the relationship between objects. Boundaries and planes, these are the factors which define the limits but do not have the characteristics of an object within them selves. These limits may be more or less explicit, they may form a continuous surface, which forms an unbroken boundary or on the contrary these limits may only form only a few cues in which the observer establishes a genesis defined by cues, these cues at first may leave an implicit impression but will gradually make the planes and edges more obvious to the observer with the addition of concrete cues [Meiss, (1998), pp: 101, 102].

As the starting point of a architectural analysis, the interior room which is the smallest spatial unity, should be analyzed. Normally an interior space has walls, piers, a ceiling and a floor and apart from these characteristics it also has windows and doors which function as connections to the exterior, by combining all these technical elements into one, the elements of space are determined. The space becomes observable and can be defined according to its size, proportion (relationship between length, height and width) and shape [Krier, (1988), p: 72].

As stated before, Aristotle states that in his opinion space is "a container of things- a sort of succession of all-inclusive envelopes, from what is 'within the limits of the sky to the very smallest, rather like Russian dolls. Space is, therefore, of necessity a hollow, limited externally and filled up internally. There is no empty space; everything has its position, its location, and its place". For the architect the space between the ground, walls and ceiling is not nothingness, quite the contrary it is in fact the sole reason of his activity, the architects main aim is to create a hollow in order to contain. The architect's mission is to create a concrete form for the space in which the people have relative freedom of movement which can be seen within the boundaries of these walls [Meiss, (1998), p: 101].

Basic elements and the places, which they identify, can be modified by many varying factors such as light, color, sounds, temperature, air movements, smell, taste, the quality and texture of the materials used etc. These many factors are part of the conditions of architecture and the process of producing architecture. The possible combinations of basic and modified elements are endless, for example as Unwin stated (1997) "The inside of a cell might be dark, or bright; it might muffle sound, or have an echo; it might be warm, or cool; it might be dark, or fresh; it might smell of

expensive perfume, or of stale sweat, or fruit, or of fresh cooking. A pavement may be rough, or as smooth and slippery as ice. An enclosure (a garden) might be sunny, or shady. A platform (a seat) might be as hard as stone or metal, or soft, padded with foam or feathers. An aedicule may be sheltered from wind, or be exposed and breezy". And so on [Unwin, (1997), p: 99].

The basic forms of these elements can be classified into; regular or geometric, irregular or chaotic or a mixture of the both. In other words this simply means architects manipulate the element of light and color values for the dot, line and plane which gives a different atmosphere and feeling to the space as Krier states "the primary forms; cylinder, sphere, cone, cube, pyramid or a random rock that might symbolize the irregular body, and finally the heterogeneous solid made up of different figurations. The interior space of all these bodies may be directly related to exterior form. If we remove the upper limits of these spaces and differentiate the scale, we can speak of urban space, natural space, landscape or of their dialogue" [Krier, (1988), p: 74].

#### **3.2.2 Depths and Densities of Space**

As Meiss said (1998):" the most common and effective indicators of the perception of depth are, on the one hand, the effect of perspective with, notably a gradient of texture, and on the other hand, the phenomenon which tells us an object which partially hides another should be in front of it". Spatial density is due not only to the physical staging of depth, as at Cordoba it can sufficient to suggest subdivisions implicitly by the modulation of floor, walls or ceiling so that same unitary space appears relatively full or, on the contrary, relatively empty [Meiss, (1998), pp:104,106].

### 3.2.3 Geometry of Space

In architectural design geometry is a prime necessity in calculating and solving problems of rationality, compactness of the grouping of spaces and structural regularity, in this section we will be defining geometry and its functions within architecture from two main points of view;

- The spatial characteristics of certain elementary geometric figures; square, cube, circle, octagon, cylinder, sphere, triangle, prism, pyramid.

- The assembly of rooms; the principal forms of organization for grouping series of spaces, ensuring their accessibility and fitting them to a load-bearing structure.

Once the lines of each geometric shape or element are determined the architect immediately starts to consider the ways of how they can exploit the geometric characteristics of the element in order for it to adapt itself into the specific site or area, as Meiss stated "The transformation of the square or circle is only possible after understanding the characteristics of elementary figure" [Meiss, (1998), p: 113].

There are different ways geometry is used, sometimes it emerges out of the conditions of being and sometimes it's forced upon the world. Geometry is defined differently according to its function, in school the word geometry refers to circles, squares, triangles, pyramids, cones, spheres, diameters, cones etc. These shapes have very important roles in architecture because it these shapes that give a perfect definition to space, as Unwin stated "their perfection can be imposed on the physical fabric of the world as a means for identifying place" [Unwin, (1997), p: 99].

### **3.2.4 Space Defining Elements**

This section will be reviewing the elements, which help to define space for architects, one could be tempted to describe spatial limits simply in geometric terms by simple imagining an empty room which is enclosed by planes of homogenous color and texture, but contrary to this on the other hand, we have the possibility to perceive these planes in a different way as if they don't have the same value. In architecture there are many basic differences between the floor, walls and the ceiling, which is not obvious to the untrained eye [Meiss, (1998)].

#### 3.2.4.1 Floor

The floor, which will be explained in this section of the thesis, has first of all a pragmatic meaning, the observer must be able to move around on it and place objects on it, unlike the walls and the ceilings which serve mainly as support and not for functional uses. Variations in texture can give it a different or unique importance but as a general rule all floors should be horizontal in order for it to serve its main function, which is the versatility and the possibility of movement expected within an architectural space. The floor is therefore less variable than the walls and the ceiling because as stated above it must be horizontal and it must be stable because it unifies the different elements of the space [Meiss, (1998), p: 126].

The base of a building is its ground floor zone so therefore it is without the doubt the most important part of the construction, it is exposed to immense amounts of strain and pressure from carrying the whole structure so therefore is usually made with more durable elements that that used for the rest of the construction. Another function of the ground floor is, it is the first thing people perceive when they enter the building and it often serves as the host for shops or other commercial enterprises because it is the strongest floor and also the first floor people go through when

entering a building making it the most seen floor of any building. Given the nature of business the ground floor is subject to many changes during time in order to accommodate the occupiers wishes, for example a hairdresser would need a spacious area with sinks where as a doctor's office would need private compartments, therefore it is recommended that the ground floor is given a robust, neutral structure which can cope with 'parasitical architecture' such as shop fittings and so on [Krier, (1988), p: 74].

### 3.2.4.2 Wall

This section will explain the functions of the wall, walls are the vertical structures within a building which carry the ceiling and also the roof, and apart from this main function the walls also guide our movements by setting boundaries and lead us from one place to another through doorways. Walls separate and give structure to architectural space and also protect it from external elements. As Miess (1998) refers Martin Heidegger gives an exquisite quote on the importance of walls as "One rarely touches walls, just as when one walks around a table for example; an object-peripheral gap remains. The walls are opposite our eyes. Their modulation, their texture and their ability to accept the display of messages, play a basic role in determining the character and the atmosphere of a place. Between walls and ceiling are 'high walls' which accept a sublime and untouchable role. According to their design, they may belong more to the wall or more to the ceiling" [Meiss, (1998)].

Although architecture has changed a lot through the years some concepts are still valid since the old days, as Unwin (1997) states "in many buildings, space is organized using parallel walls", this is a reference to one of the simplest, oldest yet most valid ancient architecture strategy, which is based on two straight parallel walls, although this strategy is ancient it is still used till this day in the most modern

buildings of our time and even though it is an ancient strategy architects still believe that this strategies potential has yet been exhausted [Unwin, (1997), pp:139,140].

### 3.2.4.3 Ceiling

This section of the thesis will explain the importance and function of the ceiling. It is like the antagonist of the floor, its counterpart, including the roof it is a practical element of the construction, its main function is to give shelter. Apart from this main function ceilings are used in different ways, it is a favorite area with decorators for the sole reason its unreachable giving the ceiling an illusion of mystery and beauty, for this very reason it is a favorite place for stuccos, frescos, mosaics; all are elements in which are means of expression for dreams, ideals, sacred places or people [Meiss, (1998), p: 129].

### **3.2.5 Openings of Space and Natural Lighting**

This section will explain the importance and function of the openings of space and natural lighting within a building. Space is more or less closed, the main factor in which gives people the sense that they are either in a confined, dark and small place or in a large, light and spacious place, this is based on the openings of space and the lighting of the area. Doors and windows are the two classic methods of handling openings in a structure; these are seen as places of passing through and a source of light and air [Meiss, (1998), pp: 107.108].

Doorways are the main areas in which one passes through whereas the windows are the main source of light and air, the bigger the window the more air that comes into the room and more importantly the more light that enters the room. More recent innovations have changed the concept of windows, such examples would be the glass wall which is a barrier physically but not visually, allowing a larger view of the outside and also a lot more light into the building than a window, another such innovation is the suspension rod or cable, which can support a platform or roof and allow the person to lift the roof however he sees fit again giving a larger scale of light and air [Unwin, (1997), p: 21].

### **3.2.5.1 Windows**

Windows are seen as a sign of human life, eye of the building because it allows one to gaze at the outside world from the comfort of their home, windows allow the daylight and sun's rays to come inside the building and highlighting surfaces and objects, they are also the main sources for fresh air and fragrant smells. Apart from all these functions it is also a place of vulnerability within the wall because it breaks the walls structural continuity thus making it weak, fragile, thermally sensitive and may be a cause of leakage [Meiss, (1998), p: 3].

The window is a determining feature in any buildings appearance because it is where the light comes into it, rooms are enlivened by light, therefore have a good amount of it enter a room gives the room a completely different atmosphere, it motivates our awareness of the space we are in, therefore the materials and colors used by an architect should be take into consideration the amount of light which will enter the room in order to generate a good setting [Krier, (1988), p: 102].

### **3.2.5.2 Doors**

Doors are very important because the play a decisive role in giving the room its direction and appropriate meaning, doors should be considered from varying standpoints in order to give it the best place in the room because a wrongly placed door may spoil the whole function of a room. The door must have a appropriate position which is geometrically in harmony with the room. More determined by function is the position of a door. But even under complicated functional constraints, it is possible in most cases to find an appropriate position which is in geometrical

harmony with the room. As a rule it might be appropriate to apply the system of proportion which determines the ground plan and the elevation of a building also to the secondary elements such as windows and doors. If it is not possible to coordinate door and wall in this way, there are other devices to nevertheless achieve a harmonious space. Relatively simple is the creation of niches in a wall or the concentration of a group of doors and windows. A more difficult method, but one which helps to enrich the spatial atmosphere, is to insert bays which by way of piers are separated from actual room and would cushion irregular positions of doors. This 'filter' in front of the opening would create a proper door space which is sympathetic to the functional structure of the actual form. The combination of door and window elements is very appropriate, especially in the case of balconies, terraces and loggias. It is essential, however, that a distinction in terms o proportion and the size between door and window is retained [Krier, (1988), pp: 96.97].

### **3.2.5.3** Natural Lighting

Natural lighting is a very important concept in architecture, Louis Kahn summarized this beautifully "the sunlight did not know what it was before it hit a wall", architectural space consists of many factors one of which is the illumination of objects and enclosed surfaces, this is summarized by Arnhem "Things are less bright than the sun and the sky, but not different in principle. They are weaker luminaries. Light... is an inherent virtue of the sky, the earth and the objects that populate them and their brightness is periodically hidden or extinguished by darkness. To claim that these are children's and primitives' misconceptions eradicated by modern science, would be to close our eyes to universal visual experiences which are reflected in artistic presentation" [Meiss, (1998), p: 121].

Not only is lighting very important in architecture but it also has a profound effect on the lives of humans because it faciliates vision, also and more importantly basic biological functions ,not only in humans, but in plants as well, such as photosynthesis which is the source of oxygen [Aries & Newsham, (2007) p: 1859].

Next chapter will be determining the historical and architectural space analysis focused on churches in Walled-City Famagusta.

### **Chapter 4**

## ADAPTIVE RE-USE POTENTIAL OF CHURCHES IN FAMAGUSTA

In adaptive re-use of historical monuments, the first things we have to care about are the values of historical monuments. In the re-use of historical churches the most important values to consider are the emotional values because the churches have religious backgrounds. Although they have very important backgrounds, there are lots of examples all over the world of how churches have been given new functions. Such as:

A) Residential B) Cultural C) Community D) Commercial E) Office

The adaptive re-use of churches has a great potential in Famagusta because presently there are 16 churches in Famagusta some of which are in one piece and some of which have been damaged during time. The majority of people who live in Famagusta presently are Muslims and these unique buildings are without function because there is not enough Christians within the area, if these structures are to be conserved and re-used for the future. They have to be analyzed by the criteria architectural space & historical analysis explained in the previous chapter and public opinion is very important for recommendation of new functions.

### **4.1 Historical Background of Churches in Famagusta**

Cyprus is one of the biggest islands in the Mediterranean Sea, it is seen as a very important place by historians because the whole island is full of historical sites, monuments, and artifacts [Albrecht, p: 51].

The aim of this chapter will be to analyze the quality of interior spaces of the churches in the walled City of Famagusta. On the island there are lots of marks left from many civilizations throughout history and these marks show uniquely the historical background and architectural heritage of Cyprus.

The walled city of Famagusta is located at the east of the Mesaoria. At the beginning of the 13<sup>th</sup> century the walled city of Famagusta was very important because it was a commercial transaction area between the west and the east [Enlart, (1987), pp: 210.211].

Famagusta has a very long and rich history, it was built upon the ruins of the ancient lagoon settlement of Arsinoe, which was founded by Plolemy II in the 3<sup>rd</sup> century BC, the walled city was inhabited only after the Saracens in 648 AD defeated Plolemy II at the historic site of Salamis/Constantia, the survivors of this invasion moved here and developed it into a small commercial port [Albrecht, p: 145].

The walled city of Famagusta is a city based on the sea and has a perfect harbor, because of this quality it has always been a very important source of business for Famagusta.

Famagusta is one of the biggest cities of Cyprus, it has a historic castle in the center of the new city with a long historical wall and trench surrounding the historical city and many churches are located within the castle walls.



Figure 4: The map of Cyprus

The walled city of Famagusta has a huge potential in architectural heritage because of its amazing and long history, many different civilizations passed through this small city, each leaving their own unique marks on it, many churches were built in different periods of time within the walls of the city [Albrecht, p: 149].

There are some churches which were built in the 13<sup>th</sup> century, one particular church has a pointed arch which has been the centre of confusion for a long, de Vogue deals with this problem of the pointed arch and French Gothic style with a insightful argument. The pointed arch originally developed in France independent of Eastern influence but that it also was found in early Arab architecture in the East. The gothic architecture found in the Levant was above all that which is found today on Cyprus and was derived from French Gothic sources [Folda, (2005), p: 2].

In Gothic churches one of the most obvious features is the use of a certain type of vaulting: the rib vault, in which the crisscross lines of penetrations, which remained plain and rather indistinct in groin vaulting, are underlined by a system of ribs clearly dividing the surface of the vault into triangular compartments or cells. Another typical feature is the pointed shape given to all the arches and present everywhere in the structure: in the vaults, in the triforium. The third characteristic is a deliberate insistence on height, which affects all the proportions of the building it affects not only the general shape of the interior volume but the divisions of all the stories and the architectural members which express them, whether piers or shafts or arches or windows [Bony, (1983), p: 6].

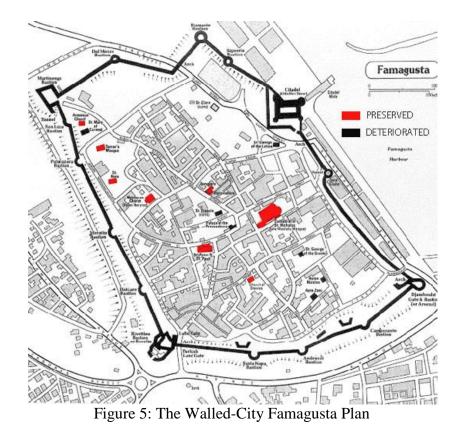
This becomes particularly obvious in the constricted bays of the apse or rather in the hemicycle, since this is the term to be used when the semicircular termination of the choir is surrounded by an ambulatory making, with its crown of chapels, this composite composition of volumes is known as a chevet. Finally, the whole building gives an impression of openness, for the solid masses, the solid surface especially, are here reduced to a minimum. The size of the windows, the brightness of light in this interior is particularly striking and that skeleton of the structure [Bony, (1983), p: 7].

The supporting arches had to be raised above the aisle roofs to abut the high vaults, as if they were flying over them, hence the expression flying buttresses. Flying buttresses shifted the weight of the roof and vaults away from the supporting walls to side structures that in turn carried it down to the ground [Scott, (2003), p: 113].

Another symbol that marked the gothic churches are the Rose windows which touch most different cultures, times, and systems. The rose window's form could change according to the different periods in time, [Dahlke, (1992)].

Some churches in Walled-City Famagusta were unfortunately destroyed but some of them are still standing and have a great potential for re-functioning. One of the main reasons for these churches not being used and just standing without a reason is because of the unsolved situation in Cyprus, the Muslim community has lived in this old town having no use for the churches. Currently there are 16 churches within the walled city but according to rumors and legends there used to be 360 churches within these walls. The churches are listed as these:

- 1. The Twin Churches (Templars and Hospitallers)
- 2. The Church of St. Anne
- 3. The Tanner's Mosqus(church)
- 4. The Church of Stavros
- 5. The Armenian Church
- 6. The Cathedral of St. Nicholas
- 7. The Church of St. Peter and Paul
- 8. The Nestorian Church
- 9. The Church of St. George of the Greeks
- 10. The Church of St. Symeon
- 11. The Church of St. George of the Latins
- 12. The Church of St. Francis
- 13. The Church of St. Mary of Carmel
- 14. The Church of St. Clare (ruins)
- 15. The Church of Ayia Zoni
- 16. The Church of Ayio Nicolas



These 8 churches greatly deteriorated since the period of time it which they were built and for this reason some of their sections cannot be drawn into the plans. One reason that this thesis will be emphasized on giving these churches a new function is that, because of the damage they have received during the period of time they all need restoration, one church is completely ruined, instead of focusing just on restoration this thesis will focus on restoration with a new function of the churches. It will also be possible to find the churches which are preserved and protected in the historical and architectural analysis section in the thesis. Half of these churches have deteriorated and will be subject to historical and architectural analysis, but only the first 5 will be in the community analysis in this chapter. These churches are marked on de map, the red ones are preserved and the black ones are deteriorated.

## 4.2 Historical Analysis and Architectural Space Analysis of Churches of Walled-City Famagusta and Public Response Survey

The Walled-City of Famagusta is one of the most unique heritage sites which are very attractive for tourists and residents. Famagusta's future development is expected to be based on a cultural heritage tourism oriented scenario. Since the Famagusta Walled-City bears high potentials in opinions of tourism, the opinions of tourists as well as the residents are very important.

The historical analyses will be marked by values, the churches will be given either (+) or (-), and these ranges were determined in the literature review. The historical analyses will not affect the recommendation of new functions to the 5 churches which are the main churches in the conclusion. The architectural space analyses will be marked on plan with colors, which are also determined in the literature review.

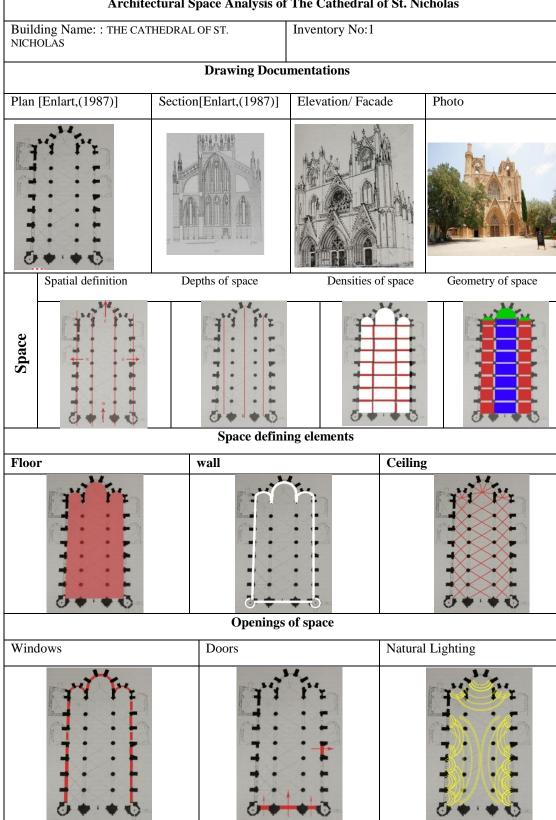
The evaluation of analyses is shown in a table and this table includes the name of the building and some criteria from the historical and architectural space analyses. Each building will range from maximum pluses to minus and with these ranges the churches will be categorized into different groups.

A survey has been conducted with both the tourists and residents. This thesis tries to determine an evaluation of re-functioning opportunities of historical churches in the Walled-City Famagusta and one of the important components in this subject is the ideas of people who live in this city and also the people who come to visit this historic area. Sixteen churches are exists in this historic city which is a public place. But for determining re-functioning potentials of these buildings, we have to consider on the ideas of both communities. The tourists are generally from Russia and the UK and the majority of residents are Turkish Cypriot and Turkish immigrants.

The survey system consists of the opinions of surveyors which are measured through a numerical 30 residents and 30 guest surveyors. The method used in this thesis is the semantic rating scale method [Özturk, (1978), p: 121], it contains of two questions within the survey and some information about the answerers. The first question aims to find out information about the ideas of people about the re-functioning of these churches and the second question aims to clarify the preference of the surveyors among different functions for these churches.

The first three churches are out of the scope of the questionnaire because of the high monumental characteristics of buildings. The next five churches are either the scope of the questionnaires to find out the public opinion about the Re-functioning potentials of these churches. The questioner which was show in chapter 1 (p: 8) was prepared for each church separately. The questionnaire was held whit equal number of tourists and residents to see the differences in their visions.

CH	Historical Analysis of the Cathedral of St. Nicholas Historical analysis of The Cathedral of St. Nicholas										
1Data recorded:	30/06/	/2010			Building name: THE CATHEDRAL OF ST.						
Addresses: Bar	baros s	treet				Construction 1311. 14 <sup>th</sup> cent	date/p	CHOLAS eriod: E	rected in ab	out	
Map Section no: 2	XXXIII,4	4,5,IV	P	lot no: 801,802	!	Architectural st	tyle: (	Gothic			
Current Function	on: Mo	sque				Building mater	ial: H	ewn sand	stone		
					Va	alues					
Emotional values	wond	er	+	identity	+	continuity	+	spiritual	and symbolic	+	
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	+	
	archit	ectural	+	Townscape, ecological	, land		+	Technolo scientific	ogical and	+	
Use values	functi	onal	+	economic	+	social	+		and ethnic	+	
				Mainte	enan	ce Condition					
		Structu System		External structure		Upper structure	Internal structure		Ornamental Element		
Very good	Α										
Good	В	Х		Х		X X		Х			
Poor	С										
Ruined destroyed											
Repairs in	Е										
Photo date: 15/	03/201	0									
WEST ELEVATION						SOUTH ELEV	And				
EAST ELEVATION						SITE PLAN		Catholic Cat	and a Mosque)		



## Table 7: Architectural Space Analysis of the Cathedral of St. Nicholas Architectural Space Analysis of The Cathedral of St. Nicholas

# Interpretation of Historical and Architectural Space Analysis of Cathedral of St. Nicholas

After being crowned the king of Cyprus in Nicosia, the Lusignan king was coroneted as the king of Jerusalem in the Famagusta Cathedral; this is probably the reason for the Famagusta Cathedral's architecture imitating the Rheims Cathedral. The Cathedral of St.Nicholas is one of the best examples of Gothic churches built in 1311 (14th century). [Enlart, (1987)].

The building until this day has been maintained, its stuctural system and the maintenance condition of the building as a whole is good. The building has a width of around 25 meters and a height of about 20 meters, there are arches that seperate the sub spaces from each other. Another special characteristic of this building is that it shows a French Gothic style with flying buttresses above the aisle roofs to abut the high vaults. The density of the building is complicated.

The geometry of the building was built with two geometrical shapes, it contains 21 cubes and 3 half cylinder and the upper structure of the building was built as cross voult. The east part of the buildings upper structure was built with an apse. The building has 1 main door and 2 side doors which divide the building into a three space. The centre of the west front is completely filled with a large pointed window which is surmounted by a gable with foliage cresting and this cuts into the balustrade. The building has ten large pointed windows and eleven three rose windows in the east pert and these windows ensure that natural light enters the building equally. The building is presently used as a mosque named Lala Mustafa Pasa Camii.

This function helping the building to maintain its values. The mosque function doesn't prevent and even encourages visitors to reach and experience the buildings spatial qualities.

The conservation values are very high because this building includes emotional, cultural and use values. This monument carries high re-use potential because of its architectural and historical characteristics; however since it is a very large scale monumental church; it needs a committee decision including different actors from governmental bodies as well as renovation experts therefore it is taken out of the scope of this thesis.

Table 8: Histo	orical	•				of St. Peter an				
CH		Hist	oric	al Analysis	of T	he St. Peter and	l Poul	Church		
2 Data recorded :	30/06	6/2010			Building name: THE CHURCH OF ST.					
						PETER AN				1.
Addresses: Sin	ian pas	ha street				Construction 1358. 14 <sup>th</sup> cent	date/p tury	eriod: Ere	ected in abo	out
Map Section no:	XXXIII,	4,5,IV&III	F	Plot no: 800		Architectural s	tyle:	Gothic		
Current Function	on: Wi	thout fui	nctic	on		Building mater	rial: H	ewn sand	stone	
					1	Values				
Emotional values	wond	er	+	identity	+	continuity	+	spiritual	and symbolic	+
Cultural values	docui	nentary	+	historic	+	archaeological	+	aesthetic		+
	archit	ectural	+	Townscape,	land	age and scarcity	+		gical and	+
Use values	functi	ional	+	ecological economic	+	social	+	scientific political	and ethnic	+
				Mainte	enan	ce Condition				
		Structu		External		Upper	Interr		Ornamental	
Very good	•	System		structure		structure	struct	ure	Element	
Good	A B	X		x		X	x		X	
Poor	C	Λ		Λ		Λ	Λ		<u>л</u>	
Ruined destroyed										
Repairs in	Е									
Photo date: 15/	03/201	0		1						
WEST ELEVA	TION					SOUTH ELEV	ATIC	DN		
WEST ELEVATION										
EAST ELEVATION						SITE PLAN			tita Teranggan Ing	
EAST ELEVATION						51	SELPE	Provvedit		

Architectural Space Analysis of The Church of St. Peter and Paul										
Buile PAUI	Building Name: : THE CHURCH OF SS. PETER AND Inventory No:2 PAUL									
	Drawing Documentations									
Plan     Section     Elevation     Photo										
				they want						
	Spatial definition	Depths of space	Densitie	s of space	Geometry of					
	space									
Space	abace									
			ning elements	~ •••						
Floo		wall	s of space	Ceiling						
Wine	dows	Doors	-	Natural	Lighting					

## Table 9: Architectural Space Analysis of the Church of St. Peter and Paul

## Interpretation of Historical and Architectural Space Analysis of St. Peter and Paul

This church was erected during the reign of Peter I (1358-1369) by a man named Simon Nostrano, who was a merchant in Famagusta. It supposedly cost him only a third of the profit he made from one single trading venture to Syria [Enlart, (1987)]. It is the second largest church in Famagusta. The church is located a short way to the west of the cathedral and to the south of the palace.

This church is another Gothic building built in 14<sup>th</sup> century in 1358; it is located to the west of the Cathedral of St. Nicholas and south of the Venetian Palace separated only by a street. This building has a structural system which is still present today and the maintenance of the building is in good condition. The width of the building is approximately 20 meters and its height is around 15 meters. Arches separate the spaces. The density of the building is complicated.

The building consists of 15 cubes and 3 half cylinders and the roofs are constructed by cross vaults. The east part of the building consists of an apse. The building has 1 main door and 2 side doors in the west front of the building forming three spaces and it also has one door in the north section of the building. The center of the west front is completely filled with pointed windows. This building has 9 large pointed windows and 5 small pointed windows in the east part. This building includes a small rose window in the east section of building and these windows ensure that the building receives natural light equally. This building presently has no function.

The conservation values of this building are high because this monument is the second largest church in the Walled-City and the emotional and cultural values of

the monument are also very high. This monument caries high re-use potentials because of its architectural and historical characteristics, however this building is empty nowadays and no one can enter to this building.

Since it is a very large scale monumental church, it needs a committee decision including different actors from different governmental bodies as well as renovation experts therefore it is taken out of the scope of this thesis.

## Table 10: Historical Analysis of the Nestorian Church

CH Historical analysis of The Nestorian Church										
3 Data recorded :			Building name: THE NESTORIAN CHURCH							
Addresses: Tu	zun str	reet				Construction 1360. 14 <sup>th</sup> cent	date/µ tury	period: E	rected in abo	out
Map Section no:	XXXIII	,4,5,IV	P	lot no: 185,187	7,189	Architectural s	style:	Gothic		
Current Function	on: EM	U multi o	cultur	al hall		Building mater	rial: H	Hewn sand	l stone	
					V	alues				
Emotional values	wond	er	+	identity	+	continuity	+	spiritual	and symbolic	+
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	+
		ectural	+	Townscape, ecological	, lands	scape and	+	Technolo scientific	gical and	+
Use values	functi	onal	+	economic	+	social	+	political	and ethnic	+
				Mainte	enanc	e Condition				
		Structu System		External structure		Upper structure	Intern struct		Ornamental Element	
Very good	Α									
Good	В	Х		Х		Х	Х		Х	
Poor	С									
Ruined destroyed										
Repairs in	E									
Photo date: 15/	03/201	0								
WEST ELEVA	TION					SOUTH ELEV	VATI	ON		
west elevation										
EAST ELEVA	ΓΙΟΝ					SITE PLAN				
2 T		1				Nasta Chur (Aylos Yer	ian the string of the string o			

	chitectural Space Ana				
Building Name: THE NE	STORIAN CHURCH	Inventory No:3			
	Drawing Doc	umentations			
Plan [Enlart,(1987)]	Section	Elevation / Facade	Photo		
Spatial definition	Depths of space	Densities of space	Geometry of space		
space					
Floor	wall	ning elements			
		Ceil			
		s of space			
Windows	Doors	Nati	ural Lighting		

### Table 11: Architectural Space Analysis of the Nestorian Church

## Interpretation of Historical and Architectural Space Analysis of Nestorian Church

The Nestorians were highly ranked and very influential in the Syrian society at the time of the Latin domination. The Nestorian faith admits the existence of two Christs. The Syrian church accepted this belief also and also embraced the Melchites and the Jacobites, these were people who practiced circumcision and used trumpets instead of bells at mass. In 1222 a bull owned by Honoris III was presented to the Latin archbishop [Enlart, (1987)].

This building was built in Gothic style and built in the 14<sup>th</sup> century 1360; the interior decoration of the building is very plain. The building has a good structural system which is still present and the maintenance of the building is good. The width of the building is approximately 18 meters and the height of it is approximately 6 meters, the spaces are separated with arches, the density of the building is complicated.

The geometrical structure of the building consists of two geometrical shapes, it consists of 7 cubes and 3 half cylinder shapes and the roofs are constructed by cross vaults, the upper east part of the building contains an apse. The building has 1 main door and 2 side doors in the west front of the building which divides it into a tree spaces, it also has 1 door in the north section. The building has 7 large pointed windows in the south section and 3 large pointed windows in the north section. There are also 3 small pointed windows in the east section of the building. This building includes 1 rose window in the west section of building. The building receives the best light from the south section therefore the north section is dark. The building is presently used as the Eastern Mediterranean University cultural center.

The conservation values are very high because this building includes emotional, cultural and use values. This monument carries re-use potential not only because it has an appropriate architectural and historical characteristic but at the same time it already has a function that is helping the building to maintain its values.

Since this church already has an appropriate function, it is taken out of the scope of the study.

able 12: Historical Analysis of the Twin Churches         CH       Historical Analysis of The Twin Churches										
4		1	1150		y 515	of the twin ch	urene	ο.		
Data recorded:	30/06/	2010			Building name: THE TWIN CHURCHES (TEMPLARES AND HOSPITALLERS)					
Addresses: K	lishla st	reet				Construction dat				,
Map Section no:	XXXIII,	4,5,IV	Pl	lot no: 275.274	-	Architectural sty	/le: G	othic		
Current Function	on: Cu	ltural cen	ter ar	nd Bar		Building materia	al: He	wn sand s	tone	
					Va	alues				
Emotional values	wond	er	+	identity	+	continuity	+	spiritual	and symbolic	+
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	+
	archit	ectural	+	Townscape, ecological	lan		+	Technological and scientific		+
Use values	functi	onal	+	economic	+	social	+		and ethnic	+
			1 1	Mainte	nar	ce Condition				
		Structur System		External structure		Upper structure	Internal structure		Ornamental Element	
Very good	Α									
Good	В	Х		Х		Х	Х		х	
Poor	С									
Ruined destroyed	l D									
Repairs in	E									
Photo date: 15/	03/201	0								
	NORTH ELEVATION					SOUTH ELEVA				
EAST ELEVATION					CONTRACT OF THE		Hespitz			

	rchitectural space ana		ırches					
Building Name: THE TV (TEMPLARS AND HOSPI	VIN CHURCHES TALLERS)	Inventory No:4						
	Drawing Doc	umentations						
Plan [Enlart,(1987)]	Section	Elevation / Facade	Photo					
Spatial definition	Depths of space	Densities of space	Geometry of space					
space		Â						
	Space defin	ing elements						
Floor	wall	Ceil	ing					
	Openings of space							
Windows	Doors	Nati	ural Lighting					

## Table 13: Architectural Space Analysis of the Twin Churches

## **Public Opinion Survey Result of Tourists for:**

### The Twin Churches

A: Residential B: Cultural C: Community D: Commercial E: Office

Options:	A	В	С	D	Е	
e1	5	1	2	4	3	
e2	5	1	2 2 3	4	3	
e3	5	1	3	4	2	
e4	5	1	2	4	3	
e5	5	1	2	4	3	
e6	5	1	3	4	2	
e7	5	1	2	4	3	
e8	5	1	2	4	3	
e9	5	1	3	4	2 3 3 2 3	
e10	5	1	2	4	3	
e11	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 2 3 2 2 3 2 2 3 2 2 4	3	4	
e12	5	1	4	2 4	3	
e13	5	1	3	4	2 3	
e14	5	1	2	4	3	
e15	5	1	2	4	3	
e16	5 5 5	1	3 2 2 2 2 2	4	3	
e17	5	1	2	4	3	
e18	5	2	1	4	3	
e19	5	1	2	4	3	
e20	5 5 5 5 5 5 5	1	2 2 1	4	3	
e21	5	2	1	4	3	
e22	5	1	2	4	3 3 2 3 3 3	
e23	5	1	2	4	3	
e24	5	1	3	4	2	
e25	5	1	2	4	3	
e26	5	1	2	4	3	
e27	5	1	4	2 4		
e28	5	1	2	4	3	
e29	5	1	2 2 3 2 2 4 2 2 1	3	4	
e30	5	4	1	2	3	
Total:		150	35	66	112	87
Average:		5	1.16	2.2	3.7	2.9

Results of functions preferences:

1.	(pr	efere	ence) : Cultural (Exhibition hall, Dance studio, Museum)
2.	(	"	): <b>Community</b> (Library, Nursery, Church)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

## Public Opinion Survey Result of Residents for:

#### The Twin Churches

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	E	
e1	5	1	2	4	3	
e2	5 3	1	2 2	4	5	
e3	5	1	2 2 4	3	4	
e4	5	1	2	4	3	
e5	5	1	4	2	3	
e6	5 5 5 5 5 5 5 5	1	3	2 2	4	
e7	5	1	3 2 3 3 5 2 4	4	3	
e8	5	1	3	4	2	
e9	5	1	3	2 2 4	4	
e10	4	1	5	2	3	
e11	5	1	2	4	3 3	
e12	5 5 5 5	1		2 4	3	
e13	5	1	2	4	3	
e14	5	1	2 2 2 1	4	3	
e15	5	1	2	4	3	
e16	5 5 5	3		4	2 3	
e17	5	1	2	4	3	
e18	5	1	4	2	3	
e19	5 5 5 5 5 5 5 5 5 5	1	4	3	2 3	
e20	5	1	2 2 2 3	4	3	
e21 e22	5	1	2	4	3	
e22	5	1	2	4	3 3	
e23 e24	5	1	3	2	3	
e24	5	2	1	4 3 2 4 2 4	3	
e25	5	1	2	3	4	
e26	5	1	4	2	3	
e27	5	1	2 3	4	3	
e28	5	1	3	2	4	
e29	5	1	2 2	4	3	
e30	5	1	2	4	3	
Total:	1	47	33	76	101	93
Average:		.9	1.1	2.1	3.3	3.1
	•				2.0	2.1

1.	(pi	refere	nce) : Cultural (Exhibition hall, Dance studio, Museum)
2.	(	"	) : <b>Community</b> (Library, Nursery)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

# Interpretation of Historical and Architectural Space Analysis of Twin Churches and Recommendations

The origins of the Twin churches in Famagusta are not exactly known because there is very little information available. The Twin Churches is actually two church buildings called Templars and Hospitaliers. History records show that in 1191 Richard the Lionheart paid for it in accordance with the terms of the treaty of cession. Records also indicate that the Templars retained a majority of their properties in the 13<sup>th</sup> Century [Enlart, (1987)].

These buildings were built in the 14<sup>th</sup> century but their history is unknown. These buildings were built with Gothic architectural style. The northern building, the Templars Church, consists of a lower floor and a style which is not so tall and slender and also slightly more Gothic in style. The latter, which is on the south side, the Hospitaliers Church, has a good structural system present today and the maintenance of the building is good. Both buildings' widths are approximately 6 meters and their heights are approximately 7 meters. The densities of the buildings are simple.

The geometrical structures of both buildings are simple, the Templars Church consists of 3 cubes and 1 half cylinder spaces and the Hospitaliers Church consists of 1 cube and 1 half cylinder spaces. Both buildings' roofs are constructed by cross vault structures. Both buildings' east section contains an apse. The Templars Church has 1 main door and 1 side door in the north section, whereas the Hospitaliers Church has 1 main door and 1 side door in the north and 1 side door in the south sections of the building. The Templars Church has 5 large pointed windows and 1 small pointed window in the east section and the Templars Church has a small Rose

window in the west section of building. The Hospitaliers Church has 2 large pointed windows and 1 small pointed window in the east section of the building. Both buildings receive the best natural light from the south so the north sections of the buildings are darker. Currently the Templars Church is being used as a cultural center and the Hospitaliers Church is being used as a café and bar.

These churches include several values which were mentioned in the previous chapter, the Emotional values: (wonder, identity, spiritual and symbolic). The historical values (historic, aesthetic and symbolic, architectural) and the last one the use values: (functional, economic, social) these churches contain all these values. These monuments carry high re-use potentials because of their architectural and historical characteristics but at the same time they have a function already that is helping the buildings to maintain their values.

The historical analysis and architectural space analysis lead the study to recommend new functions for these churches which are related to the conservation values of these historical buildings. The historical buildings must preserve their cultural uniqueness for the future and in this sense; these buildings must be alive with the community. The functions that will be suggested for these historical buildings related with its architectural characteristics are public functions therefore, residential functions are not proposed. The cultural functions that would be recommended for these churches are Exhibition hall and art studio, or Art center or Dance studio. Community functions that would be recommended are Library. Office functions supported by a commercial function are Tourism Information office and souvenir shop. The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. In cultural function both groups would prefer an Exhibition hall, Dance studio and Museum and their second preference for a community function was, Library, Nursery. The Third preferences of both groups were Tourism information office and Architectural office which reflect the office function.

However when the first preferences of public opinions were taken into consideration, the Museum function, is not appropriate for these churches because these churches have limited space for re-functioning of these churches into Museum. The Nursery function is also not an appropriate function for these churches because Nurseries need soft spaces and this function can be opposite to the conservation values of these historical buildings. The Tourism information office function also is not an appropriate function for these churches because other potentials surrounding these buildings show that these buildings can be more attractive for people with cultural functions.

New re-functioning opportunities for Twin Churches have to be handled together with the other potentials surrounding these buildings such as proximity to the City Square, and important buildings as the Hamam or the Eaved House. Its own architectural and historical characteristics, together with the public opinion survey led the study to propose functions such as an Exhibition hall and art studio, Dance studio, or Library. The parallel walls and effective texture on these walls show that an Exhibition hall function can be an appropriate function for these churches. These buildings were created by parallel cube spaces and covered with cross vaults so in this sense a Dance studio can also be an appropriate function for these buildings. The Dance studio can serve for the continuity of traditional dances of Cyprus and at the same time can introduce world dances to the island by dance courses and performances. The Library function that would be collecting the researches specially focusing on Cyprus Studies can help people to experience the spatial qualities of this building and at the same time would serve for both locals and tourists.

Table 14: Hist	torical	Analy				n of St. Anne is of Church of S	t. An	ne		
5			1115	toricar / ina	<b>u</b> y 51			nc		
Data recorded:	30/06/	2010				Building name:		IE CHU NNE	RCH OF S'	Г.
Addresses: A	li pasha	a street				Construction dat			entury	
Map Section no:	XXXIII	,4,5,IV	P	lot no: 546		Architectural sty	le: G	othic		
Current Function	on: Wi	thout fui	nctio	n		Building materia	al: He	wn sand s	tone	
					V	alues				
Emotional	wond	er	+	identity	+	continuity	+	spiritual	and symbolic	+
values	wond	CI		identity		continuity		spinuar	and symbolic	
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	H
	archit	ectural	+	Townscape, ecological	, lan		+	Technolo scientific	gical and	Н
Use values	functi	onal	+	economic	+	social	+		and ethnic	Н
				Mainte	nai	nce Condition				
		Structu System		External structure		Upper structure	Intern		Ornamental Element	
Very good	А	, ,								
Good	В	х		X		х	X		х	
Poor	С									
Ruined destroyed	l D									
Repairs in Photo date: 15/	E									
		0								
WEST ELEVA						SOUTH ELEVA				
EAST ELEVA	TION					SITE PLAN				
							it.	athrian s hereb		

c 

Architectural Space Analysis of the Church St. Anne Architectural Space Analysis of The Church St. Anne										
Building Name: THE CHURCH OF ST. ANNE Inventory No:5										
	Drawing Documentations									
Plan [Enlart,(1987)]	Section[Enlart,(1987)]	Elevation /Faca	ade Photo							
	Section[Email,(1987)]									
F I I	KKK A									
Spatial definition	Depths of space	Densities of	of space Geometry of space							
space										
		ing elements	a							
Floor	wall	la l	Ceiling							
Windows	Openings Doors	s of space	Natural Lighting							
willdows	Doors									

Table 15: Architectural Space Analysis of the Church of St. Anne

## **Public Opinion Survey Result of Tourists for:**

#### The Church of St. Anne

A: Residential B: Cultural C: Community D: Commercial E: Office

Options:	А	В	С	D	Е	
e1	5	1	2	4	3	
e2	5	1	2 4	4	3	
e3	5	1		3	2 3	
e4	5	1	2	4	3	
e5	5	1	2	4	3	
e6	5 5 5 5	1	2 2 2 2 3 2 2 2 2 2 2 2	4	3	
e7	5	1	2	4	3	
e8	5	1	3	4	2	
e9	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2	4	3	
e10	5	1	2	4	3	
e11	5	1	2	4	3	
e12	5	1	2	4	3	
e13	5	2	1	4	3 3	
e14	5	1	2 2	4	3	
e15	5	1	2	4	3 3 3 3 3 3 2 2 3	
e16	5	2	1	4	3	
e17	5	1	2	4	3	
e18	5	1	1 2 2 2 2 3 3	4	3	
e19	5	1	2	4	3	
e20	5	1	2	4	3	
e21	5	1	3	4	2	
e22	5	1	3	4	2	
e23	5	1	4	2	3	
e24	5	1	2	4	3	
e25	5	1	2	4	3	
e26	5	3	2	4	1	
e27	5	1	2	4	3	
e28	5	1	2	4	3	
e29	5	1	2 2 2 2 2 2 2 2 2 2	4	3	
e30	5	1	2	4	3	
Total:	1	50	34	65	117	84
Average:		5	1.13	2.1	3.9	2.8

1. (pr	efere	nce) : Cultural (Exhibition hall, Dance studio)
2. (	"	) : <b>Community</b> (Library, Nursery)
3. (	"	): <b>Office</b> (Tourism information office, Architectural office)
4. (	"	) : Commercial (Store, Restaurant, Café)
5. (	"	): Residential (Home)

## Public Opinion Survey Result of Residents for:

#### The Church of St. Anne

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	Е	
e1	5	1	3	2 4	4	
e2	5	1	3	4	2 3	
e3	5	2	1	4		
e4	5	1	3	4	2 3	
e5	5	1	2	4	3	
e6	5	1	2 2 2 4	4	3	
e7	5	1	2	4	3	
e8	5	1		3	2	
e9	5	1	4	2	3	
e10	5	1	2	4	3	
e11	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4	1	3	3 2 3 3 2 3	
e12	5	1	2 2 2 4	4		
e13	5	1	2	4	3 3	
e14	5	1	2	4	3	
e15	5	1		2	3	
e16	5	1	2 4	4	3	
e17	5	1		2	3	
e18	5	1	3	2	4	
e19	5	1	3	4	2	
e20	5	1	3	2 3	4	
e20 e21 e22 e23 e24	5	1	2	3	4	
e22	5	1	3	4	2	
e23	5	1	2	4	3	
e24	5	1	3	2	4	
e25	5	1	2	4	3	
e26	5 5	1	2	4	3	
e27	5	1	2	4	3	
e28	5	1	2	3	4	
e29	5	1	3 2 3 2 3 2 2 2 2 2 2 2 2 2 2	3	4	
e30	5	1	2	4	3	
Total:	1	50	34	77	101	91
Average:	_		1.13	2.5	3.3	3.03
11101020.		5	1.15	2.5	5.5	5.05

1. (prefere	ence): Cultural (Exhibition hall, Dance studio)
2. ( "	): <b>Community</b> (Library, Nursery)
3. ( "	): Office (Tourism information office, Architectural office)
4. ( "	): Commercial (Store, Restaurant, Café)
5. ( "	): Residential (Home)

# Interpretation of Historical and Architectural Space Analysis of Church of St. Anne and Recommendations

Today, this church is known as Maronit Kilise (Maronite Church), but there is no historical information about the church under this name. Enlart (1987) mentions the names of St. Anne's or Maronite church from an inscription which unfortunately, the date at the end is no longer legible, making it impossible to determine the exact date of its creation. It was built in the early 14<sup>th</sup> century and it is likely that it formed a part of a monastery and it is adjoined to the Nestorian church which shows it was built in the Syrian Quarter. This church can be restored with certainty in the manner proposed [Enlart, (1987)].

This building is one of the best examples of Southern French Gothic Style Architecture and was built in the 13<sup>th</sup> century. It is constructed completely with finely-cut ashlars masonry, the building has a good structural system which is present today and the maintenance of the building is good. The width of the building is approximately 8 meters and its height is approximately 9 meters. The density of the building is simple.

The geometrical building structure is simple, it consists of 2 cube- spaces and 1 half hexagonal prism space and the roof is constructed by a cross vault. The building has one main door in the west front and 2 side doors in the south and north part of the building. This building has 5 large pointed windows and 3 small pointed windows. There is much natural light within the building giving it a wide and bright interior. This church has no present function. This church includes several values, which were analyzed in the previous chapter, the Emotional values: (wonder, identity, spiritual and symbolic). The historical values (historic, aesthetic and symbolic, architectural) and the last one the use values: (functional, economic, social) these churches include all these values. This monument is not re-functioned most probably because of its location in the Walledcity. This building is small but it is high enough to make a mezzanine floor in it. This building is closed nowadays and no entrance is permitted.

The historical analysis and architectural space analysis lead the study to recommend new functions for this church which are related to the conservation values of this historical building. The historical buildings must preserve their cultural uniqueness for the future and in this sense; this building must be alive with the community. The functions that will be suggested for this historical building related with its architectural characteristics are public functions therefore, residential functions are not proposed. The cultural functions that would be recommended for these churches are Exhibition hall and art studio, or Art center or Dance studio. Community functions that would be recommended are Library. Office functions supported by a commercial function are Tourism Information office and souvenir shop.

The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. In cultural function both groups would prefer an Exhibition hall, Dance studio and Museum and their second preference for a community function was, Library, Nursery. The Third preferences of both groups were Tourism information office and Architectural office which reflect the office function. However when the first preferences of public opinions were taken into consideration, Exhibition hall function is not appropriate for this church because this church has a limited space for being Re-functioned as an exhibition hall, however with the creation of a mezzanine floor it could be done. The Nursery function is also not an appropriate function for this church because Nurseries needs soft space and this soft space can be opposite to conservation values of this historical building. The public opinions sometimes may not give the answers you are looking for sometimes for example the people prefer office function in third preference. The historical and architectural analyses show that commercial function can be better for this church which was the fourth preference of the public.

New re-functioning opportunities for the Church of St. Anne are handled together with the other potentials surrounding this building such as the Dabble Drains and children playgrounds. Its own architectural and historical characteristics, together with the public opinion survey led the study to propose functions such as an Art studio, Dance studio, or Library. The parallel walls and effective texture on these walls show that an Art studio function can be an appropriate function for these churches. These buildings were created by parallel cube spaces and covered with cross vaults so in this sense a Dance studio can also be an appropriate function for these buildings. The Dance studio can serve for the continuity of traditional dances of Cyprus and at the same time can introduce world dances to the island by dance courses and performances. The Library function that would be collecting the researches specially focusing on Cyprus Studies can help people to experience the spatial qualities of this building and at the same time would serve for both locals and tourists.

Table 16: Historical Analysis of The Tanne	er`s Mosque
--------------------------------------------	-------------

Cable 16: Hist     CH	torical	-				f The Tanner`s M				
6		П	istor	ical Analys	as oi	I The Tanner's M	iosqi	le		
Data recorded:	30/06/	2010				Building name: THE TANNER`S MOSQUE				
Addresses: A	li pash	a street				Construction date	e/peri	iod: 14 <sup>th</sup> co	entury	
Map Section no:	XXXIII	,4,5,IV	Р	lot no: 546		Architectural sty	le: G	othic		
Current Function	on: Wi	thout fu	nctio	n		Building materia	l: He	wn sand si	tone	
						Values				
Emotional	wond	or	+	identity	+	continuity	+	spiritual	and symbolic	+
values	wond		Ŧ	-	т		Ŧ		-	Ŧ
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	+
	archit	ectural	+	Townscape	, lan		+	Technolo scientific	gical and	+
Use values	functi	onal	+	ecological economic	+	social	+		and ethnic	+
	I			Mainte	enar	ice Condition	1	1		1
		Structu	ral	External		Upper	Intern	ıal	Ornamental	
		System		structure			struct		Element	
Very good	А									
Good	В	х		х					х	
Poor	С					X	х			
Ruined destroyed										
Repairs in	E									
Photo date: 15/		0								
NORTH ELEV	VATIO	N				SOUTH ELEVA	TIO	N		
								1 A		
EAST ELEVA	TION					SITE PLAN				
						mian rth St. Mary of Carmel	Tenner's Mosque			

Architectural Analysis of the Tanner's Mosque								
Building Name: THE TAI	NNER`S MOSQUE	Inventory No:6						
	Drawing Doc	umontations						
Plan	Section	Elevation	Photo					
Spatial definition	Depths of space	Densities of	of space Geometry of space					
space								
		ning elements	<u>a</u>					
Floor	wall		Ceiling					
		s of space						
Windows	Doors		Natural Lighting					

 Table 17: Architectural Space Analysis of the Tanner`s Mosque

## **Public Opinion Survey Result of Tourists for:**

### The Tanner's Mosque

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	Е	
e1	5	1	2	4	3	
e2	5 5	1	2	3	4	
e3	5	1	2	4	3	
e4	5	1	2	4	3 3	
e5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4	3	
e6	5	1	2	4	3	
e7	5	1	2	4	3	
e8	3	1	2	4	5	
e9	5	1	2	4	3 5 3 2 2 2 2 3 3 3 3 3 3 3 3	
e10	5	1	3	4	2	
e11	5	1	3	4	2	
e12	5	1	3	4	2	
e13	5	1	2	4	3	
e14	5	1	2	4	3	
e15	5	1	2	4	3	
e16	5 5	1	2	4	3	
e17	5	2	1	4	3	
e18	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 2 1	4	3 3	
e19	5	1	2	4	3	
e20	5	2	1	4	3	
e21	5	1	2	4	3	
e22	5	1	3	4	2	
e23	5	1	2	4	3	
e24	5	1	2	4	3	
e25	5	1	2 3 2 2 2 2 2 3 2 2 2 2 2 2	4	2 3 3 3 3 2	
e26	5	1	2	4	3	
e27	5	1	3	4	2	
e28	5	1	2	4	3	
e29	5	1	2	4	3	
e30	5	1	2	4	3	
Total:		148	32	63	119	88
Average:		4.9	1.06	2.1	3.96	2.8

1.	(pro	efere	ence) : Cultural (Exhibition hall, Dance studio)
2.	(	"	): <b>Community</b> (Library, Nursery, Church)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

## Public Opinion Survey Result of Residents for:

### The Tanner's Mosque

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	Е	
e1	5	2	3	4	1	
e2	5 5	2 1	2	4	3	
e3		1	2 3	4		
e4	5	1		4	2 3	
e5	5	1	2 4		3	
e6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	3	2 2	4	
e7	5	1	3 3 2 3	2 4	4	
e8	5	1	2		3	
e9	5	1	3	4	2	
e10	5	1	2	3 3	4	
e11	5	1	4	3	2 2	
e12	5	1	4	3	2	
e13	5	1	3 3 5 2 4	4	2	
e14	5	1	3	2 1	4	
e15	3	2	5		4	
e16	5	1	2	4	3	
e17	5	1	4	2 4	3	
e18	5	1	2 2 2		3	
e19	5 5 5	1	2	4	3	
e20	5	1	2	4	3	
e21	5	4	1	3	2	
e22 e23	5	1	2	4	3	
e23	5 5 5 5 5 5	1	4	2	3	
e24	5	1	4	3	2 3	
e25	5	1	2	4	3	
e26 e27	5	1	2	4	3	
e27	5	1	2 2 2 3	4	3	
e28	5	1	3	4	3 3 2 3	
e29	5	2 1	1	4	3	
e30	5	1	2	3	4	
Total:		148	36	71	99	88
Average:		4.9	1.2	2.3	3.3	2.9
11,01450.			±•#	2.5	5.5	2.7

1.	(pr	efere	ence) : Cultural (Exhibition hall, Dance studio)
2.	(	"	): <b>Community</b> (Library, Nursery)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	) : Residential (Home)

# Interpretation of historical and Architectural space analysis of Tanner's Mosque and Recommendations

Because of the clumsy architecture of the church it is impossible to determine who the church was built by, which was either by the Latin, Greeks or Armenians. The church has a mixture of styles which point to all these cultures, the church is a peculiar example of a mixture of French and Aragonese Gothic art with a touch of Byzantine and also there are some elements which are similar to buildings in Armenia [Enlart, (1987)].

This building is another example of French Gothic Architecture of the 14<sup>th</sup> Century. It is located just at the north of St. Anne Church where it is possible to see a very small polygonal apse which is incorporated in a rectangular form at the east end. It is formed by three straight walls. It also has a girder vault which is supported by four columns. The building has a good structural form present today and the building's maintenance is in good condition. The width of the building is approximately 9 meters and its height is approximately 6 meters. The density of the building is simple.

The geometry of the building is simple; it consists of 2 cube spaces and 1 half hexagonal prism space. The roof is constructed by a cross vault. The building has 1 main door in the west front, and 2 side doors in the south and north sections. This building has 5 medium pointed windows and 1 small pointed window. The natural lighting of the building is not very effective and the building has a dark interior. This building has no present function. This church includes several values, which were analyzed in the previous chapter, the Emotional values: (wonder, identity, spiritual and symbolic). The historical values (historic, aesthetic and symbolic, architectural) and the last one the use values: (functional, economic, social) these churches include all these values. This monument carries low re-use potentials because of its position in the Walled-City. This building is too small and entrance is not permitted.

The historical analysis and architectural space analysis lead the study to recommend new functions for this church which are related to the conservation values of this historical building. The historical buildings must preserve their cultural uniqueness for the future and in this sense; this building must be alive with the community. The functions that will be suggested for this historical building related with its architectural characteristics are public functions therefore, residential functions are not proposed. The cultural functions that would be recommended for these churches are Exhibition hall and art studio, or Art center or Dance studio. Community functions that would be recommended are Library. Office functions supported by a commercial function are Tourism Information office, souvenir shop and Café.

The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. In cultural function both groups would prefer an Exhibition hall, Dance studio and their second preference for a community function was, Library, Nursery but there was some differences between residential and tourist opinions in their choices, the tourists preferred a religious function for this church such as church. The Third preferences of both groups were Tourism information office and Architectural office which reflect the office function. The first preference of the public was an Exhibition hall but it is not appropriate for this church because this church has a limited space for Re-functioning into an Exhibition hall. The Nursery function is also not an appropriate function for this church because Nursery function needs soft space and this soft space can be opposite to conservation values of this historical building. The historical and architectural analyses show that commercial function can be better for this church which was the fourth preference of public opinion.

New re-functioning opportunities for Tanner's Mosque are handled together with the other potentials surrounding this building such as the dabble drains. Its own architectural and historical characteristics, together with the public opinion survey led the study to propose functions such as a Café, a Souvenir shop, a Tourism information office. This building includes two cubic spaces with parallel walls which are covered with cross vault and it has a wide and bright interior space. In this sense, the first recommendation for this church would be a Café or Souvenir shop. This function would provide service to the Famagusta rehabilitation center which is next to this building. The Second function that would help to attract tourists and residents to this part of the Walled-City is a Tourism information office or Architectural office.

#### Table 18: Historical Analysis of the Church of Stavros

СН	CH Historical Analysis of The Church of Stavros									
7 Data recorded:	20/0	C/2010				~				
Data recorded:	30/00	6/2010				Building name: STAVROS				
Addresses: L	ala M	ustafa pash	a stre	et		Construction da	te/peri	iod: Nearl	y 14 <sup>TH</sup> Century	
Map Section no:	XXXI	II,4,5,IV	Pl	ot no: 799,798	,	Architectural sty	yle: F	Ialf gothic		
Current Function	on: N	Mosque				Building materia	al: He	wn sand s	tone	
					V	alues				
Emotional values	won	ıder	+	Identity	+	Continuity	+	spiritual	and symbolic	+
Cultural values	doci	umentary	+	Historic	+	Archaeological age and scarcity	+	aesthetic	and symbolic	+
	arch	itectural	+	Townscape ecological	e, lai	ndscape and	+	Technolo scientific	gical and	+
Use values	func	ctional	+	Economi c	+	Social	+		and ethnic	+
	I		1	-	nar	ce Condition	1	1		1
		Structura	1	External		Upper	Intern		Ornamental	
V	<b>.</b>	System		Structure		structure	struct	ure	Element	
Very good Good	A									
	B	X		Х		X	Х		X	
Poor Ruined	C D									
destroyed	D									
Repairs in	Е									
Photo date: 15/	03/20	10		•					•	
WEST ELEVA						SOUTH ELEVA	ATION	V		
<section-header></section-header>						SITE PLAN		Aurch of A		

	nitectural Space Analy			
Building Name: THE CH	URCH OF STAVROS	Inventory No:7		
	Drawing Doc	cumentations		
Plan	Section	Elevation/Faça	de	Photo
Spatial definition	Depths of space	Densities of	of space	Geometry of space
space			7	
		ning elements		
Floor	Wall	_	Ceiling	5
		s of space		
Windows	Doors		Natural	l Lighting

 Table 19: Architectural Space Analysis of the Church of Stavros

## **Public Opinion Survey Result of Tourists for:**

#### The Church of Stavros

A: Residential B: cultural C: community D: commercial E: office

Options:	A	В	С	D	E	
e1	5	1	2	4	3	
e2	5 5	1	2	4	3	
e3	5	1	3	4		
e4	5	1	2	4	2 3	
e5	5	1	2	4	3	
e6	5	1	2	4	3	
e7	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 2 3 2 2 2 2 2 2 2 2 2 2 2 1	4	3 3 3 3 3 3	
e8	5	1	2	4	3	
e9	5	1	2	4	3	
e10	5	1	2	4	3	
e11	5	2		4	3	
e12	5	1	2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4	3	
e13	5	1	2	4	3	
e14	5	2	1	4	3	
e15	5	1	2	4	3	
e16	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2	4	3	
e17	5	1	2	4	3	
e18	5	1	2	4	3	
e19	5	1	3	4	2	
e20	5	1	3	4	2	
e21 e22 e23 e24	5	1	2	4	2 2 2 3 3 3	
e22	5	1	2	4	2	
e23	5	2	1	4	3	
e24	5	1	2	4	3	
e25	5	1	2	4	3	
e26	5 5	1	2	4	3 3	
e27	5	1	2	4	3	
e28	5	1	2	4	3	
e29	5	1	2	3	4	
e30	5	1	2	4	3	
Total:		150	33	60	119	88
Average:		5	1.1	2	3.9	2.9
i i orugo.		5		-	5.7	2.7

1.	(pre	eferen	ce) : Cultural (Exhibition hall, Dance studio)
2.	(	"	): <b>Community</b> (Library, Nursery, Church)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

## **Public Opinion Survey Result of Tourists for:**

#### The Church of Stavros

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	Е	
e1	5	2	1	4	3	
e2	5 5	2 1	2	4	3	
e3	5	1	3	2	4	
e4	5	1	3	4	2	
e5	5	1	2	4	2 3	
e6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	3 2 2	4	3	
e7	5	1	4	3 2	2 3 3 2 2 3	
e8	5	1	4	2	3	
e9	5	1	2 2 1	4	3	
e10	5	1	2	4	3	
e11	5	3		4	2	
e12	5	1	3 2 2 4	4	2	
e13	5	1	2	4	3	
e14	5	1	2	4	3	
e15	5 5 5 5 5 5 5 5 5 5 5 5 5	1		2 4	3	
e16	5	1	2 4	4	3	
e17	5	1		2 2 3 3 3	3	
e18	5	1	3	2	4	
e19	5	1	4	3	2 2	
e20	5	1	4 2 3 2 3	3	2	
e21	5	1	2	3	4	
e22 e23 e24	5	1	3	4	2 3	
e23	5	1	2	4 2 3	3	
e24	5	1	3	2	4	
e25	5 5 5	1	4	3	2 3	
e26	5	1	2	4 2 4	3	
e27	5	1	4	2	3	
e28	5	2	1		3	
e29	5 5	2 1	1	3	4	
e30	5	1	2	4	3	
Total:	1	50	36	77	110	87
Average:		5	1.2	2.5	3.6	2.9
					•	

1.	(pr	efere	nce) : Cultural (Exhibition hall, Dance studio)
2.	(	"	): <b>Community</b> (Library, Nursery, Church)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

# Interpretation of Historical and Architectural Space Analysis of the Church of Stavros and Recommendations

This church can be dated to the 15<sup>th</sup> century because all the elements and furniture inside of it is dated to this period of time. As stated by Enlart (1987), many of the elements found in the building can be seen in such buildings as Hautes Alpes, Franciscan church at Embrun, the choir at le Monestire, churches at Vallouise, les Vignaux and other examples in the backward regions of France.

This building has a unique architectural structure. It was built with a half-gothic style, it was built in 1571. The plan of this church is completely different from the other churches. One such difference is the spatial definition of the building, the main entrance of the building looks towards the south walls, and the apse of the building looks towards the north walls. The building presently has a good structural system and the maintenance of the building is good. The width of the building is approximately 9 meters and its height is 6 meters. The density of the building is simple.

The geometrical structure of the building is simple. It consists of 2 cube spaces and 1 half hexagonal prism space. The roof of the building is constructed by a cross vault. The building has 1 main door in the north section, and 2 side doors in the west and east sections of the building. This building has 2 pointed windows. The natural lighting is inefficient and therefore the building has a dark interior. The building is presently used as a mosque.

This church includes several values, which was analyzed in the previous chapter, the Emotional values: (wonder, identity, spiritual and symbolic). The historical values (historic, aesthetic and symbolic, architectural) and the last one the use values: (functional, economic, social) this church includes all these values. This church has a function that is already helping the building to maintain its values and giving the chance to experience the buildings spatial quality.

The historical analysis and architectural space analysis lead the study to recommend new functions for this church which are related to the conservation values of this historical building. The historical buildings must preserve their cultural uniqueness for the future and in this sense; this building must be alive with the community. The functions that will be suggested for this historical building related with its architectural characteristics are public functions therefore, residential functions are not proposed. The cultural functions that would be recommended for these churches are Exhibition hall and art studio, or Art center or Dance studio. Community functions that would be recommended are Library. Office functions supported by a commercial function are Tourism Information office, souvenir shop and Café.

The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. In their first choice was a cultural function as an Exhibition hall, Dance studio. The second preference of the public which was a community function were, Library, Nursery and there were some differences between the residential and tourist opinion in the second choice, the tourists preferred a religious function for this church such as church. The third preferences of the public were for a Tourism information office or Architectural office which is reflects an office function. The first preferences of the public for an Exhibition hall function is not appropriate for this church because this church has a limited space for it to be Re-functioned into a Exhibition hall.

New re-functioning opportunities for the Church of Stavros are handled together with the other potentials surrounding this building such as the shops and residential areas in this part of the city. Its own architectural and historical characteristics, together with the public opinion survey led the study to propose functions such as a Dance studio, Library, Nursery, Tourism information office or Souvenir shop. Therefore, the first function recommendations for this church would be a Tourism information office or Souvenir shop. Because this church has a dark interior space and the location of this building in the Walled-City lead us to suggest these functions would be the most appropriate ones for this building. The Second function recommended for this church would be a Nursery or Library. This church is used as a Mosque nowadays and the interior walls of this building are covered with plaster and this makes is a space with a soft interior and therefore this function would help the residents to use this historical building more frequently. The Third function recommended is a Dance studio, which is the cultural function that was the first preference of public.

Cable 20: Hist     CH	torical	•				ian Church The Armenian c	huro	hos		
8		п	stori	ical Analysi	15 01	The Armeman c	nurc	nes		
Decimation da	te: 30/	06/2010				Building name:	THE	ARMENIA	AN CHURCH	
Addresses: L	ala Mus	stafa pash	ia stro	eet		Construction dat 14 <sup>th</sup> century	e/per	iod: Erect	ted in about 13	35
Map Section no:	XXXIII	,4,5,IV	Р	lot no: 549		Architectural sty	le:			
Current Function	on: W	Vithout fu	nctio	on		Building materia	ıl: He	wn sand st	tone	
					Va	lues				
Emotional values	wond	er	+	identity	+	continuity	+	spiritual a	and symbolic	-
Cultural values	docur	nentary	+	historic	+	archaeological age and scarcity	+	aesthetic	and symbolic	-
	archit	ectural	+	Townscape ecological	, land		+	Technolo scientific	gical and	-
Use values	functi	ional	+	economic	+	social	+		and ethnic	-
			1	Mainte	enan	ce Condition				
		Structu System		External structure		Upper structure	Inte stru	rnal cture	Ornamental Element	
Very good	Α									
Good	B	x								
Poor Ruined destroyed	C I D			X		X	Х		X	
Repairs in	E E									
Photo date: 15/	03/201	0					1			
WEST ELEVA	ATION					SOUTH ELEVA		N		
							1	A DE LA DE L		
EAST ELEVA	TION					SITE PLAN				
	A set	TIN	2			Martinen Bastion	go	A IT		
		A Contraction of the second				Tunnel San Li Basti		Armenian Church St. Mr Carm		

#### •

	rchitectural Space Anal				
Building Name: THE A	RMENIAN CHURCH	Inventory No:8			
	Drawing Doo	cumentations			
Plan	Section	Elevation	Photo		
				the second second	
Spatial definition	Depths of space	Densities of	of space Geometry of	space	
space					
		ning elements			
Floor	wall		Ceiling		
		gs of space			
Windows	Doors		Natural Lighting		
	Í				

Table 21: Architectural Space Analysis of the Armenian Church

## **Public Opinion Survey Result of Tourists for:**

#### The Armenian Church

A: Residential B: cultural C: community D: commercial E: office

Options:	A	В	С	D	Е	
e1	5	1	2	4	3	
e2	5	1	2	3	4	
e3	5	1	2	4	3	
e4	5	1	2	4	3	
e5	5	1	2	4	3	
e6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4		
e7	5	1	2	4	3 3 3 3 3 2 2	
e8	5	1	2	4	3	
e9	5	1	2	4	3	
e10	5	1	2	4	3	
e11	5	1	3	4	2	
e12	5	1	3	4	2	
e13	5	1	2	4	3 3	
e14	5	1	2	4	3	
e15	5	1	2	4	3	
e16	5	1	2	4	3	
e17	5	2	1	4	3	
e18	5 5	1	2 2	4	3	
e19	5	1	2	4	3	
e20	5 5	2	1	4	3	
e21	5	1	2	4	3	
e22	5	1	2	4	3	
e23	5	1	2	4	3	
e24	5	1	2	4	3	
e25	5 5 5 5 5 5 5	1	2	4	3	
e26 e27	5	1	2	4	3 2 3	
e27	5	1	3	4	2	
e28	5	1	2	4	3	
e29	5	1	2 2 2 2 2 2 2 3 2 2 2 2 2 2	4	3	
e30	5	1	2	4	3	
Total:		150	32	61	119	88
Average:		5	1.06	2.03		2.9
riveruge.		5	1.00	2.05	5.7	2.7

1.	(pr	eferen	ce) : Cultural (Exhibition hall, Dance studio)
2.	(	"	): <b>Community</b> (Library, Nursery,)
3.	(	"	): <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	) : Commercial (Store, Restaurant, Café)
5.	(	"	): Residential (Home)

## Public Opinion Survey Result of Residents for:

#### The Armenian Church

A: Residential B: cultural C: community D: commercial E: office

Options:	А	В	С	D	Е	
e1	5	1	2	4	3	
e2	5	1	2	4	3	
e3	5	1	2 2 2 3 3	4	3	
e4	5	1	3	4	2 2	
e5	5	1	3	4	2	
e6	5	2	4	3	1	
e7	5	2 2 1	1	4	3	
e8	5		4	2 4	3	
e9	5 5 5 5 5 5 5 5 5 5 5 5	1	2 3		3 3 3	
e10	5 5 5 5 5 5 5 5 5	1	3	4	2 2	
e11	5	3	1	4	2	
e12	5	1	2	4	3	
e13	5	1	4	3	2	
e14	5	1	4	3 2	3	
e15	5	1	2	4	2 3 3 3	
e16	5	1	4	2	3	
e17	5	1	4	2	3	
e18	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	3	2 2 2 3	4	
e19	5	1	4 3 2 3 2 3	3	2 2 4	
e20	5	1	3	4	2	
e21	5	1	2	3		
e22	5	1	3	4	2 3	
e23	5	1	2	4		
e24	5	1	3	2 3	4	
e25	5	1	4		2	
e26	5	3	1	4	2 2 3	
e27	5	2	4	1	3	
e28	5	1	2	3	4	
e29	5 5	3	1	4		
e30	5	3 3	1	4	2 2	
Total:	1	50	41	80	99	84
Average:		5	1.36	2.6	3.3	2.8
riverage.		5	1.50	2.0	5.5	2.0

1.	(pre	ference	: Cultural (Exhibition hall, Dance studio)
2.	(	"	: <b>Community</b> (Library, Nursery)
3.	(	"	: <b>Office</b> (Tourism information office, Architectural office)
4.	(	"	: Commercial (Store, Restaurant, Café)
5.	(	"	: Residential (Home)

# Interpretation of Historical and Architectural Space Analysis of the Armenian Church and Recommendations

The identification of this church is confirmed by the Armenian inscriptions appended on all the paintings within the building. The Armenians have been in Cyprus since the middle of the 14<sup>th</sup> Century and during this time they built this modest and very extraordinarily structured church which the style suggests was built in the fairly late quarter of the 14<sup>th</sup> century. It was built in 1335, it was probably built shortly after their arrival to the island, and the modest and very unusual church style suggests this presumption. [Enlart, (1987)].

This building is the only mark left by the Armenian community within the Walled City. This building currently has a poor structural system and the maintenance of the building is also poor. The width of the building is approximately 8 meters and its height is approximately 6 meters. The density of the building is simple.

The geometrical structure of the building is simple. It consists of 1 cube space and 1 half cylinder space. The roof is constructed by a cross vault; the upper east part of the building contains an apse. The building has 1 main door in the west front and 2 side doors in the north and south sections. This building has 3 pointed windows. The natural lighting of the building is inefficient and it therefore has a dark interior. The building presently has no current function.

This church includes several values, which were analyzed in the previous chapter, the Emotional values: (wonder, identity, spiritual and symbolic). The historical values (historic, aesthetic and symbolic, architectural) and the last one the use values: (functional, economic, social) this church includes all these values. This monument carries low re-use potentials because of its position in the Walled-City. This building is too small for most of the public functions. Entrance is not permitted into this building.

The historical analysis and architectural space analysis lead the study to recommend new functions for this church which are related to the conservation values of this historical building. The historical buildings must preserve their cultural uniqueness for the future and in this sense; this building must be alive with the community. The functions that will be suggested for this historical building related with its architectural characteristics are public functions therefore, residential functions are not proposed. The cultural functions that would be recommended for these churches are Exhibition hall and art studio, or Art center or Dance studio. Community functions that would be recommended are Library. Office functions supported by a commercial function are Tourism Information office, souvenir shop and Café.

The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. Their first choice was a cultural function as an Exhibition hall or a Dance studio. Their second preference was for a community function in the form of a Library or Nursery. Third preference of the public was a Tourism information office or Architectural office which is reflecting an office function.

The cultural functions are not appropriate for this church because of its limited space. The historical analysis shows that this building is the single mark of Armenians in Walled-City Famagusta. The cultural and commercial function can mix in for this church. Wine has a great place in Armenian culture. The Armenian wine house can be an appropriate function for Armenian Church which would reflect the cultural value of the church.

New re-functioning opportunities for the Armenian Church are handled together with the other potentials surrounding this building such as The Church of St. Mary of Carmel which has deteriorated during the period of time. This historical building is the single relic left by the Armenians inside the Walled-City and the function that would be best recommended for this church must have a reflection on the culture of the Armenians. Its own architectural and historical characteristics, together with the public opinion survey led the study to propose functions such as an Armenian Wine house, Library or Tourism information office. The first preference of public was a cultural function and an Armenian wine house would reflect on the Armenian culture because Armenian people like to drink wine and take pride in this activity. The second function recommended would be a Tourism information office, which would attract tourists to this part of the Walled-City and by creating some space around this historical church it would be more attractive for the tourists, also. The Third function recommended is a Library, this historical building has limited space but it could be a small Library which includes books about Armenian culture.

### **Chapter 5**

### CONCLUSION

Historical heritage show and teach the future generations about previous cultures; therefore they must be preserved and taken care of. For future generations to have the chance that we have in our present day to learn from, these monuments have to be preserved. The Walled-City of Famagusta in North Cyprus is in the world heritage list of UNESCO and therefore must be preserved for future generations. The Walled-City contains an immense amount of important historical monuments, and within the walls it is possible to find 16 churches, all of which were very important for both previous and today's civilizations.

This thesis is aimed on evaluating the potential of re-functioning opportunities of historical churches in the Walled-City Famagusta and for the conclusion of this thesis, new functions are appropriately chosen for these churches after careful evaluation of them.

These churches have been separated into two groups, the preserved ones and the deteriorated ones. The deteriorated ones are not included in the analysis, because they primarily need reconstruction activities, whereas this thesis is based on the conservation and adaptive re-use potential of the eight churches which are still standing as a volume. This thesis tries to find the most suitable function which would suit the architectural and historical qualities of the buildings. These are the Cathedral of St. Nicolas, Church of St. Peter & Paul, Nestorian Church, Twin Churches,

Church of St. Anne, Tanner's Mosque, Church of Stavros and Armenian Church. The first three churches are larger in volume whereas the other five are comparatively smaller.

These functions are determined by the three categories of analyses in chapter 4. In addition to the analyses of the historical and architectural space potentials of the churches, a survey was held with both residents of Walled-City and the tourists to determine the ideas of the people about the re-functioning of the churches. After combining the results of the three analyses; historical, architectural, and public opinions, the most appropriate suggestions for the new functions of these churches are proposed.

The new functions suggested must be according to the contemporary conservation values and the architectural potential of these churches, otherwise the original qualities of these churches may be destroyed during the re-functioning process and apart from this; the function that will be recommended for these buildings are expected to be acceptable for the people who will use these historical buildings.

The results of historical analyses show that these churches include all conservation values which are emotional, cultural and use values. Therefore, all conservation values must be considered for all churches in new re-functioning suggestions. Re-functioning proposals are made for five churches which are Twin Churches, Church of St. Anne, Tanner`s Mosque, Church of Stavros and Armenian Church.

The historical analyses and architectural space analyses lead the study to recommend new functions for these churches which are related to the architectural space characteristics of these historical buildings. The historical buildings must preserve their cultural uniqueness for the future and in this sense; these buildings must be alive with the community. The functions that will be suggested for these historical buildings, related with their conservation values are public functions.

Famagusta's future development is expected to be based on a cultural heritage tourism oriented scenario. Since the Famagusta Walled-City bears high potential in the aspect of tourism, the opinions of tourists as well as the residents were very important. In this perspective the Public Opinion Survey was conducted with both the tourists and the residents.

The primary choices of both groups focused on cultural functions and the secondary functions were community functions and third ones were based on office functions.

The public opinion survey analyses show that, both residents and tourist preferences are parallel to each other. Their first choice was a cultural function as an Exhibition hall, Dance studio. The second preference of the public which was a community function were, Library, Nursery and there were some differences between the residential and tourist opinions in the second choice. The tourists preferred a religious function such as church. The third preferences of the public were for a Tourism information office or Architectural office which reflects an office function.

In this sense, new re-functioning opportunities for these historical churches have to be handled together with the other potentials surrounding these buildings. Their own architectural and historical characteristics, together with the public opinion survey led this study to propose functions for these unique and historical churches such as Exhibition hall, Dance studio, Art center and Art studio which reflect cultural functions. Library and Nursery which reflect the community function and Tourism information office which reflects office function. The last function recommendations for these historical churches are Souvenir shop and Café which reflect commercial functions.

The ideal functions for The Twin Churches are Exhibition hall and art studio, Dance studio, or Library. These buildings were created by parallel cube spaces and covered with cross vaults so in this sense a Dance studio can also be an appropriate function for these buildings. The Library function that would be collecting the researches specially focusing on Cyprus Studies can help people to experience the spatial qualities of this building and at the same time would serve for both locals and tourists.

However, the Exhibition hall function is not an appropriate function for The Church of St. Anne because of limited space of this church which was determined in pervious chapter. The appropriate functions for The Church of St. Anne can be such as such as an Art studio, Dance studio, or Library. The parallel walls and effective texture on these walls show that an Art studio function can be an appropriate function for this church. The height of this church is also suitable for creating a mezzanine floor in this church.

Another church which is near The Church of St. Anne is The Tanner's Mosque which is created by parallel cube spaces and covered with cross vaults. The appropriate functions for this church are a Souvenir shop, Café, Tourism information office because, this church have wide and bright interior space.

The appropriate functions for The Church of Stavros are Dance studio, Library, Nursery, Tourism information office or Souvenir shop. Therefore, the first function recommendations for this church would be a Tourism information office or Tourism Souvenir shop. Because this church has a dark interior space and the location of this building in the Walled-City lead us to suggest these functions that would be the most appropriate ones for this building.

The last church is The Armenian Church which is created with one single cube space and there is a deteriorated church surrounding this building as The Church of St. Mary of Carmel which has deteriorated during the period of time. This historical building is the single relic left by the Armenians inside the Walled-City and the function that would be best recommended for this church must have a reflection on the culture of the Armenians. The appropriate functions for this church are Armenian Wine house, Library for multi-cultural or Armenian sources or Tourism information office which can reflect the cultural activities of Armenian culture.

These scenarios can be developed according to the further upper scale development plans of Famagusta Walled-City. This study proposes some appropriate functions for the analysed churches to give an understanding how this architectural and historical analysis methods as well as the public opinion survey are used in the evaluation processes for the Re-functioning of historical churches.

The political uncertainty and financial situations and the most importantly the isolations on North Cyprus make the conservation of these historical churches difficult. If the historical monuments are important for all countries, and they must

convey to future all actors are expected to partake in the steps to conserve these buildings and make them to be alive with people.

The future studies on this subject are expected to develop more detailed models for the re-functioning of the historical churches within a holistic approach that is concerning the future development scenarios of Famagusta.

#### REFERENCES

Ahunbay, A.Z (2007) "Tarihi Çevre Koruma ve Restorasyon", İstanbul: YEM Yayın

Alsac, U(1992) "Turkiye'de Restorasiyon", Istanbul: Iletisim Yayinlari

- Altınay, M., Bıçak, H. ve Alipour, H. (1994), "Turizm'de Planlama ve Politikalar: KKTC Turizm Sektörü", 5. Ulusal Turizm Kongresi, Adnan Menderes Üniversitesi, İzmir, Türkiye
- Anon, (2007), "A two-factor method for appraising building renovation and energy efficiency improvement projects", Energy Policy 35 (2007) 192–201
- Anon, (2008) "Valuation of the historic environment: The scope for using economic valuation evidence in the appraisal of heritage-related projects" Progress in Planning, pp: 131–175

Asensio, P. (2007) "Renonating for Living", China, Loft Publishing Ltd.

- Asoobar. N, (2009) Acomparative assessment of the design approaches for the conversion of historic residential buildings, EMU, North Cyprus, Famagusta
- Aries. M. B.C, Newsham. G. R, (2007), "Effect of daylight saving time on lighting energy use", Canada, Elsevier, pp: 1858, 1866

- Bony, J. (1983) "French Gothic Architecture of the 12<sup>th</sup> and 13<sup>th</sup> centuries" Los Angeles, University of California Press Ltd.
- Cramer. J, Breitling. S, (2007) "Architectur in Existing Building", Switzerland: Birkhauser Verlag

Douglas. J, (2006), "Building Adaptation", Oxford, Elsevier.

Dahlke, R. (1992) "Mandalas of the World" New York, Sterling Publishing Co, Inc.

- Enlart. C, (1987), "Gothic Art and The Renaissance in Cyprus", London, Trigraph Limited.
- Feilden. B. M, Jokilehto. J, (1998) "Management Guidelines for World Cultural Heritage sites" Italy, ICCROM.
- Feilden. B. M, (1994) "Conservation of Historic Building", London: Reed Educational and Professional Publishing Ltd

Filden. B.M, (2005) "Conservation of Historic Building. Uk, Oxford.

- Folda, J. (2005) "Crusader art in the Holy Land: from the Third Crusade to the fall of Acre", New York, Cambridge University Press.
- Gruf. W. L, (1990) "Fluvial Dynamics of Thorium-230 in the Church Rock Event",Puerco River, New Mexico, Taylor & Francis, Ltd, on behalf of The

Association of American Geographers. Annals of the Association of American Geographers, Vol. 80, No. 3, pp: 327-342

- Gieeson. M.E, (1992) "Renovation of Public Housing" Management Science, Vol. 38, No:5. pp: 655-666
- Hamnett. C. (1993) "The church's Many Mansions: The Changing Structural of the Church Commissioners Land Property Holdings" Transactions of the Institute of British Geographers, Vol. 12. No: 4. Pp: 465-481

Jokilehto, J, (1999) "A History of Architectural Conservation", Italy, ICCROM

- Jokilehto. J, (2007) "World Heritage Conservation from values to management" Italy, ICCROM
- Jense. C.B, And Makuseen. R, (2001) "Marup Church and the Politics of Hybridization: On Complexities of Choice" Sage Publications, Ltd. Social Studies of Science, Vol. 31, No: 6, pp: 795-819
- Kiley. C. J, (2004), *Adaptive re-use of Churches*, Master in City Planning, Massachusetts Institute of Technology, Cornell Univercity
- Kidney. W. C, (1979), "The Adaptive Re-use of Industrial Building", American Antiquity, 44(1), 188-190

- Kuban. D, (2000) "Tarihi Çevre Korumanın Mimarlık Boyutu", İstanbul, YEM Yayın
- Kuban. D, (2001) "Turkiye'de Kentsel Koruma", Istanbul, Tarihi vakfi yurt yayinlari
- Krier. R, (1988) "Architectural Compsition", London, Academy Aditions
- Latham. D, (2000) " Creative Re-use of Buildings Volume1", London, Hardback Publication
- Latham. D, (2000) " Creative Re-use of Buildings Volume2", London, Hardback Publication

Lawson, B. (2003) "The Language of Space", London: Elsevier Ltd.

- M. Fitch. J, (1990). "Historical preservation", United kingdom, Donhead Ltd.
- Marconi, P, & D`Amato,C (2006). *"The venice charter Revisited"* Modernism and Conservation in the Past-war World,2<sup>nd</sup> International Congress of Architects and technicians of Historic Monuments, November 2-5, 2006, Venice, Italy
- Meiss. P. V, (1998) "Elements of Architecture from form to place", 29 west 35<sup>th</sup> street, Newyork, NY 1001
- Miller, S. & Schlitt, J. K. (1985) "Interior Space: Design Concept for Personal Needs", Preager Publishing

- Moffett. M, (2004) "A World History of Architecture", Laurence King Publishing Ltd.
- Okelly. E, (2007) "Conservation", London, Laurence King Publishing Ltd.
- Özturk. K, (1978) "Mimarlikta Tasarim Surecinde Cephelerın estetik Agirlikli SAYAL/Nesnel Değerlendirilmesi için bir yontem Araştirmasi" Trabzon: Karadeniz Matbaacilik ve Gazetecilik A.Ş
- Önal.Ş & Numan.I, (2002), " Tatihi Çevre Koruma ve Yaşatma", Mimarlik Eğitiminde Koruma, Doğan Kuban Semineri 2000, İstanbul, Çizgi Basım Yayın Ltd
- Powell. K, (1999) "Architecture Reborn", London, Laurence King Publishing
- Provins. A, Pearce. D, Ozdemiroglu. E, Mourato. S, Jones. S.M, (2008) "*The scope* for using economic valuation evidence in the appraisal of heritage-related projects" Economics for the environment consultancy Ltd. London, UK

Rengel, R. J. (2003) "Shaping Interior Space", Fairchild Publications

Scott, R. A. (2003) "The Gothic Enterprise: A Guide to Understanding the Medieval Cathedral", California: University of California Presses Ltd.

- Slater. T. R, (1984) "Preservation, Conservation and Planning in Historic Towns" Blackwell Publishing on behalf of The Royal Geographical Society, Vol: 150, No. 3. pp: 322-334
- Simith. E.A, AND Wishne.M, (2000) "Conservation and Subsistence in Small-Scale Societies" Annual Review of Anthropology, Vol: 29 (2000), pp: 493-524
- Schwarts. M.W, (1999) "Choosing the Appropriate Scale of Reserves for Conservation" Annual Review of Ecology and Systematic, Vol: 30, pp: 83-108
- Steele, J. (1992). Architecture for a Changing World: The Age khan Award for Architecture. Academy Edition Publishing
- The Athens Charter, (1996) First International Congress of Architects and Technicians of Historical monuments, Athens
- The Venice Charter, (1964) International Charter for the Conservation and Restoration of Monuments and Sites II International Congress of Architects and Historic Monument Technicians, Venice, (http://www.internat ional.icomos.org/e-venice.htm)
- Türker. Ö. O, And Dinçyürek. Ö, (2007) "Sustainable Tourism as an Alternative to Mass Tourism Developments of Bafra, North Cyprus" Open House International. Vol:32, No:4, p: 108

Tuan, Y. (2003) "Space and Place", Minneapolis: Minnesota Press.

- URL1, (n.d) "Coolboom" http://www.coolboom.net, (visited on 08/05/2009)
- URL2. (n.d) "st. George of Latins Church" http://www.cyprus44.com (visited on 15/05/2009)
- URL3. Heritage United Nations, (2009) "http://whc.unesco.org/en/list" UNESCO World Centre, Updated 11 Aug 2010

Unwin. S, (1997) "Analyzing Architecture", USA, Routlished

Wang. H. J , Zeng, Z. T, (2010) "A multi-objective decision-making process for reuse selection of historic buildings", A multi-objective decision-making process for reuse selection of historic buildings, Taiwan

Wilkinson. J, (2002), "From Synagogue to Church", London, Routledge Curzon