Comparative Analysis of the Conservation of Various periods of Architecture in the Walled City of Famagusta

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ABSTRACT

The Walled City of Famagusta is a multi-layered city of several socio-cultural and architectural heritages, from various stratus of time, each strata contributing to the richness of the historic city of Famagusta. The evidence of the several layers of architecture can be seen all within the city. To sustain this multi-layered architectural richness, the conservation of these layers of architecture for future generations is vital. To conserve these periods of architecture in the Walled City of Famagusta requires exploration of varying conservation approaches that are internationally valid to provide guidelines for adaptive reuse purpose. The focus of this thesis is to discuss conservation approaches through adaptive reuse for some selected buildings located within the Walled City of Famagusta. Adaptive reuse, as undertaken within this thesis, does not just change the program or function of the spatial environment, but may also prolong the authenticity of cultural and natural heritage of the place. Therefore, the main focus here is to shed some light on conservation of the authentic qualities of heritage buildings while at the same time assigning new uses considering contemporary needs of the users.

The core aim of this thesis to provide a foundation for the documentation and appreciation of several architectural conservation approaches for selected periods of architecture in the Walled City of Famagusta and to provide guidelines for efficient conservation through adaptive reuse that is peculiar to selected buildings which are internationally sound. This was to answer the research question which is “what are the various internationally valid architectural conservation approaches that can be adopted for selected architectural products of different periods in the Walled City of

Famagusta?" The bases of this thesis are adopted and evaluated through five case studies from the Walled City of Famagusta, which represents various periods of architecture; they are Chimney House, Cafer Pasha Hammam, Old Police Station, Gazi Elementary School and Efecan Building Complex. To achieve the aim of this thesis a Qualitative research methods are adopted through document review of case studies and on-site investigation, and also a critical literature reviews on these topics; Architectural conservation, adaptive reuse, international documents of conservation, authenticity, space, current agenda of conservation, current legal legislation of conservation in North Cyprus. Authenticity measurements stated by the Nara Document on Authenticity are detailed to extract the authentic spatial qualities of the case studies and accordingly proposals are anticipated for the future of these spaces, based on the analysis.

The results of this research shows the peculiarity of the various periods of architecture in the Walled City of Famagusta, with guidelines towards conservation through adaptive reuse and the international conservation principles and charters that can be adopted to meet the peculiar needs of each selected period of architecture.

Keywords: Adaptive Reuse, International Documents of Conservation, Space, Authenticity, Walled City of Famagusta

ÖZ

Surlarla çevrili olan Mağusa, çok katmanlı bir tarihi geçmişe, birçok sosyo-kültürel ve mimari mirasa sahip olan bir kenttir. Kentin zenginliğine katkıda bulunan çeşitli mimari katmanlar, kentin mevcut çevreleri ve mekanları içerisinde görülebilmektedir. Bu çok katmanlı mimari dokuyu sürdürmek, ve gelecek nesillere taşıyabilmek adına korunması önem arz etmektedir. Surlarla çevirili Mağusa kentinin, mevcut mimari zenginliğin korunabilmesi için de uluslararası geçerli çeşitli koruma yaklaşım kılavuzlarının araştırılması önemli ve gereklidir. Bu tezin amacı, Mağusa Suriçi Bölgesi'nde bulunan bazı seçilmiş binalar için yeniden kullanım yoluyla koruma yaklaşımlarını tartışmaktır. Yenileme (uyarlamalı yeniden kullanım), bu tez kapsamında anlaşıldığı şekliyle, sadece mekânsal çevrenin programı veya işlevini değiştirmez, aynı zamanda mekanın kültürel ve doğal mirasının özgünlük değerlerini de koruyup geleceğe taşınmasına yardımcı olabilir. Bu nedenle, buradaki ana odak, miras binalarının özgün (otantik) niteliklerinin korunmasına ışık tutmak ve aynı zamanda yapıların mekansal ve çağdaş ihtiyaçları da göz önünde bulundurarak yeni kullanımlar sağlamaktır.

Bu tez çalışmasının temel amacı, Mağusa Suriçi'nde belirli mimari dönemler için çeşitli mimari koruma ve yaklaşımlarının tanımlanması ve değerlendirilmesi için bir alt yapı sağlamak; ve uluslararası ses getirmiş binalarına özgü ise yeniden kullanım yöntemiyle, koruma kılavuzu sağlamaktır. Bu bağlantıda, Mağusa Sur İçi'nde yer alan, farklı dönemlere ait mimari ürünler için uygulanabilecek uluslararası geçerli mimari koruma yaklaşımlarının neler olduğu sorusuna cevap aranmıştır. Tezin amacı doğrultusunda, çeşitli mimari dönemleri temsil edecek şekilde beş farklı örnekle;

Şömüneli Ev, Cafer Paşa Hamamı, Eski Polis Karakolu, Gazi İlkokulu, ve Efecan Sitesi'nde alan çalışması yapılmıştır. Bu amaçla, nitel bir araştırma yöntemi benimsenmiş, alan çalışmaları ve saha içi incelemelere dokümanlar oluşturulmuş; eleştirel bir literatür taraması ile mimari koruma, uyarlanabilir yeniden kullanım, uluslararası koruma belgeleri, özgünlük, mekan, mevcut koruma gündemleri, ve Kuzey Kıbrıs'ta mevcut yasal koruma mevzuatları irdelenmiştir. Nara Özgünlük Belgesi tarafından belirtilen orijinallik (otantiklik) ölçümleri, vaka çalışmalarının özgün mekânsal niteliklerini ortaya çıkarmak için detaylandırılmıştır ve buna bağlı olarak analizlere dayanarak bu alanların geleceği için öneriler sunulmuştur.

Bu yapılan araştırmanın sonuçları, Mağusa Suriçi'ndeki çeşitli mimari dönem özelliklerinin, uyarlanabilir yeniden kullanım yoluyla korunmasına yönelik prensipleri; ve alan çalışmasında seçilen binaların özgün ihtiyaçlarının tespiti ve karşılanması için uluslararası koruma ilke ve tüzüklerinin uyarlanabileceğini bir yol izlemiştir.

Anahtar kelimeler: Yenileme (Uyarlanabilir Yeniden Kullanım), Uluslararası Koruma Belgeleri, Mekan, Özgünlük, Mağusa Suriçi

DEDICATION

To my Family

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INTRODUCTION

1.1 Background of the Study

Cultural heritage is an irreplaceable surviving treasure of humanity. The UNESCO's World Heritage Convention underlines that the knowledge and the historical continuity through time is being created by heritage. Cyprus Island hosts many important architectural heritages. Among the islands of the Mediterranean, the island of Cyprus is the third largest, found at a crossroads among three continents, Africa, Europe and Asia; its geographic location has contributed to the island's turbulent history. Around 3500 years ago, the island prehistoric age occupants were joined by the Mycenaean Greeks after which other cultures like Phoenicians, Assyrians, Franks, Venetians, Ottomans, and British joined, thereby leaving tangible cues of their occupation (URL 1, Luke, 1965, UNESCO, 1972).

At the north-eastern coast of the island which is about 510km from Syria (URL 2) is a city called Famagusta or Gazimağusa in Turkish, a major port down, which has the deepest harbor in Cyprus. The city of Famagusta was transformed from a small shipping village to one of the richest cities in the Mediterranean, in 1291, with the coming of Christian refugees running from the downfall of Acre in Palestine; Genoa in 1372 seized the port, which was later seized by the Venetians in 1489. Famagusta was made the capital of Cyprus by the Venetian, which made them to remodel the city and improve the fortifications of the city (URL 3); as a result of Famagusta's

port being of the great significant shipping route, the city hosted several cultures, which had an immense impact on the fabric of the City of Famagusta and the island in general. The urban fabric of the town was geared towards the social wellbeing of the rich; this is evident in the organization of the activities which was focused upon the Lusignan palace, the square, the harbor and the cathedral (Lords, 2002). With the beginning of Ottoman rule in 1571, Some building were given different functions, to meet the needs of the inhabitants of the walled city (Ahmert, 1990); With the change of the Administrative government of the island at each particular period, so as the change in the socio-cultural activities of the island were seen (even in the Walled City of Famagusta). These socio-cultural changes are shreds of evidence in the various periods of Architecture existing in the Walled City. The form and structure of the buildings, the materials, and the construction methods adopted clearly show the various architectural products in the fortified city. Even the characteristics of interior architecture of these varying periods, which include space organization, function, materials and finishes, openings, the geometric and volumetric composition of the form, are distinct. The distinctness in the way of life and also the design styles that covers several building typologies, with the unique interior and exterior configuration has served as evidence to socio-cultural activities of the people in the Walled City of Famagusta thereby providing the City with an identity and historic heritage. So it is imperative to conserve these various buildings in which have been left to dereliction for numerous reasons. The sustaining of these various building in which their primary function is obsolete might be the generations of the future (Mısırlısoy and Günçe (2016), Brooker and Stone (2004), Plevoets (2014) argued that instead of demolishing the building of significance they would be conserved because they are footprints of the peoples' economic and socio-cultural lifestyle that

lived in the building. The conservation of the buildings has been championed various individuals and organizations with changing agendas to tackle that several challenges they faced at each particular period starting from the 19th century, from Viollet-le-Duc (1819-79) and Ruskin (1819-1900), where Vollet-le-Duc focuses on restoring the buildings back to their original design through liberation of any extension or changes through time. Whereas Ruskin advocated keeping the historic structures as they are, to preserve the authenticity; To Ruskin's pupil William Morris (1834-96) who found the Society for the Protection of Ancient Buildings (SPAB) in 1877 advocates against "harmful restoration" in buildings and advices a non-touch approach (Plevoets, 2014).

According to international conventions and charters of the 20th century especially the Athens Charter (1931), the Venice Charter (1964), ICOMOS (1965), DOCOMOMO (1990) and UNESCO Convention (1972), Burra Charter (1981), Nara Document (1994), Faro Convention (2005), Valletta Principles (2011) various other charters have the objectives, to the rise in global concern for awareness in the built heritage and its sustainable conservation for the future.

The agenda of conservation in Famagusta can also be traced through its legal regulations of a country. Basarir (2018) argued that to understand the way a nation develop its perception of heritage conservation can be through the examination of the legal regulation of the country is necessary

According to Australia ICOMOS, UNESCO (2013) cultural significance can be said to be social or spiritual, historic, aesthetic and scientific values of the past, present or

future generations, which is incorporated in the place itself; use, setting, its fabric, associations, related objects, records and related places for the buildings significance to be conserved, it is important that an in-depth analysis of the building to be conserved, in order to comprehend the various lines of action. This is so also for the buildings inside the Walled City of Famagusta, which are of varying periods and would require specific approaches towards their conservation. The analysis of the buildings would be in agreement with current conservation agenda of the country and with the internationally accepted documents of conservation of the world in general. This would look into the form and structure, historical and functional factors, context and environment in addition to their proposed functions. This approach would prevent the engagement of one approach for the various period of Architecture, in turn, preserving several historic contexts of each particular building.

For this purpose this research focuses on an area in the Walled City of Famagusta, where it involves various architectural products of different periods. The research will discuss varying approaches for the conservation of different periods of architectural products.

1.2 Problem Statement

The significant of conservation through Adaptive reuse cannot be overemphasized; conservation of buildings or spatial environment through Adaptive reuse is critical for the society provide a path to connect the past, present, and future, considering the Walled City of Famagusta is rich and diverse period of Architecture is an evidence of the previous inhabitants of the City. But to adapt this building it is of essential that the right conservation approach which is special for each building is applied. For the right application conservation approach peculiar to a building, the analysis of the

building has to be done. The reading of each particular building would provide an answer to the question that might arise during the conservation process. In the Walled City of Famagusta, there is a lack of conservation guidelines for each particular period of architecture, leading the inhabitant to conserve as they see fit and sometimes leaving the building to dereliction. There is also a lack of up-to-date vision learned from the international conservation platforms where it is advisable to conserve various Architectural periods.

1.3 Research Questions

The main research question is:

- What are the various internationally valid architectural conservation approaches that can be adopted for varying architectural periods in the walled city of Famagusta (in the selected area)?

The sub-questions that will be extracted through the literature review are:

- What are the characteristics of various Ethics of conservation that are critical to conservation process, specified according to the periods of conservation and style?
- What are the various international platforms for conservation and their current agenda for conservation?
- What are the legal regulations for conservation in the Walled City of Famagusta?
- What are the several Analytical tools required for evaluation of a building?

1.4 The Aim of the Study

Building on the bases of the problem statement, which identifies a research gap in architectural conservation approaches for varying periods of architecture and also lacking an up-to-date vision of international conservation platforms; Due to above the aim of this thesis is to provide a base for the appreciation and documentation of

various Architectural conservation approaches for varying periods of architectural products and to provide a guideline in that sense in the Walled City of Famagusta.

1.5 Methodology

In line with the aim of the study and research questions, the methodology would be divided into the following parts;

- First a review of literature such as articles, conference proceedings, books, webpages, published thesis and other relevant materials; to evaluate the theoretical background of topic under review (Adaptive Reuse, International Documents of Conservation; Space; Authenticity; Walled City of Famagusta) which would provide a base to achieve the aim of the study.

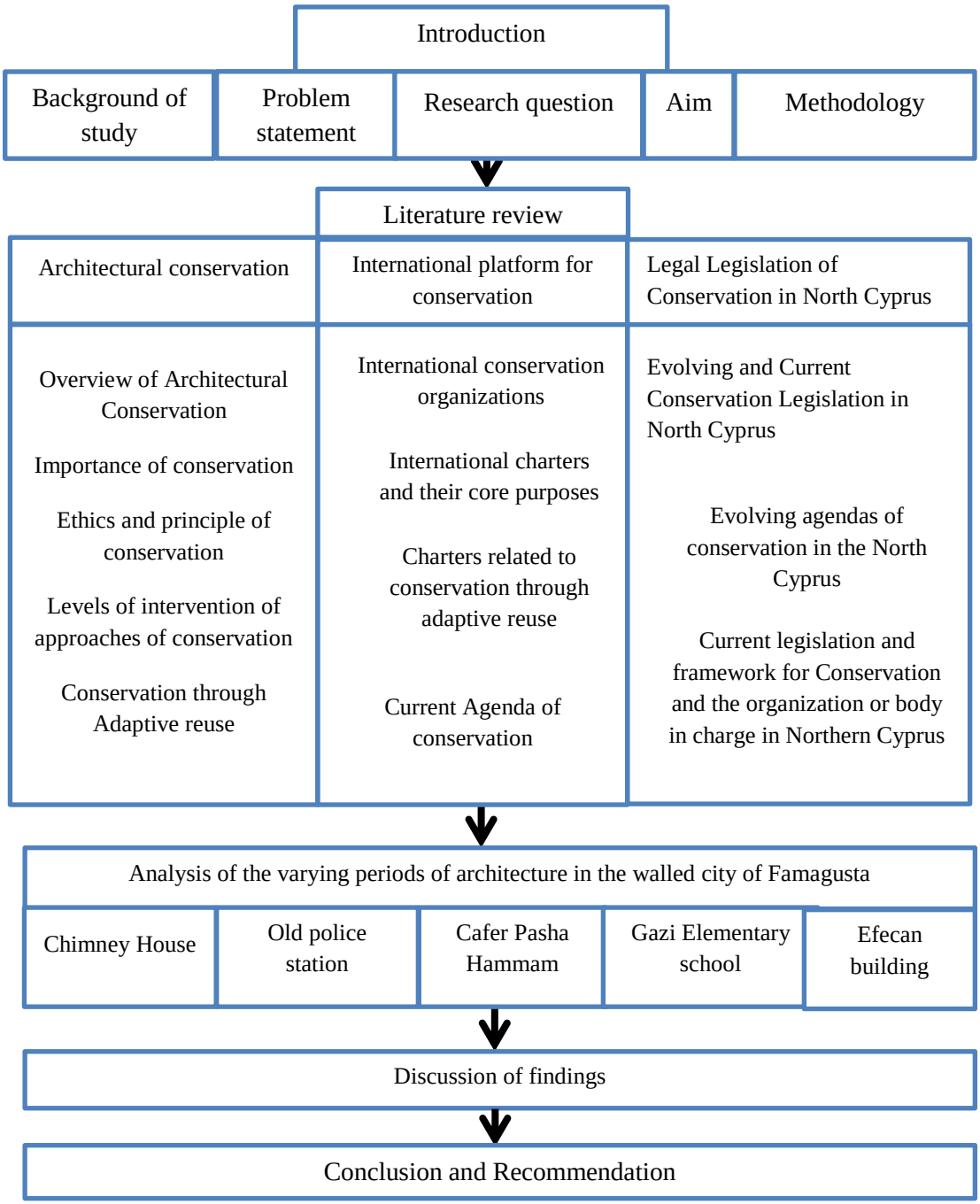
- After the review of literatures, the next section would be the analysis of selected period products of architecture at a selected area of the walled city of Famagusta (chimney house, Old police station, Gazi Elementary School, Cafer Pasha Hammam and Efecan building complex) in which the Analytical tools would be used to examine each individual building, with guidelines for the conservation from an international platform coupled with the legal regulation of the City of Famagusta for each building period will done and this was combined with a semi- structured interviews have been conducted with some owners and the Department of Antiquities and Museums to access vital information concerning the buildings.

- Finally a comparative analysis of conservation of varying periods of Architecture, where high significance and contrasting elements would be identified, and conservation guidelines will be produced for these buildings.

1.6 Structure of the Thesis

The table explains the structure of this thesis; the table illustrates the core subjects of each section with several relevant sub-subjects for the thesis is strategically organized.

Table 1: Structure of the Thesis



Chapter 2

THEORETICAL BACKGROUND OF THE STUDY

This part of the research provides the theoretical background of study. For a systematic work, this part is divided into three major headings, which looked into; architectural conservation, ethics of conservation that contains a Authenticity a keyword of the research as well as importance of conservation with definition of adaptive reuse. The next part explores various international organizations for conservation, which would lead to the analysis of international charter/principles and legislation for conservation, with their evolving core purpose and current agenda. Moreover, this chapter explores the conservation legislation that has close links to conservation through adaptive reuse. The last part of this chapter looks into the evolving and existing conservation legislations in the study are of North-Cyprus and it current legislations and organization in charge of it implementation.

2.1 Overview of Architectural Conservation

The need to institute the bases of architectural environment as a representation and evidence of social life cannot be overemphasized, according to the World Monument Fund human activities has become the most significant menace to the world's natural and cultural heritage and climate change, conflict, developmental and economic pressures threats historic sites (Basarir, 2008). Tourist development and urban projects sum quickly to the list of the "World Heritage in Danger" of UNESCO and devastation affected by the alteration in the utilization and ownership of the land as a menace to historic sites (Basarir, 2008; UNESCO 1972). To this effect, it is

imperative to apply appropriate conservation methods to prevent further deterioration of historic sites.

Conservation is the method of inhibiting deterioration and dereliction. It involves actions that elongate the life of natural and cultural heritage intending to preserve them for the future (Fielden, 1994). The safeguarding and reviving of artifacts, archaeological, architectural and art from ancient periods can be said to be conservation. Orbasli (2008) underlines architectural conservation spans from doing small repairs to major modifications and preventive maintenance whether partial demolition, to permitting a new program or function to succeed in the existing building. Architectural conservation is not all about safeguarding building or sites of significance; Boussaa (2010) argued that the major purpose of conservation is about enhancing and boosting the lives of the individuals in the historic environment and not limited to reviving bricks and mortar. He went further to stress that the core intent is to achieve a socio-cultural identity and sense of place for the society without leaving out the everyday needs of the inhabitants. Orbasli (2008) also affirms to the above argument by stating that architectural conservation is not limited to a building but about human beings and the means to conservation at each particular time will undeniable be attracted to the values of the society at that period. When we review the charters and internationally accepted document of conservation, we can also perceive the evolving trends in architectural conservation.Where it involves everything from tangible to intangible values related to natural and cultural heritage.

It is important to state the relevance of architectural conservation. Historic buildings are inherent parts of the built environment. Conservation may spring from the need

to promote national identity or particularly to inspire international and domestic tourism. It is practical and logical to the environment, also economically liable to use what is existing, other than to waste resources that till there for exploitation (Orbasli, 2008). Also, Forster (2010) highlighted the importance of conservation in several key aspects of human endeavors.

Economic aspects: with the conservation of the historic building, it increases tourism, which in turn creates more jobs for the host community of the historical site. The building could also have a use-value and exchange value serving as an asset to the host community.

Cultural aspects: Buildings with architectural and historical significance to the socio-cultural life of the host community are kept to promote continuity for the survival of their heritage for future generations.

Technical aspects: to reduce the need for the major or undesired repairs in the future, it is important to preserve it to prevent further damage.

Educational aspects: the utilization of historical buildings as a good source for educational purpose and drawing tourist to learn and be aware of the host area. The documentation value of the most historic building is vital for the conservation of building of its periods and style and also for people of the academic world to source for critical knowledge for research.

Legal aspect: due to the rapid developments going on globally it is important to create policies and legislation that would be needed to provide order and guidance for growth and development in and around these historical sites. International Charters like Athens Charter 1931, Venice Charter (1964), Nara Convention (1994), and even the laws of conservation in TRNC, are the legal importance of conservation, which would guide the activities around conservation.

2.1.1 Principles and Ethics of Architectural conservation

For a particular conservation program the challenges would be peculiar to that project and should be approached on its own merits with ethical means and principles that are sound and accepted globally.

Ethics of conservation

Feilden (1994), Orbasli, (2008), Jokilehto (2002), Evan (2014), stressed that the following standards are critical and should be observed in conservation process;

- Before any intervention the condition of the building should be documented.
- Falsification, removal and destruction of historic evidence must strictly avoid.
- Minimal intervention on the building is important.
- The documentation of materials or methods used for intervention must be done.
- The intervention must respect the physical integrity, aesthetic and historic values of the cultural property.

International cultural heritage legislation and conventions should play a critical role in instituting the framework by which socio-cultural components and features are evaluated at international level. These criteria should be utilized by the institutions in

establishing the valued components in a nation's culture and past. There are two major criteria in the evaluation process; they are **Authenticity and Integrity** of cultural heritage, which arise from UNESCO'S World Heritage Convention (WHC) that started the World Heritage Site List with Nara Document of Authenticity and also seen value based means of advocating for conservation philosophy today (Kostet, 2007; Welburn, et, al 2009; Wirilander, 2012, Jokilehto, 2006; Orbasli, 2008).

Integrity:

Integrity comes from the operational guidelines of WHC as "*conditions of integrity*" for sites chosen under the four natural criteria. Integrity is defined in the paragraph 88 UNESCO Operational Guidelines (2012) as *"a measure of wholeness and intactness of the natural and cultural heritage sites, and it has been defined as the object's continuing significance overtime and its attribute".* The paragraph 88 went further to state that to analyze the conditions of integrity, it demands the examining the degree to which the property;

- Contains "***all elements***" important to emphasis its "***outstanding universal value***".
- Is of "***adequate size***" to make sure the precise description of the details and processes which carries the property's significance.
- Be subjected to "***adverse effects*****"** of development and /or dereliction.

According to the expert meeting on evaluation of general principle and criteria for the nomination of natural world heritage site in La Lavanoise, France in 1996 suggest that the concept of integrity are structural, functional and visual integrity

(UNESCO, 1996). In the historical environment Jokilehto, 2006 and Stovel, 2007), that classified integrity into three main criteria;

Social-functional integrity: the social-functional integrity of site or building could be said to be the processes and functions on which its development over a period has been built on, like that of which is related to the society, mobility of people, spiritual responses, and how the natural resources are been used (Jokilehto, 2006 and Stovel, 2007).

Historical-structural integrity: it could said to be elements that have endured from its evolution of time, providing the spatial description of elements that document such process and also function of the historical building. The existing elements are evidence to the continuity and creative response in building the structures and providing the clarification to the totality of the spatial setting of the area (Jokilehto, 2006 and Stovel, 2007).

Visual-aesthetic Integrity: visual- aesthetic integrity assist to describe the aesthetic dimension shown in that site or building, it also helps in the system management to prevent the undermining of relative values (Jokilehto, 2006 and Stovel, 2007).

Authenticity

Authenticity is the formation of cultural identity that is made up through cultures and communities in societies. It can also be defined as being truth and exactly what is claimed to be (Welburn et al, 2009; Wirilander, 2012).

The world Heritage convention gives consideration by which the authenticity of cultural heritage can be analyzed using the "***Test of Authenticity***". This is the test used in WHC to validate the selection of the World heritage list. There was a longing to research the meaning and appropriateness of authenticity aspect in WHC context. Therefore, in relation to the World Heritage Convention in 1994 UNESCO's world Heritage Committee's eighteenth session published The Nara Document on Authenticity, which was drafted at the conference with the same name in japan in November of 1993. The function of the Nara document is to illuminate the aspects of authenticity in various cultures in relation to WHC (Jokilehto and King, 2012; Wirilander, 2012). Jokilehto and King, (2012) went on to stress that the test of authenticity forms a description of genuine cultural heritage in the World Heritage Convention. In the test has the following requirement;

- That the work of human creativity is genuine and it is supported on its virtue.
- That authentic work can be a testimony or is a descriptive sample of the precise cultural tradition.
- That the authenticity can also be said to be the interchange of values or ideas, which have originally taken place in the site of the cultural heritage.

According to the Nara Document of 1994, authenticity is defined as a critical component in defining, assessing and monitoring cultural heritage. The document states that an object's authenticity comes from a specific cultural context that should be analyzed to guarantee its existence. Nara Document contests the description of Authenticity as "Material originality by ICCOROM. Nara Documents encompass both reconstructions and distinguish spiritual as well as material values, continuousness of historical layers (Rodwell, 2007).

The Nara document on Authenticity also stated that the diversity of heritage and culture are irreparable origin of intellectual wealth of human kind and should be conserved (Nara, 1994; Wirilander, 2012). The document declares that diversity in cultural heritage prevails in modern societies and its existence requires respect for other cultures and aspects of their belief systems (Nara, 1994; Wirilander, 2012).

Importance of Nara Document of Authenticity

A. Nara Document of Authenticity was adopted as against universally common principles, but to promote natural and cultural diversities, thereby giving special focus on cultural significance (Kono, 2014, Jokilehto, 2006; Orbasli, 2008, Wirilander, 2012) .
B. Nara document of Authenticity brought a shift from originality to credibility of information sources. Authenticity was separated from definition that required originality of material aspects of heritage (Kono, 2014, Jokilehto, 2006).
C. The Nara Document provides a non-exhaustive list of types of information sources that offers a more analytical approach that enables the inclusion of diverse values (Kono, 2014).

Nara Document defined Authenticity as a qualifying factor concerning values, in which the clarification of authenticity expanded not only theoretical but also practical implication. The factors for analyzing the credibility of a cultural heritage is a non-exhaustive as types of information sources, they include tangible, intangible and dynamic aspects of cultural heritage (Nara, 1994; Wirilander, 2012, Kono, 2014). These factors are:

1. Form and design
2. Materials and substance
3. Use and function
4. Tradition and techniques
5. Location and setting
6. Spirit and feeling with internal and external factors

For the purpose of this thesis, the measures of authenticity as clarified by the Nara Document are analyzes focusing on spatial qualities of the selected case studies. Accordingly, below each one of the six measures of authenticity are analyzed and main focus will be extracted. This measures will be used in the analysis chapter (Chapter 3) to specify the most important qualities of the case studies that needs to be taken into account during the adaptive reuse process, as it can be followed from the below table:

Table 2: Matrix for the summary of the case study analysis (Author, 2019)

Parameters of Nara Documents		Features of parameters of Nara Document	Extracted features from case studies
1	Form & design	Form of the building	
		Space Organization & relationship	
		Openings	
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	

		Structural system	
		Roof system	
2	Material & substance	Structural Materials	
		Finishing materials	
3	Use & function	Period Initial function Existing function	
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation Interior elements	
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	

1. Form and Design

The analysis of the building design and form looks into most of the tangible part of the building which provides the visual interpretation and also the tangible information which are important in the appreciation and documentation of the building, which is also critical for the assessment of the credibility (Authenticity) of the building. The form and design of the building is critical because it impact on other aspects of tangible and intangible of authenticity. An initial “visual inspection” and evaluation of a particular building is vital in order to have knowledge and define it as “whole” (Feilden, 1994). As can be seen from several analyses of methods of

Architecture through various times, it is now clear that, in which ever way the aim of architecture is established by the theoretician; “form” takes a critical part of architecture (Günce et.al, 2005). The analysis of the building gives the basis for the argument for the adaptive reuse of specific buildings. The building form and design can be categorized into the following headings which are critical in the analysis of the form and design of the building:

- Form of the building
- Spatial organization and relationship
- Circulation
- Openings
- Structural system

a. Form of the building

Form can be defined as the quantity of three- dimensional space occupied by object (Jirousek, 1995). Forms are shaped by the space they occupy, which is seen as an object or thing and also a state of existence (as a process) (Malnar & Vodvarka, 1992). Form is the meeting point between mass sand spaces (Ching, 1995). According to Ching (1996) the form of a building can be categorized into:|

- Centralized form which is a number of secondary forms assembled about a principal parent-form.
- Linear Form it is a series of forms organized chronologically in a row, which can be manipulated to enclose a portion of space.
- Radial Form is composition of linear forms outspreading externally from a principal form in a centrifugal fashion.

- Clustered Form is a collection of forms assembled together by closeness or the sharing of a mutual visual characteristic.
- Grid Form is a set of segmental forms linked and delimited by a three-dimensional grid.

b. Spatial organization and relationship

Spatial organization describes the basic way space is been arranged and organized in the building. Space can be organized into; Centralized organization, linear organization, radial organization, clustered organization and grid organization; whereas spatial relationship describes the how spaces relate to another within a building form. These relationships can be seen as follows;

- Space within a space
- Interlocking spaces
- Adjacent spaces
- Spaces linked by a common space

c. Circulation

Circulation describe the movement within and out the building, it also describes how the building is approached, the nature of the entrance of the building, the arrangement of the paths, relation between path and space, system of the circulation space. Ching (1996) stress that the route of our movement can be comprehended as the perceptual cord that link the spaces of the interior or exterior together. The circulation of within and outside a building can be described through the following ways:

- **Approach**; before entering the interior of a building, one approaches its entrance within a path. Approach is the first phase of the circulation system, in which we are ready to view, experience, and utilize the spaces within a building (Ching, 1996). The nature of the approach to the building's entrance might different or combination of the following; **Frontal approach**, **Oblique approach** and **Spiral approach**. Frontal approach describes the approach that is in a straight path or axial to the buildings entrance, while the Oblique approach describes an approach that is at extreme angle to the entrance of the building, whereas Spiral approach describes the approach that highlights the three-dimensional form of a building as one move round its boundary (Ching, 1996).
- **Entrance**; Entering a distinct field of exterior space, comprises the act of piercing a vertical plane that separates one space from another and separates "here" from "there". Entrances may be classified into the following classifications: **Flush, Projected**, and **Recessed**. A Flush entrance sustains the continuousness of the surface of a plane, while a Projected entrance forms a intermediate space, reveals its purpose to the approach, which also offers overhead accommodation, whereas a Recessed entrance also offers shelter and takes a part of exterior space into the boundary of the building (Ching, 1996).
- **Configuration of the path**; the configuration of the path can be describe as space sequences, from which one begins from one point in space to the another. It can be classified into the following; **linear**, **radial**, **spiral**, **grid**, **network** and **composite** configurations of path (Ching, 1996).

- **Path- space relationship**; this describes how Paths might be associated to the spaces they connect in the following ways; **pass by spaces**, **pass through spaces** and **terminate in a space** (ching, 1996).
- **Forms of the circulation space**; a circulation space could be described as the following: **Enclosed**, Open on One Side and Open on Both Sides. Enclosed can be seen as establishing a private corridor or public galleria that relays to the spaces it connects though entrances in a wall plane; **Open on One Side** creating a balcony or gallery that offers visual and spatial continuity with the spaces it connects; **Open on Both Sides** bringing into being a colonnaded passageway that turn out to be a physical addition of the space it goes through (Ching, 1996).

d. Openings

The openings describe how the building is been accessed and how light (natural light) comes into the building and how the building is been ventilated. The openings in the building also control the circulation within the building. According to Ching, (1996) classified openings in the following; **within the planes**, that can be centered, off-center, grouped, deep set and skylight; **at corners** that can be along one edge, along two edges, turning a corner, grouped and skylight; **between planes** can be vertical, horizontal, 3/4opening, window-wall and skylight. The analysis of openings can also look into outlook or view of the opening.

e. Structural system

The analysis of an existing building is incomplete without a proper analysis of the structural system of the building, the knowledge of the structural system provides information on tangible aspect of the building which has impacted on the building and also would affect the next function of the building(Brooker and Stone, 2004). For this research the structural system can be grouped into the following;

- **RCC Framed structure**; this structure involves a system of column and beams in which the load of the building is been transferred to the columns and beams which then transferred to the foundation of the building.
- **Load bearing structure**: here the load of the building is been transferred to the vertical walls of the building which then transfer to the foundation.

2. Materials and Substance

The material and substance information sources provide information on the elements in which the building made of and also in which the surfaces is finished with. These information sources are tangible aspect of authenticity, which critical to the visual interpretation and the context of the building, which could also sources of information on other intangible aspects of the building (Kono, 2014). These information sources can be grouped into the following:

- **Structural materials**; the structural material are the materials in which the structural system of the building is been assembled with.
- **Finishing materials:** these are materials in which the surface or face of the building is finished with.

3. Use and Function

Function of the space is the activity in which the character of the space is design upon (Christian Norberg-Schulz, 1968). Function or uses of the buildings are important aspects in conservation as stated in Nara Document of Authenticity. These information sources are intangible and dynamic (Kono, 2014). Building change over time; they can evolve, grow or be reduced in size. The typology of the building is critical to the analysis of the building. The prevailing attitude towards the building can alter the function of the building, the narrative of the building might be hidden or shown upon the building itself. The former function of the building would of course have had a significant impact upon the adaptive reuse process. The buildings function dictates many factors in the building (Brooker and Stone, 2004). Key questions that could be considered under this theme are:

- What is the pervious function of the building?
- What are the events that occurred to or in the building that is significant?

3. Traditions and Techniques

Nara Document that was adopted to challenge the universally common principles, but to promote the credibility of a cultural and natural heritage of the host community. This is reinforced in Article "7" which states that all cultures and societies are entrenched in the specific forms and means of tangible and intangible countenance that constitute their heritage and should be respected. These information sources are tangible, intangible and dynamic aspects of authenticity that could be found in the building (Kono, 2014). These are seen in the way of life of the host community, their method of construction that is peculiar to them, tools and techniques use for the building. It can also be seen in the spatial organization and

some elements used in the interior of the building. It could also be seen ornamentation on the surfaces of the interior and exterior of the building.

4. Spirit and feeling

The spirit and feeling of the place or space is an intangible as of the places cultural and natural heritage. It deals with the spirit or the feeling that is attached to a place or space, which in turn offer understanding of the place's context and setting in relation to the location, tradition, form, design, use, function and material. The spirit and feeling of the place or space is also the atmosphere of the place, which is the experience that is gain in the utilization of that space. The formal elements like mass, space and façade can resonate the spirit and feeling of the space (Graumann, 1989, Norberg-Schulz, 1980, Norberg-Schulz, 1988). The analysis of the credibility of these information sources is critical to the identity of the place.

5. Location and setting

Each specific building as aspects of settlements are not defined as a simple or separated entities but as micro elements within an even evolving state, a complicated circumstance that is affected by the many variables which include cultural systems, time, history and context (Brooker and Stone, 2004). The location of the building is critical to the analysis of the building, this might be due to the context it created with it vicinity and where is located in an urban context. Key question that could be considered under this theme are:

- What is the relationship between the sites, its neighbors, climate to the building?

- What is the closeness of the building to a natural landmark (sea, coast and rock outcrop?
- Socio- cultural influence?
- Natural landscape?

Proposed Function

Before the building would be considered for adaptation, the proposed function of the building has to obey the ethics and principles of conservation. The intended function has to be compatible with building in terms of mass, circulation route, orientation and relationship with other spaces, it also very vital that the intended function is in conformity with the context and setting of the environment, and not a function that contradicts the surrounding fabrics of that specific host community

Principles of conservation

Before any individual intervention for conservation project, it is imperative that the professional conservation team consider the general conservation principles and project philosophy being guided by ethic of conservation (integrity and authenticity). The fundamental principles of building conservation are arranged in the table below.

Table 3: Principles of conservation Adapted by Author from Orbasli, (2008)

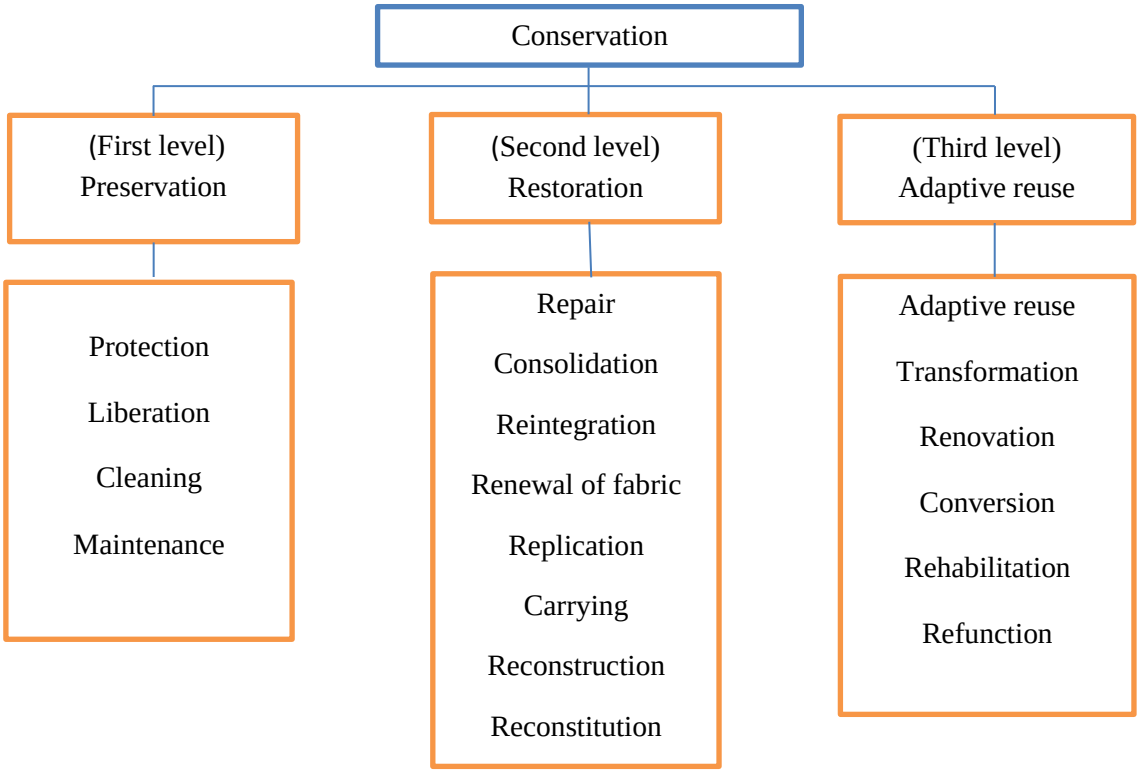
Understanding	**Implementation**	**Evaluation**
Working with the evidence	Appropriate uses	New problems may require new approaches
Understanding layers	Material uses	Sustainability
Setting and context	Tradition and technology	Interpretation
	legibility	
	Patina of time	

With the proper understanding or comprehension and evaluation of the historic building, the implementation of the conservation philosophy would be done with the focus of integrity and authenticity.

2.1.2 Approaches to Conservation

As stated under the subheading of ethics and principles of conservation, it is vital for each building to be understood, evaluated and the implemented of under the guard of integrity and authenticity. Several approaches are employed in safe guarding of heritage buildings with each of the techniques or process been peculiar to the conservation project. Conservation is the act that encompasses these various processes for the safe guarding and elongating the life span of historic buildings. Approaches to conservation according to the level of interventions that may be permitted can be categorized into three levels, which are further subdivided into other subsets.

Table 4: Different Approaches according to the level of intervention adapted by Authors from (Jokilehto, 2006; Turker, 2002; Douglas, 2006; Brooker and Stone, 2004; Basarir, 2008)



From the Table 3 it can be seen that conservation can be achieved through three levels of approaches in conservation, with the first level preservation, second level restoration and third level being adaptation, the choice of approach to be chosen for a particular conservation project, depends on the setting, context and conservation philosophy that has been set out to be achieve.

- **Preservation**: maintaining the building in the "found state" whether ruinous or not. The building is made safe and further decay is prevented; the ruined condition is important to historical understanding of the place (Brooker and Stone, 2004). The main aim of preservation is to retain the site or building in its present state by preventing further deterioration. The current state can be keep through stabilization means or protection and maintenance.

- **Restoration**: is the process of returning the condition of the building to its original state and this often involves using materials and techniques of the original period to ensure that the building appears as though it has just been constructed (Brooker and Stone, 2004).

- **Adaptive reuse:** it is procedure for altering or transforming a structure or building or surrounding in conformation with it new program (Chudley, 1981). Douglas (2006) went further by giving more light on adaption as additions, alterations works permitting transformation in size, utilization or efficiency of a construction.

2.1.3 Adaptive Reuse

Conservation can be achieved in a number of ways which was shown graphically in the Table (2), the intervention through preservation, restoration and adaptation are critical to the conservation process, in which all three different approaches to interventions can be used for one project or individually. For this study adaptive reuse would be on the focus; for its vital role in conservation process. Operating with existing structures for continual use has become progressively relevant in contemporary architectural practice. The various reasons for this are many varying from the need for architectural heritage conservation and preservation, to sustainable development designs prevailing economic climate needs for less expensive physical architecture (exterior or interior). Adaptive reuse as defined by Kee, (2014) is the process of reutilizing mundane buildings recent programs order than demolishing and reconstructing new building on the site. According to Plevoets and Van Cleempoel (2013) it is situation for building that no longer utilized for the purpose in which they were designed for and now have to be transformed to a completely

unique function. Burchell and listokin (1981) defined adaptive reuse as revitalization strategy which employs a series of linked procedures to plan for, inventory acquire, manage and reuse surplus or abandoned real estate. In addition Brooker and Stone (2004) pointed out that Adaptive reuse is also termed Rehabilitation or Refurbishment the program is the most clear or transformation, but other modification may be done to the building itself, which could be “circulation route”, “the orientation”, “the relationship between spaces”, extension might be made to the building and other parts might be demolished.

The major purpose of adaptive reuse is to preserve contextual features as well as the importance existing space. Adaptive reuse provides the dual strategy of preserving historical heritage while changing with evolving needs of the society. Adaptive reuse is development in reverse; the parcel and building are predetermined, leaving the use and rehabilitation as the remaining variables. Adaptive reuse is considered as an important tool towards conservation of cultural heritage. Although since ancient times, buildings have been altered to fit changed needs and wants in a rather pragmatic way (Plevoets, 2014).

2.1.3.1 Principles of Adaptive Reuse

Considering the adaptive reuse process is very difficult to meet the needs of all the part that are involved, these might be restoration, transformation, and /or adaptation.in order to do this it is important that the five principles of adaptive reuse should be integrated into the design process as highlighted by Loures and Panogopulos, 2007. These five principles of adaptive reuse are

- **Sustainability**: adaptive reuse has to be environmentally conscious, it should have low environment impact, non-polluting, should be efficient in it energy consumption.

- **Context**: since the one the core aim of adaptive reuse is to preserve the context or value of the existing site or structure, it is important the adaptation of the building respond to its surrounding and promote the context.

- **Functionality**: even as the structure or building is giving new with introduction of a new program the building should execute that function or program efficiently.

- **Aesthetic**: with the building having low environmental impact promotes the context of where it is located, it is functional, and it should also have a visual coherence and be aesthetically pleasing to the users and passers- by.

- **Adaptation**: with the constant changing or evolving needs of the society, it is very critical that the building of site could be able to transform to needs when needed.

2.1.3.2 Benefits of Adaptive Reuse

According to the department of environment and heritage in Australia (2004); the benefits of adaptive reuse can be observed from several contexts that affect the society enormously. The contexts could be classified into socio-cultural benefits, economic benefits and environmental benefits.

- **Environmental benefits**

According to the Australian green house office who stressed that about 95percent of embodied energy from reuse building materials are saved new structures of buildings have greater embodied energy cost to building that have undergone Adaptation. The environmental impact is minimal making adaptive reuse very vital to sustainable development.

- **Economic benefits**

The reuse of most building materials of the existing building and also the use of a brown field than a green field would in turn reduce the embodied energy cost thereby saving cost that might come with predictable energy rising cost in the future.

- **Social- cultural benefits**

According for the Australian government (Department of environment and heritage) heritage has combined with quality of life and more environmental issues in recent years, Societies increasing knowing those future generations would gain from presentation of specific places or sites; our everyday life is enriched not just from the retention of heritage buildings but from repurposing the place. Adaptive reuse when done right would restore and preserve heritage significance of the building.

2.2 International Organizations of Conservation

With rapid development of globalization and urbanization, the need to have a collective and global cooperation down to national and local approach on conservation of tangible and intangible cultural and natural heritage is so critical. There are influential international non-governmental organizations that facilitate the

promotion of exchange of knowledge, tools, rising of awareness, safe guarding and research natural and cultural heritage globally. There are;

2.2.1 a United Nations Educational Scientific and Cultural Organization (UNESCO)

A specialized Agency of the United Nations (UN), its constitution was endorsed by the London conference in November 16, 1945; the constitution took effect in 1946. The agency is known for fostering the importance of global cooperation among nations through culture, education, communication and science. It has its permanent headquarter in Paris in France. UNESCO aims to promote the free passage of ideas and knowledge by creating conferences and providing intermediate and exchange services. Apart from its promotion of science programs and education, UNESCO also partakes in safe guarding of humanity's collective cultural heritage and natural environment. UNESCO seeks to promote the preservation, identification and protection of natural and cultural heritage around the world reviewed to be of exceptional value to humanity. This is incorporated in an international treaty known as the World Heritage Convention regarding the protection of the world's cultural and natural heritage, endorsed by UNESCO IN 1972. The international treaty would have the support of government (member states) protect this world heritage (in the world heritage list). UNESCO has three advisory bodies that are international non-governmental that support the World heritage committee in the serving and contemplation of the world heritage list. These advisory bodies that provide technical advice to UNESCO are (UNESCO, 1995);

2.2.2 b International Council on Monuments and Sites (ICOMOS):

It is international non-government organization established in 1965 which has it international secretariat in Paris. It aids the world heritage committee with

examinations of cultural and combined properties nominated for inclusion on the world heritage list (URL 4).

2.2.3 c International Center for the Study of Preservation and Restoration of Cultural Property (ICCORM):

It is non-governmental international organization, established to foster the conservation of all kinds of cultural heritage, in every part of the world. It mission is to aid member states, with enabling environment, knowledge, tools, and skills to safe guard the cultural heritage in the various forms, for the betterment of all humans; ICCORM also contribute to the economic, environmental and social sustainability of communities (URL 4).

Modern movement architectural heritage seem to be more at risk in the previous decades that any other period. The dynamic spirit of the machine age is uplifted by the built inheritance. many modern unique/ masterpieces had already been changed beyond recognition, or even demolished or left to dereliction at the end of the 1980s; this was hugely due to the lack of consideration of this building not being elements of heritage and their original functions have be substantial changed and their technological innovations have not always endured long-term stresses (DOCOMOMO, 1990a).

To aim this challenge the nonprofit and non-governmental international organization was established in 1988 by Hubert- JanHerket and Wessel Dejonge at the school of Architecture at the Technical University in Eindhoven, in the Netherlands. This organization is known as **Documentation and Conservation of Buildings, Sites and Neighborhoods of Modern Movement (DOCOMOMO).** The organization is

inspired by the works of ICOMOS (1965) on conservation of historical sites and buildings. With it international secretariat is now hosted in Lisbon at Instituto Superior Technico-Lisbon University Portugal. The aims of the organization are to raise the awareness of the importance of Modern Movement, foster the reuse and conservation of Modern movement sites and buildings, speak against the disfiguration and destruction of importance works, promote the development of important methods of conservation and adaptive reuse, attract funding for conservation and develop news ideas for sustainable built environment's future built on past experience of Modern Movement (DOCOMOMO, 1990b).

2.3 International Charters of Conservation

A charter is a document also a statement of purpose, direction and clarity of principles. They are distinguished documents which need to be produced for setting out main principles and guidelines of conservation. According to Burra charter (2013) The Charter makes a benchmark of practice for those that provide advice, decision maker executors of works of areas of cultural significance, including owners, managers and custodians; General guidelines are made available by international charters concerning critical factors in handling significant rural or urban sites. These international charters are limited to circumstances, to some extent and time in which they were setup. An evaluation of these international charters and declarations would provide clarity to the global attitudes and approaches regarding conservation (Basarir, 2008). They are distinguished documents which need to be produced for setting out main principles towards working with heritage and heritage building. It is important that the principles directing the preservation and restoration of historical buildings should be focused towards achieving the same goal and be prescribing on a global footing, with each nation being liable for executing the plan

within the guideline of its own culture and traditions. International charters, organizations, and policies of conservation are seen as an advancement in awareness of the "unity of human values" and concerning monuments and historic cities as prevalent heritage of all human beings (Basarir, 2008).

There are several international charters that are involved in safe guarding and preserving of architectural, historical heritage of on a global level, but the first two charters would be looked into in detail. They are as follows

Athens Charter (1931):

By outlining these fundamental principles for the first time, the Athens charter was established, held in Athens in 1931 by mostly representative from Europe, to discuss conservation of architectural monuments which resulted to various guidelines and principles called the "**Athens Charter"**. The charter has the footing was the first international document defining modern conservation. The Athens charter has the following features:

- The charter discouraged stylistic restoration in favors of conservation and repair that respected the various changes a building and character of the setting would have gone through.
- The community or site where the monuments are located were also discussed (Orbasli, 2008).
- The charter was instrumental in the formation of an efficient international movement concerning conservation.
- The charter was on the first time to outline principles of conservation of cultural and historic property should be rooted on an international platform (Basarir, 2008).

Venice Charter (1964):

The charter was held in Venice in 1964 by representatives from 61 countries, for the purpose of revising the Athens Charter. It came at a critical time as a reaction to the stylistic restoration that had taken place after the war and the modern movement urbanism that was taking off cites with little consideration of historic environment. The Venice charter has the following features:

- It moved away from the idea of individual monument conservation towards defining context and most importantly set out sound principles of conservation and extending the understanding of historic monuments from individual building to also incorporate areas both urban and rural.
- Also helps with general framework to develop a more customized charter.
- The framework of the Venice charter has influenced conservation policies worldwide.

The signatories of the Venice established ICOMOS (International charter for the conservation and restoration of monuments and sites) as an international non-governmental organization in 1965. The Venice charter became the chief doctrinal document for ICOMOS on its foundation and international conservation movement was established. Today, ICOMOS has a membership of 120 countries with a secretariat in Paris is recognized adviser to UNESCO on cultural heritage sites. A series of charters responding in more detail to specific issues or to regional differentiations have been developed by ICOMOS extensive network of international scientific committees. The committees make ICOMOS a scientific organization bringing together international expertise, setting an international agenda for conservation and establishing an international benchmark through meetings,

conferences, and international charters (Orbasli, 2008). As the charter are merely advisory documents on the ethics and principles of conservation, so many charters were established, using the ICOMOS as the guarding framework to design their charter that would suit and respect needs of their region. The various charters with the year in which the established and the core purpose are shown in the table 5:

Table 5: International charter, principles and legislation's date and core purpose adapted by Author from Basarir, (2018) and Orbasli (2008)

International charters, principles and legislation	Date	Core purpose
Athens Charter CIAM	1931 1933	objects/monuments & close surroundings urban texture –public welfare
Venice Charter s(ICOMOS)	1964 1965	objects/monuments & close surroundings Active conservation /utilisation /planning
The Split Declaration on Towns of Historic Interest UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage	1971 1972	locaL-central authorities 'world heritage' 'natural heritage' 'belong to all peoples of the world'
Amsterdam Charter OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION Burra Charter The Florence charter	1975 1977 1979 1982	'integrated conservation' 'active conservation' Management plan Cultural Significance Historic Gardens and landscapes
Convention for the Protection of the Architectural Heritage of Europe The Washington charter Docomomo The Lausanne charter	1985 1987 1988 1990 1994	integrated conservation* social parameters of conservation Historic Towns and urban Areas Protection and conservation of Modern Architecture and Urbanism. Protection and management of Archaeological heritage

		Expanding authenticity parameters
Nara Document on Authenticity	1996	Protection and management of underwater cultural heritage
Charter for the	1999	Cultural tourism
		Preservation of historic timber
International charter on	1999	structures
Principles for the		Built Vernacular Heritage
Charter on the	1999	
European Landscape Convention (Florence)	2000	Cultural landscape, Natural landscape
The UNESCO Convention for the Safeguarding of Intangible Cultural Heritage- Paris	2003	Intangible heritage
		Principles for analysis, conservation and structural
ICOMO Charter	2003	restoration of architectural heritage
ICOMOS-TICCIH Nizhny Tagl-Charter For The Industrial Heritage	2003	Industrial heritage –active conservation
Convention on the Value of Cultural Heritage for Society (Faro Convention)	2005	Public involvement Cultural landscape , sustainable conservation
	2008	Common heritage
ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites		socio-economical dimensions
The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas	2011	Management of urban areas, genius loci, quality of life Management plan, sustainability
ICOMOS – Turkish	2013	Welfare –sustainability –balancing tourism
The Florence Declaration on Heritage and Landscape as Human Values	2014	Sprit of place- genius loci

From the above table one can see the changes in the core purpose of the various charters, principles and legislation and expanding concepts of heritage conservation as time draws to the current period.

Since this study is focus on appreciation and documentation of selected periods of architectural products in the Walled City of Famagusta, it becomes imperative to select various international platforms for conservation in which their charters, principles and legislation have close link to the aim of this study concerning conservation through adaptive reuse. This is so because it is not all the international documents of conservation that are related to conservation through adaptive reuse directly or indirectly. Some charters, principles and conventions in their articles or declarations have mentioned critical statement that essential to cultural significance of the cases. The table below shows selected charters principles and conventions that are critical to conservation through adaptive reuse with the specific articles showing it's relevant for it selection.

Table 6: Conservation documents and their principles, mission and articles adapted from ICOMOS Charters

CONSERVATION PRINCIPLES	**PRINCIPLES, ARTICLES AND DEFINITION**
VENICE CHARTER (1964)	"The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the lay-out or decoration of the building". (ICOMOS V; Article 5).
BURRA CHARTER (1981)	"Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives". (ICOMOS, 1981; Article 21.2)
DOCOMOMO (1988)	"Bring the significance of the modern movement to the attention of the public, the authorities, the professionals and the educational community" (DOCOMOMO, 1990; MISSION). "Oppose destruction and disfigurement of significant works of the modern movement" (DOCOMOMO, 1990; MISSION).
NARA DOCUMENT ON AUTHENTICITY (1994)	"Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place". (ICOMOS N;1994)
ICOMOS CHARTER (2003) Principles for the analysis,	"A full understanding of the structural and material characteristics is required in conservation

conservation and structural restoration of architectural heritage	practice". (ICOMOS, 2003; 2.3) "Checks and monitoring during and after the intervention should be carried out to ascertain the efficacy of the results". (ICOMOS, 2003; 3.21)
FARO CONVENTION (2005)	"Develop knowledge of cultural heritage as a resource to facilitate peaceful co-existence by promoting trust and mutual understanding".(ICOMOS F; Article 7c) "Develop the legal, financial and professional frameworks which make possible joint action by public authorities, experts, owners, investors, businesses, non-governmental organizations and civil society".(ICOMOS F; Article 11b)
ICOMOS CHARTER FOR THE INTERPRETATION AND PRESENTATION OF CULTURAL HERITAGE SITE (2008)	"It should consider all aspects of the site's cultural, social, and environmental significance and values". (ICOMOS, 2008; Principle 3.1) "Interpretation should also take into account all groups that have contributed to the historical and cultural significance of the site".(ICOMOS, 2008; Principle 3.3)
VALLETTA PRINCIPLES(2011)	"The intangible elements that contribute to the identity and spirit of places need to be established and preserved, since they help in determining the character of an area and its spirit". (ICOMOS V; P.7) "Proper planning requires up-to-date precise documentation and recording (context analysis, study at different scales, inventory of component parts and of impact, history of the town and its phases of evolution, etc.)" (ICOMOS V; p. 9)

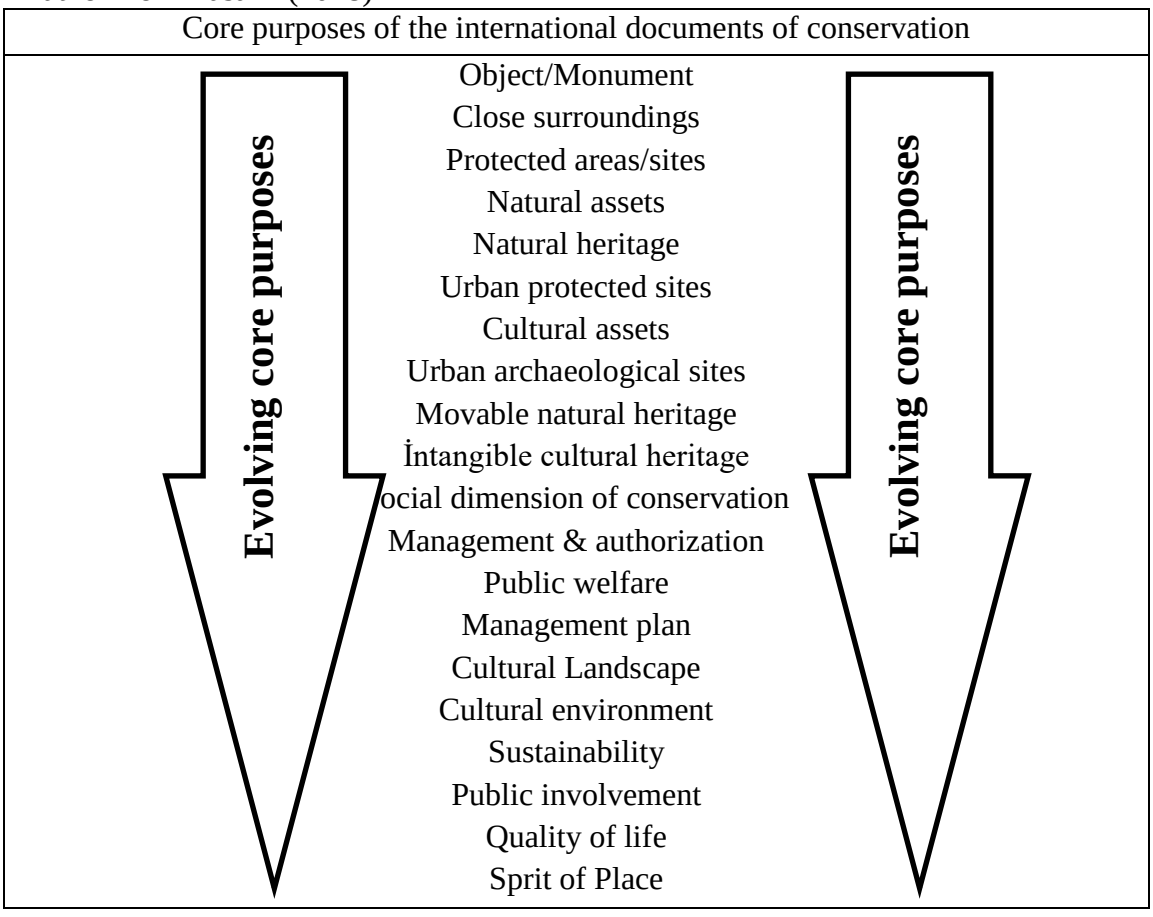
From the table some of conservation documents and their core purposes, documents vital to conservation through adaptive reuse and these documents have laid down guidelines for consideration when needed. These guidelines of principles are shown in the table above:

2.3.1 Evolving Agendas of Conservation Principles

The exploration of different documents of conservation through time shows that; the agenda has shifted from focusing on the material aspects of conservation of

monuments to a more subjective matter such as spirit of place. The international, charters and legislation all formulates the ethics and principles of conservation. In Table (3) in which the various charters, convention, principles and legislation are laid out with their date of establishment and core purposes were shown, it could be observed that core purpose has been evolved from an individualistic manner to matter of global concern. Basarir (2018), illustrated these changing core purposes in conservation principles in the Table below.

Table 7: Evolving core purposes of international charters and principles, adapted by Author from Basarir (2018)



The global consciousness is reflected in the above table with the evolution that started from the conservation of monuments and their surroundings, to the natural

heritage, down to cultural heritage to environmental issues like sustainability, to interior and concepts like *sense of place* and *quality of life*. This shows that people are becoming conscious of the immediate environments and how tangible and intangible material of cultural, play a very critical role in identity of a place, an evidence and the value of the everyday life of the people that inhibited the place prior to the present occupant of the place.

2.3.2 Evolving and Current Conservation Legislation in North Cyprus

Northern Cyprus with it rich and diverted history has many important historic sites and monuments dating back to thousands of years. These provide evidences of the economic and socio-cultural activities of the people that occupied the island throughout history. This amalgam of different cultures and civilizations provided a unique identity for the people of the island.

For these architectural heritages to be seen by the future generations it has to be conserved. The conservation of these many architectural heritages in Northern Cyprus has gone changes with the evolving needs and the administrative authority at each period of time in the country. The evolution of legislation on heritage conservation in (Northern) Cyprus is outlined table below.

Table 8: Various periods of heritage conservation legislation in TRNC adapted by Author from Basarir (2018).

Several periods of the evolution of the legislation for conservation in Northern Cyprus
Ottoman Period (1571-1878)
British Period (1878-1960)
Cyprus Republic (1960-1963)
Period of Bi-communal conflicts (1963-1974)
Turkish Federated State of Cyprus (1975-1983)
Turkish Republic of Northern Cyprus (1983-…)

Through these periods several legislation were made to support various regulations and these laws were a ministered by different parts of government and these laws were influenced by the challenges that were faced at that period. In the constitution of TRNC, there are four sections that are concerned with the conservation of cultural and historical heritage; they are

- Section 36; property rights
- Section 39; Protection of Historical, Cultural and Natural Values;
- Section 40; protection of the environment
- Section 42; expropriation, sequestration and restriction to the properties of Vakf (Evkaf foundation).

The legal legislation that has a critical impact on functional adaption of several relevant conditions of conservation in TRNC is the “LAW OF ANICENT MONUMENTS (60/94)” the law was enacted in 1975 as a more contemporary version of the 'Antiquities Law' (Chapter 31 of the Laws) was enacted in 1935 and amended in 1949 and 1959 and in 1994. Considering the first version many monumental buildings and some examples of civil architecture were listed. However this law(35/75) was focused on the protection of monuments and archaeological findings which belong to the period earlier than 1700AD, additional laws such as, the 'Famagusta Improvement Law‘(Chapter 56 of the Laws) was enacted. According to the law, in order to improve and develop the walled city, the street, figure-ground and housing parcels of the city were planned to be identified and divided according to cadastral survey. These laws stipulate the legal frameworks for conservation related matters in the country. In 1994, the law that was enacted in 1975 was replaced with the current 'Law of Ancient Monuments' (60/94) since the old law was

not comprehensive enough to meet contemporary needs and standards. The new law provides the basis for determination of grading the conservation areas; rights and duties of the owners; and also the law enables the establishment of the 'Ancient Monuments Fund'. In addition, this law identifies the duties and obligations of the 'Supreme Council of Immovable Antiquities and Monuments'. Every development within the conservation area depends on the approval of the 'Supreme Council of Immovable Antiquities and Monuments' (Basarir, 2018). The focus of the conservation legislation documents has to be updated according to the changing concepts of conservation in the international agenda. These changes in agenda has been classified by Basarir (2018) and the table below shows what kinds of concepts were included in the international agenda however most of them were missing and still today the legislation on conservation in TRNC lacks the international understanding:

Table 9: Evolving agendas of conservation of the international platforms versus those historical periods of Cyprus adapted by Author from Basarir, 2018.

Periods	**Dates**	**Concepts- Key Words**
British Colonial Period...	1930 s	objects/monuments & close surroundings Conservation of historic urban texture public welfare Active conservation /utilisation /planning balance 'world heritage' 'natural heritage' 'belong to all peoples of the world'
Turkish Federated State of Cyprus Turkish Republic of Northern Cyprus	1975s 1983 1994	'world heritage' 'natural heritage' 'cultural heritage' 'belong to all peoples of the world' 'common heritage' Financial aspects of conservation Cultural Significance Expanding authenticity parameters

Revisions and Revision Drafts on the 'Law of Ancient Monuments'	2000s Up to present	Cultural landscape, Natural landscape Intangible heritage Industrial heritage –active conservation Public involvement Cultural landscape , sustainable conservation Common heritage socio-economical dimensions Management of urban areas, genius loci, quality of life Management plan, sustainability Welfare –sustainability –balancing tourism Spirit of place- genius loci

The table above shows the changing focus of conservation practice in the international platforms versus changing periods in the history of Cyprus, we should emphasize here that considering the IAD-C,the focus of conservation has been changed from material to a more intangible focus such as, spirit of the place wellbeing (Basarir, 2018)

As mentioned above the various wings of the government that are in-charge of enforcing various legislations that are related to conservation historic and cultural heritage in Northern Cyprus, there is shown in table 10

Table 10: Current legislation and framework for Conservation and the organization or body in charge in Northern Cyprus adapted by Author from Basarir (2018)

Northern Cyprus Current Legislative and Organisational Framework for Conservation			
LEGISLATON	**SECTION/YEAR**	**ORGANISATIONAL DEPARTMENT**	**CURRENT POSITIONING**
Law of Ancient Monuments	60/94	Dept. of Ancient Monuments and Museums	Ministry of Tourism and Environment
Town Planning Law	55/89	Town Planning Department	Ministry of Tourism and Environment
Law of Municipality Municipalities	51/95	Municipalities	Ministry of Interior

Law of Vakfs	73/91	Foundation of Evkaf	Ministry of Prime Minister
Law of Immovable Properties	*11/78* Cap.224	Department of Lands and Surveys	Ministry of Interior
Law for Tourism	28/90	Department of Tourism	Ministry of Tourism and Environment
Law of Environment	9/90	Dept. of Environment	Ministry of Tourism and Environment

From the above table legislations like the law of Ancient Monuments, Town Planning laws, Law of Vakfs, Law of Immovable Properties, Law for Tourism, and Law of Environment all directly or indirectly affects the conservation of the cultural and historic heritage of Northern Cyprus. The Law of Ancient Monument is the main law that is responsible for the conservation of historic and cultural heritage in Northern Cyprus

2.4 Chapter Conclusion

The chapter provided a theoretical background for the rest of the study. This was achieved as a result of the literature review of the related concepts that are critical to the research. These keys words are adaptive reuse, internationally documents accepted of conservation (IAC-D), space, Authenticity and Walled City of Famagusta. The overview of conservation was looked into which lead to the ethics of conservation, in which Authenticity was evaluated critically in line with the Nara Document of Authenticity (1994), which brought more clarity to the topic and emphasized the importance natural and cultural heritage diversity and the concepts of universal common heritage. Parameters important for analyzing natural and cultural heritage were also looked into in depth. The analysis of authenticity will be used in

the following chapter in order to extract the elements of the selected case studies that have to be critically conserved and emphasized during an adaptive reuse project. Additionally it would not be complete without looking into the internationally accepted documents of conservation (IAC-D) that dominate the international platform of conservation practices, and since the research is focus documentation and appreciation of selected architectural periods for conservation, documents with direct and indirect links, were extracted.

The focus area of the study cannot be left behind in the literature review, the existing and the evolving legislations for Northern-Cyprus concerning conservation practices were also looked into with organizations that are in charge of executing the provided laws were also discussed. This section focuses more on the present period of North-Cyprus and the existing legislation protecting monuments in the country; however these current legislation of TRNC has been considered in comparison with the IAD-C and many important missing points has been underlined. There is a need for certain up-to-date vision within the TRNC in terms of conservation of this heritage

With each of these sections data that vital for subsequent chapters would be extracted and used for various analyses critical to this study.

Chapter 3

CASE STUDY ANALYSIS

In this chapter the methodology used in the study is clarified. This is followed by brief history of evolution of the Walled City of Famagusta. The next part of the chapter is related to the analysis of selected case studies in a selected area of the Walled City and the analysis is based on the literature review (chapter 2) in which analysis would be done under factors in the analysis of existing building for conservation through adaptive reuse for as information sources by the Nara Document of Authenticity, these factors are form and design, material and substance, use and function, tradition and techniques, spirit and feeling with location and setting.

3.1 Methodology

According to the literature reviews, architectural conservation is vital for prolonging the life span of the building. Due to this, it is critical that building to be adapted for another function or it can also be the same function but updated accommodate contemporary needs leading to continuity. To conserve a building the principles and ethics of conservation has to be followed to meet the international standards and up-to-date vision towards heritage buildings. In the literature review (chapter 2) the importance of adaptive reuse process of buildings to be conserved and also the international legislation, principles, charter and local laws & regulations guarding conservation in Northern Cyprus were looked into in detail.

Due to the diverse, length and unstable history of Famagusta, the city has the privilege to enjoy various important monuments of cultural, architectural and historical significance.

The aim of this thesis is to provide a foundation for documentation of conservation approaches for architecture in the Walled City of Famagusta through comparative analysis of several selected buildings of varying periods located within very close proximity to each other.

The major reason for which the buildings were selected as case studies are these buildings occupies a central position in the Walled City and is in close proximity to one another show casing the various periods of architecture and diverse features of those periods, with each having a unique cultural significance to the Walled City. Each building denotes a particular period:-

- The Chimney House is layered through Lusignan, Ottoman and British periods;
- The Gazi Elementary School belongs to the British period;
- The Haman Inn (Cafer Pasha Hammam) was built by the Ottomans from the debris of the Franciscan church from Lusignan Period;
- The Old Police Station was built during Ottoman Period;
- The Efecan Building Complex was built in 1973.

All the case studies are close to the Twin Churches, St Peter and Paul church and main urban square of the walled city, Namik Kemal square and a landmark St Nicolas Cathedral or Lala Mustapha Pasha Mosque.

Figure 1: The map of the Walled City of Famagusta adapted by Author from Department of Architecture, EMU.

Figure 2: Study Area map for the study adapted by Author.

A= Former Police Station; B= Chimney House; C= Primary School; D= Cafer Pasha Hammam; E= Efecan Building Complex; F= Twin Churches; G= Venetian Palace; H= Namik Kemal Square; I= St Nicolas Cathedral/ Lala Mustpha Pasha Mosque; J= St Peter and Paul Church.

In this thesis, two approaches would adapt to achieve the aim of the study.

- First would be the analysis of the selected case study in which a framework from the literature review would be used. The framework includes these factors are form and design, material and substance, use and function, tradition and techniques, spirit and feeling with location and setting. are used to analyze selected buildings for the purpose of conservation through adaptive reuse.

3.2 Historic Evaluation of the Walled City of Famagusta

Cyprus third largest island in the Mediterranean Sea after Sicily and Sardinia**,** with its history dating back to 4000 years, known as the ancient period (Mallinson, 2011). The Walled City of Famagusta, which is surrounded by a massive defensive wall of over 18 meters high and about 3900 meters long, with a 3meter deep moat of about 3 meters that has a gentle slope, is truly an historical city within the Northern Cyprus. The Walled City of Famagusta is located at the eastern shores of the island.

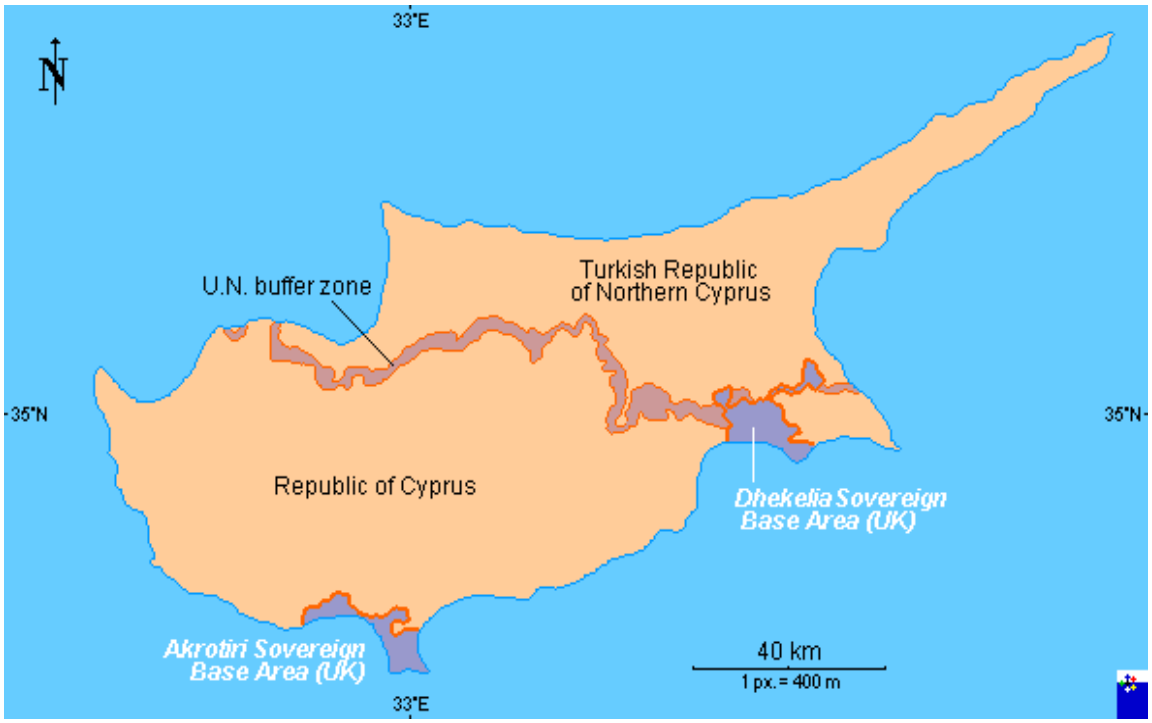


Figure 3: The Map of Northern Cyprus; (URL 5)

Arab raider in the year 648 raided the city of Salamis, forcing the inhabitants to move to the present site of the Walled City (Gürsory, et al, 2006). From there on many cultures and states has influenced Cyprus, this evident in the city of Famagusta, which has traces of overlapping cultures. The cultural history impact of the rulers like Lusignans, Venetians, Ottoman, British and the present cultures are seen visible alongside each other in the Walled City. Below the various important periods are clarified with their key political and architectural moments;

- **Early Periods (648AD – 1192):** After the refugees left the city of salamis and settled in the presented site of the Walled City of Famagusta. It was known as a small fishing town (Onal, 1999; Yilmaz, 2011)

- **Lusignan Period (1192- 1489):** During this period brought about fortifications, citadel and many religious and public buildings were built, and one of the notable ones is the St Nicholas Cathedral. The city was known for all the

economic transactions between the East and the West due to its port (Onal, 1999; Yilmaz, 2011).

Figure 4: St Nicholas Cathedral/Lala Mustpa Pasha Mosque; (Author, 2019)

- **Venetian Period (1489-1571):** this period witnessed the modification of the city defenses like the rebuilding and strengthen of the old wall to what is it today, digging of the moats around the wall, creation of the land and sea gate due to its military development (Onal, 1999; Yilmaz, , 2011).

Figure 5: Othello Castle; (Author, 2019)

- **Ottoman Period (1571- 1878):** in this period monuments like Bedesten and Arasta, medrese, bath, inns, and fountains were built, the Walled City became a military base and political exile station, economic activities became focused at the Larnaca, making the city to lose it economic significant. The period also witnessed the adaptive reuse of existing building, modification and transformations to meet the socio-cultural and economic needs of the inhabitants of the Walled City. For instance the conversion of the cathedral to a mosque (Onal, 1999; Yilmaz,; 2011).

- **British Period (1878 – 1960)**: this period had the Ottoman Empire hanging power to the British Empire. The island became a colony for the British Empire, with two major ethnic groups (Greek and Turks). This was a lot of development along the port and the port itself with warehouses and building to support the port. They also built administrative center in relation to the port, houses, government offices and buildings were also built (Onal, 1999; Yilmaz, 2011).

- **Cyprus Republic Period and the Period of ınternal struggles (1960 -1963 and 1963 -1974):** In this period the newly founded Republic was going through internal conflicts from 1963 until 1974, Walled City of Famagusta became the isolated enclave for the Turkish Cypriots, there was a serious neglect of the Walled City. There was separation of the administration of the island of Cyprus into two municipalities for the Turkish and the Greek. Traditional material and methods loses their significance due to reinforced concrete construction materials and techniques (Onal, 1999; Yilmaz, 2011).

- **Turkish Federated State (1974-1983):**

In July 1974, a coup was launched to assassinate the then the president of the Republic of Cyprus (Makarios) with the aim to establish "ENOSIS" (union with Greece), which was opposed by the Turkish Cypriots, which lead to the intervention of the Turkish forces, the coup attempt failed and a some month later Turkish Leaders proclaimed the Turkish Federated State under President Rauf Denktash (URL 6). Since then the Turkish Cypriots controlled the northern part of Cyprus, while the southern part of Cyprus is controlled by the Greek Cypriot, as Cyprus became divided into parts.

- **Turkish Republic of Northern Cyprus (1983 present):** the economic center in the Walled City becomes the nucleus serving leading to needs for shops that served the whole city and the region. The city was influenced by determinants' socio-economic, cultural and political factors (Onal, 1999; Yilmaz, 2011). There was also the construction of new units with flats roof and local administration started architectural projects to meet the needs of people of that period. Some of the

monuments and sites categorized according to the period they were built are shown in table 11;

Table 11: List of Historic monuments and sites in the walled city of Famagusta; adapted by Author from (Doratlı, 2012)

Lusignan Period (1192-1489)	**Venetian Period (1489-1571)**	**Ottoman Period (1571-1878)**
Cathedral of St. Nicholas (Lala Mustafa Pasha Mosque- listed together with the medrese, tombs, shops and the small chapel) Monastery cells' of St Nicholas Cathedral Franciscan Church Church of St George of the Latins Nestorian Church Church of SS Peter and Paul (Bugday Camii/Sinan Pasha Mosque) Twin Churches (the Templar and Hospitaller churches) Church of St Anthony (ruin with hospices/ loggias) Church of St George of the Greeks Church of St Anne Carmelite church Armenian church Tanners' Church (Tabakhane Mesjit) Ayia Zoni	Othello Tower Martinengo Bastion Ravelin(Akkule) Bastion Arsenal(Canbulat) Bastion Porta del Mare Diamante Venetian Palace Venetian House Biddulph's gate	Kertikli Hamam Cafer Pasha Bath Medrese Tomb of 28 Celebi Tomb of Mehmet Efendi Tomb of Canbulat Kizil Hamam Fountain

Church of St Nicholas Church of Stavros (Mustafa Pasha Mesjit) Salt store		

The diversity of cultures are evident in the Wall City of Famagusta, making it a peculiar site displacing proof of a long dynamic of previous cultures, but still suffering from dereliction and deterioration. The Walled City of Famagusta became a conservation area in 1989 under the new Town Planning Law (55/89); in 1999 the Department of Antiquities and Museums listed 249 building for conservation (Doratı, 2012). In 2005, a revitalization plan carried on by the UNDP together with Famagusta Municipality was agreed upon for the Walled City, which leads to execution of the Namik Kemal square and pedestranization of the Istiklal Avenue with parking lots projects.

3.3 Case Study Analysis

This section of this chapter would involve the critical analysis of the five selected case studies for this research. They are the Chimney House, Cafer Pasha Hammam, Old Police Station, Gazi Elementary School and Efecan Building Complex. The analysis would look in significant part of the cases, with the aim of documentation and appreciation of each of the case to comprehend peculiarities of their individual period of architecture and the extraction of important elements that should be conserved using aspects of authenticity from Nara Document of Authenticity that clearly stated factors to consider for authenticity in conservation.

3.3.1 Case Study Analysis of the Chimney House

The Chimney House is a historic building complex which has a multi-layered approach to its design; it is located at the center of the Walled City of Famagusta. The Chimney House would be analyzed using the frame work generated from the literature reviews which has factors for analyzing selected case studies from different perspectives. These include; these factors are form and design, material and substance, use and function, tradition and techniques, spirit and feeling with location and setting, for the purpose of conservation through adaptive reuse in order to find out it significance features and characteristics. At the end, function that is appropriate for the building would be proposed, with guide from the analysis.

1. **Form & Design Analysis**

The form and design analysis of the building provides visual interpretation of the building, which is more of tangible aspect of the analysis. These are aspects which can be seen and felt, that offer immense understanding of the selected case and the characters or uniqueness of their period. The form and design analysis would be

broken down into form of the building, space organization and relationship, openings, circulation, structural analysis and roof.

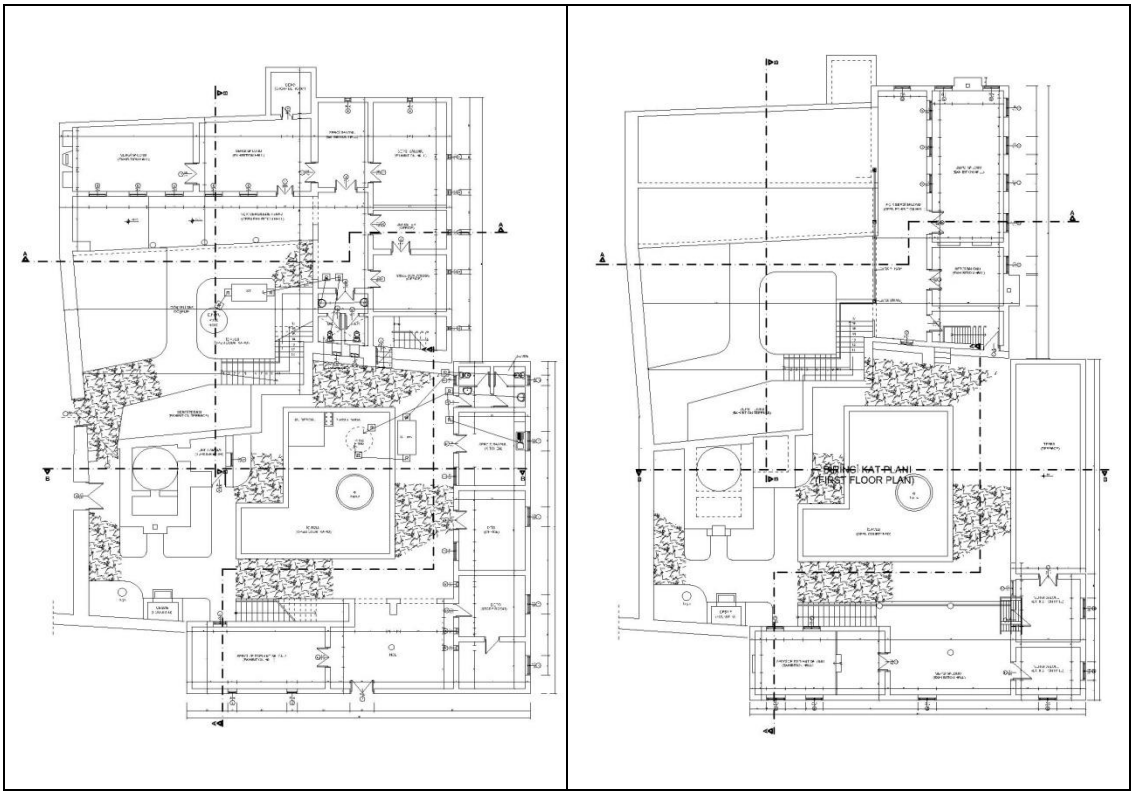


Figure 6: Floor plan of the chimney House with the ground floor plan on the left and first floor plan right side; (Department of Antiques and Museums)

a. Form of the building

The form of the Chimney House is a linear form with an L-shaped planar shape of two of its independent buildings jointed by a vertical wall separating both buildings that makes up the building complex, both building have a first floor and ground floor that is colonnaded with pointed gothic arches. The two L-shaped buildings define the two separate courtyards.

b. Space Organization and Relationship Analysis

For the Chimney House that has two independent buildings with a small bath house located at northern part of the house, the space organization of the buildings are linear organizations by design, with a space relationship of the building adjacent spaces with one space within a space at the first floors of each of the building, with a space linking common spaces at the ground floor of the building at the southern part of the House.

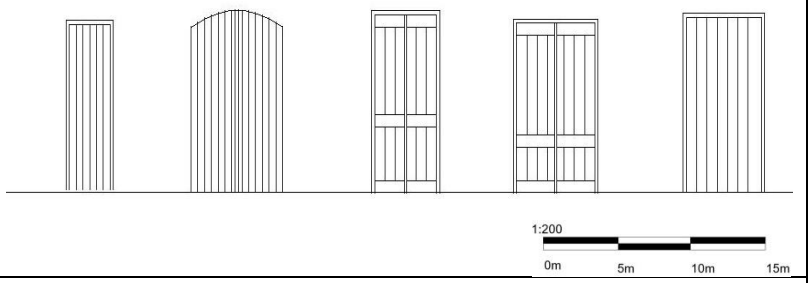
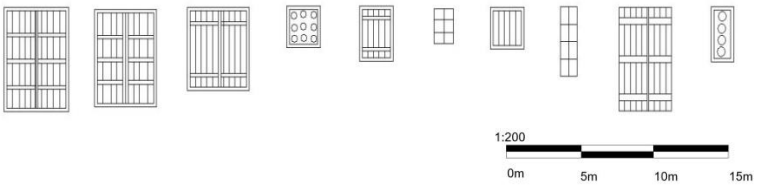
c. Openings Analysis

The Chimney house has an Eclectic style in which it exterior elevation is of Gothic character and the interior is of Turkish character. This style has affected the openings character of the house. The opening analysis is divided in to the following;

Degree of opening (for the windows); the exterior walls of the north, east and south the degree of openings using Ching's (1996) analysis would be grouped windows within their various exterior planes rendering of various scales. The interior openings are all centered at their planes in the various elevations. Outlook of the openings of the exterior, to the north the view is the parking lot of the Elementary School and residential buildings close the House, to the east is the view of the Twin churches, Efecan building complex, Gazi Elementary School and other residential buildings. The outlooks to the north have views of Cafer Pasha Hammam, Venetian palace, Gazi Elementary school and the old Police Station. The interior outlooks of the windows are oriented towards the inner garden or courtyards for each of the buildings. The major entrance doors for the House are located at high wall at the western part of the building, with each of the building having its own entrance door, still there is a door connecting both buildings between the north and the south.

Access to the first floor of each building is through a masonry stone staircase out each building. Accesses to the individual spaces are oriented towards the courtyard, except for building at the north ground floor where a lobby space is provided to give accesses to some spaces. The table below shows various openings of the Chimney house, the doors openings are all battened and ledged wooden doors, mainly double swing doors, with few single swings doors and opening towards outside. the window openings have battened and ledged wooden windows, with some shutters, grill openings.

Table 12: Openings of Chimney House (Author, 2018).

Doors	
windows	

d. Circulation analysis

The circulation analysis of the Chimney House would adopt the circulation analysis of Ching (1996) that broke down into Approach; Entrance; Configuration of paths, Path-Space relationship; Form of circulation space;

- **Approach**; the Chimney House have different ways to approach the entrance at the west, from the north it has an oblique approach and from the west it has a frontal approach.

- **Entrance**; the nature of the entrances of the Chimney House is a flushed entrances western wall plane.
- **Configuration of paths**; the major configuration of path for the Chimney house is the linear configuration that is moving from one and terminating at another point.
- **Path- Space relationship;** the relationship between the path-space in the Chimney House is mostly passing by space and few passing through space.
- **Forms of configuration of spaces;** for the Chimney House forms of configuration of spaces are enclosed for one space and most are open on one side forming corridors providing access to the various spaces (likethe corridors).

e. Structural Analysis

The structural system for the Chimney House is load bearing structure with ashlar masonry (in which the sides of the stone are dressed in a regular square) massive wall made of masonry sand stone and the passages with the verandas are supported by columns also made from Sandstone. The spaces below the veranda are supported by pointed arches, which transmit the load from the first floor to the foundation.

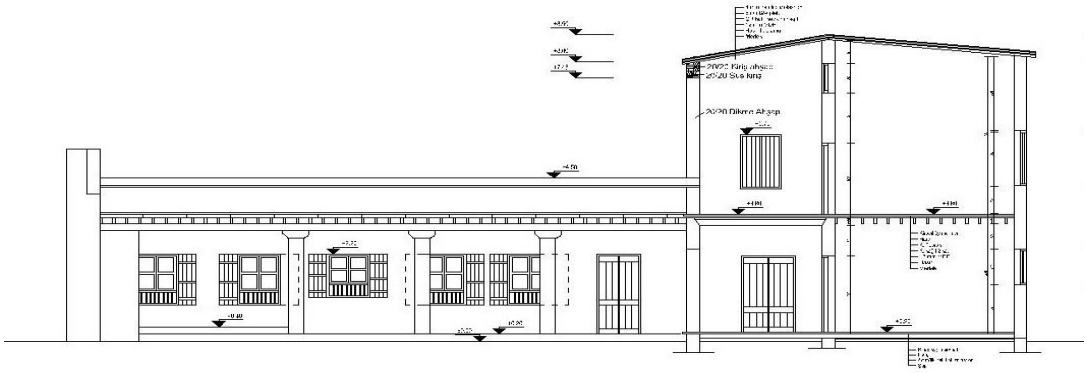


Figure 7: The section of the female part of the building (with a view windows and wall doors of the Chimney House); (Department of Antiques and Museum)

f. Roof

The roof system adopted for the Chimney House is pitched roof with a mild slope. The roofing system of the small Hammam house is spherical dome made of sandstone.

2. Material and substance Analysis

For the analysis of materials and substance would be divided into two major parts for proper analysis of what the Chimney house is made of. They are structural materials and finishing materials;

a. **Structural materials**; structural materials are materials that make up the structure elements of the building. The Chimney House being a loading bearing structure it means that the walls are carrying the load of the building. The major materials that make of the walls are masonry sand stones, the roof are supported majorly by palm branches, with the palm straws supporting the mild concrete roof.

b. **Finishing materials**; the Chimney House being an eclectic styled building is unique in its material collection of it finishing. The table below shows the finishing of the major planes of the House;

Table 13: Finishing materials of Chimney House

Planes/ Objects	Interior	Exterior
Wall	White paint	Stone used naked
Floor	Ceramic tiles	Stone slab
Ceiling	Palm straws	-
Doors	Glossy brown Wooden paneled	Glossy brown Wooden paneled
Windows	Glass, shutters, glossy brown wooden panels	-
Balustrade	Glossy brown wood	Glossy brown wooden
Columns	-	Glossy brown wood, un finished sand stone
Roof	Palm straw	Concrete, sandstone

The exterior surfaces are left unfinished, having their sandstone raw finish on them, with the flooring in the garden having stone slabs and the exterior corridors also having stone slabs.

Figure 8: Column and floor material of the Chimney House; (Author, 2018

3. Use and Functional Analysis

The Chimney House showed that it was once inhabited by a respected official either the Treasurer or Kadi, because of its interior arrangements, a size of the building and remaining piece of tile in the Hammam located in the courtyard. The Turkish interior character of the house can be felt in a room at upper floor of the southern part of the house, in that room the raised platform were retained with a balustrade dividing the room into the sitting area and lower area facing the entrance. The elevated platform are ornamented shelves at the sides of the walls, it remains the only part of the building complex to show the authentic interior arrangement of a Turkish room (Yildiz, 1996). The Chimney House is also called the Sömineli Ev, which is about 92m to the (east to the Chimney House) Twin Churches, another landmark of historic city. Between 1949 and 1951 the Chimney House was restored to serve the function of a museum and also served as temporary place for keeping the pottery sculptures found from sites of excavation conducted within that period. An interior staircase and lighting was built and installed in the building. For some time the Chimney House was a living Ethnographic museums, under the Department of Antiquities and Museums (Bagiskan, 2005). The Turkish bath in the courtyard of the southern part of the building complex has nicely shaped niches and a remnant of tiles that used to cover the whole interior of the Hammam.

Figure 9: The female part of the Chimney House with its courtyard and also showing the small Hammam (bathhouse); (Author, 2018)

4. Tradition and techniques Analysis

The Chimney house is a multi-layered historic building with several cultures making it what it is today. The Chimney House is of two parts that were of the gender orientation, with the northern part belonging to the male gender, with an entrance from the west, leading to a courtyard and a garden. The female part is towards the southern part of the building, which also has it entrance that leads to passage that is between the western high wall and small Ottoman styled bath house, the passage also leads to the internal courtyard and garden. A well and a water fountain are also found in the female part of the house (Yildiz, 1996 and Bagiskan, 2005). A well and a water fountain are also found in the female part of the house with the high wall of the western part is the house that provide a visual barrier from the passerby of the major street of the west and also as shade from the mid-day sun.as a result of the western high wall it shown the Turkish traditional value for privacy. It was until the 1952 when the house was been restored that a door was added between the two buildings (Bagiskan, 2005).

The technique of construction (traditional masonry stone) shown the value for environmental sourced material, in which the masonry sandstone, the use of palm branches and straws for construction.

Figure 10: The high wall seen from the northeast part of the Chimney House; (Author, 2018)

5. Spirit and feeling analysis

Chimney House is an eclectic style building complex, with its elevations and doorway having Venetian or Gothic character, while the interior design has a Turkish character, giving the building complex it distinctness among other historic buildings in the Walled City of Famagusta (Yildiz, 1996).

Figure 11: The interior render of the Chimney House; (Author, 2018)

6. Location and Setting Analysis

The Chimney House is located at the center of the Walled City of Famagusta, showing that most of the important buildings of the Walled City are situated at the center of the city, offering it close proximity to notable buildings in the city.

The Chimney house having two buildings which were pervious separated from each other, each having their individual wells, entrances and garden/ courtyard. For each of the courtyards for both male and female parts, there is also a garden with trees. Around the house the vegetation is limited except to the south-west and North West exterior of the surrounding of the house that has a little green area.

The well-known landmarks which have close proximity with the Chimney House are the Twin Churches to the east, Cafer Pasha Hamam to the south east, the Namik Kemal square to the south east, Venetian Palace to the south and St Nicholas cathedral/ Lala Mustpha Pasha Mosque to the south east.

Figure 12: The water fountain in the female part of the Chimney House (Author, 2018)

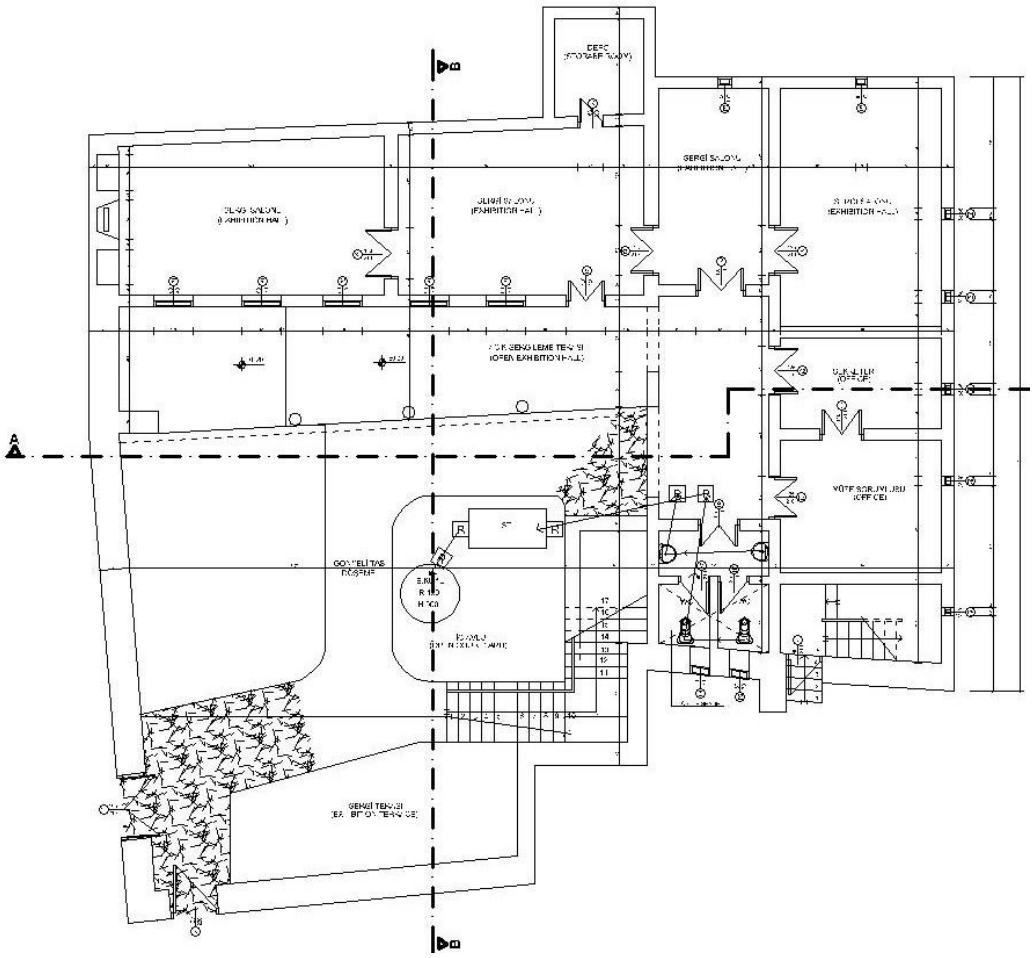


Figure 113; Ground floor plan of the male part of the Chimney House (Department of Antiques and Museums)

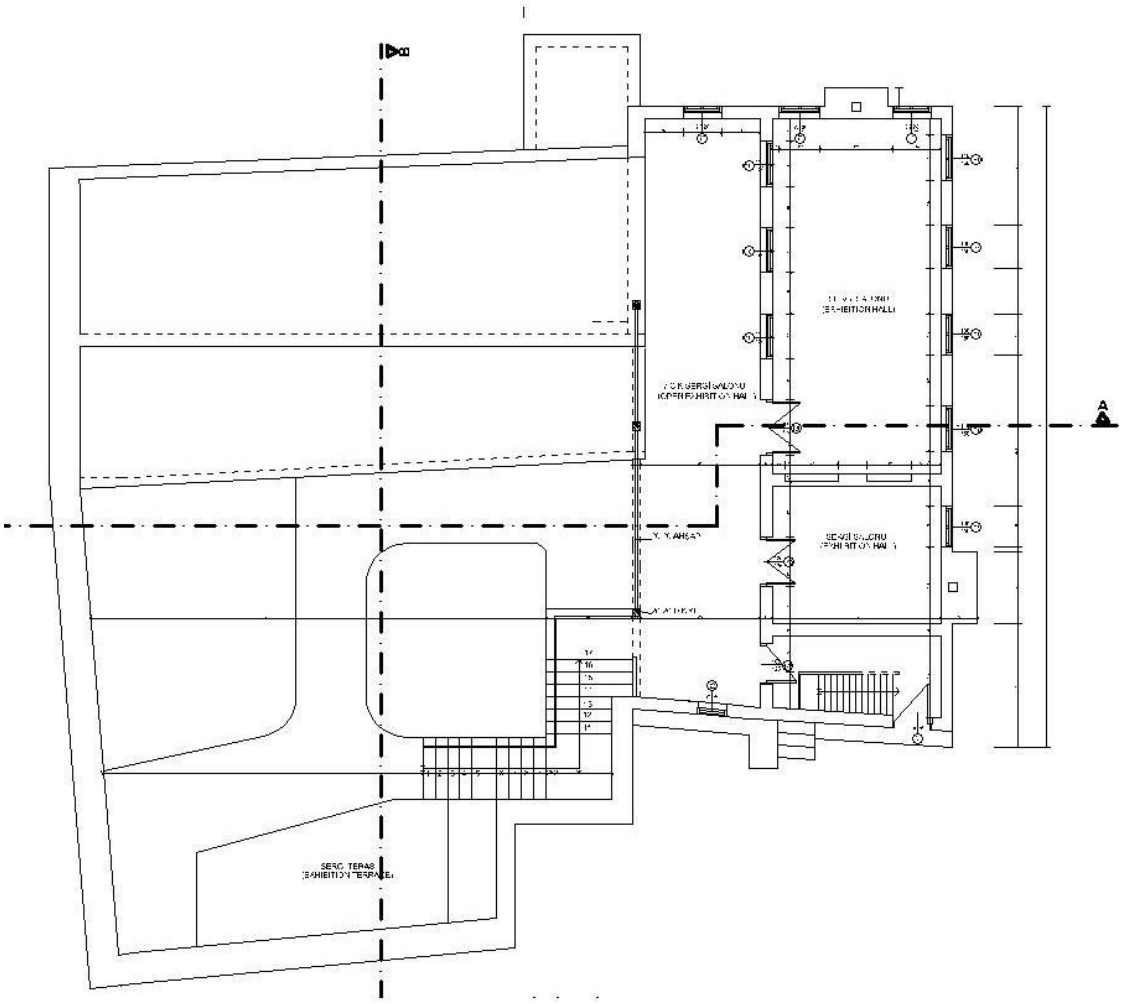


Figure 14: First floor plan of the male part of the Chimney House (Department of Antiques and Museums)

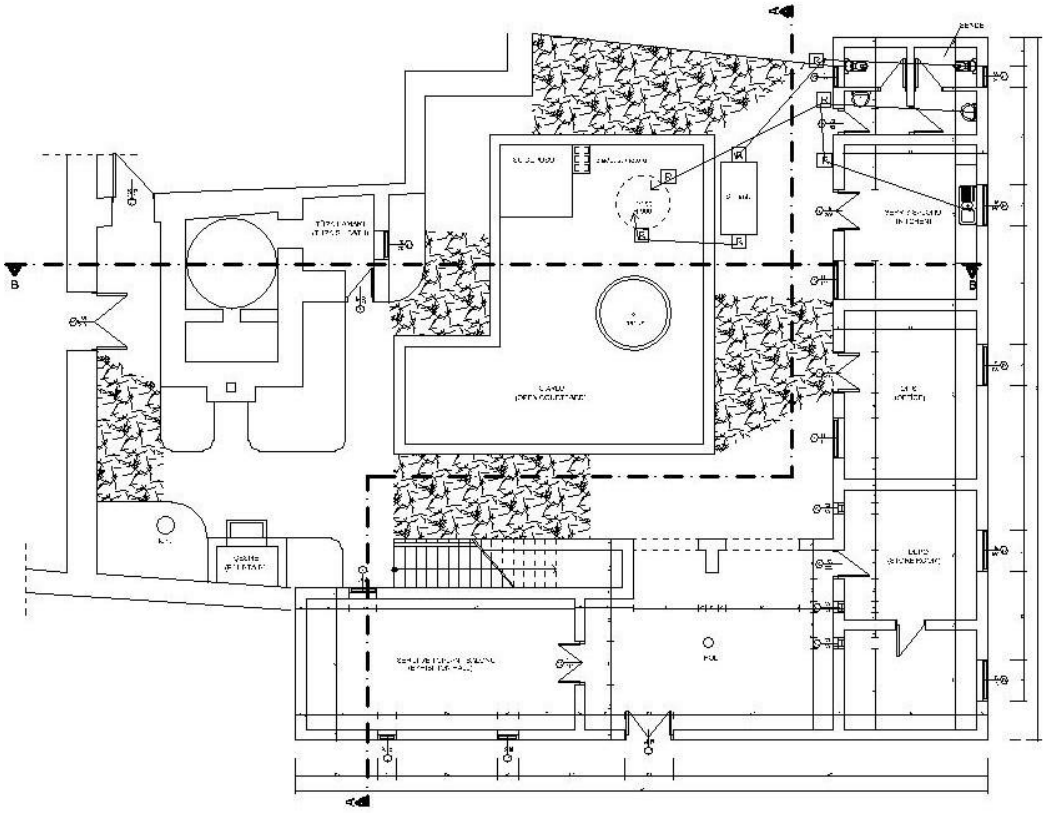


Figure 15: Ground floor plan of the female part of the Chimney House (Department of Antiques and Museums)

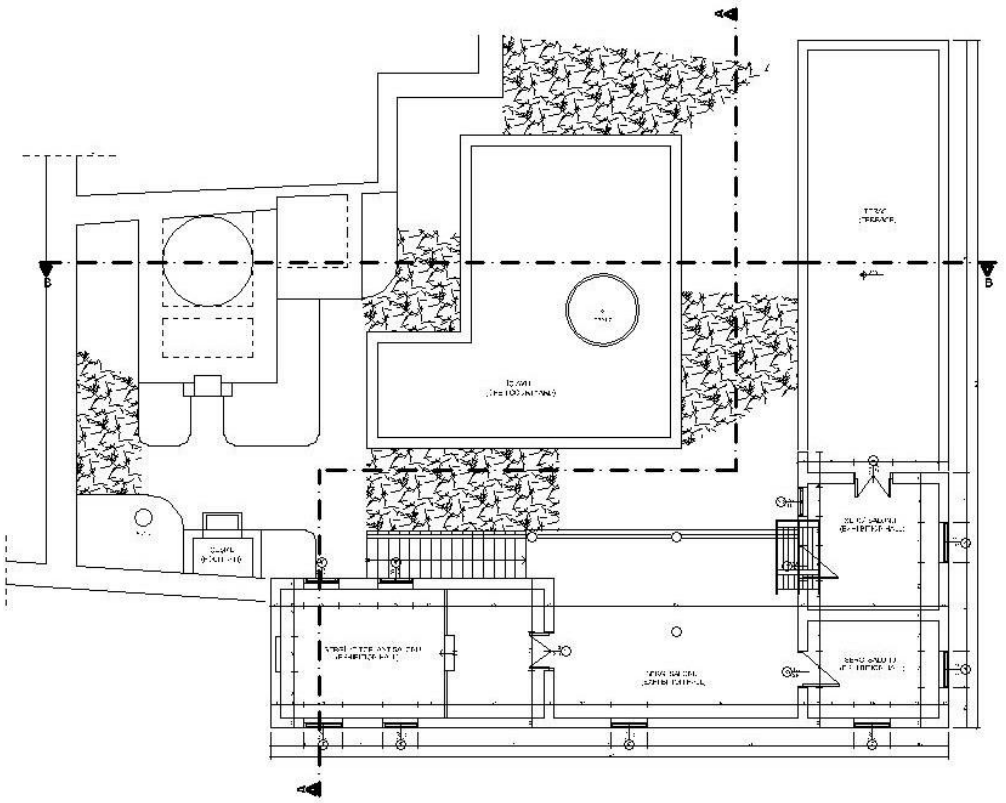


Figure 16: First floor plan of the female part of the Chimney House (Department of Antiques and Museums)

Proposed Function

The Chimney House being an eclectic building has served several periods, based on the analyses of the spirit and feeling and use and function, it would be important that proposed function should respect the spirit and history of the House, adapting function acknowledges the cultural heritage of the House, like an Art and cultural center or ethnographic museum.

The summary of the Chimney House analysis is summarized in the table below, also indicating important elements and features of the Chimney House from the analysis.

Table 14: A matrix of summary of the Chimney House.

Parameters of Nara Documents		**Features of parameters of Nara Document**	**Extracted features from Chimney House**
1	Form & design	Form of the building	Linear form with L-Shaped plan with focus to the courtyard.
		Space Organization & relationship	linear organization, with adjacent spaces, space within space relationship
		Openings	Grouped windows and doors central placed on the plane
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	- Frontal and oblique approach - Flushed entrance - Linear configuration of paths - Pass by space and passing through space - Enclosed and open on one side
		Structural system	load bearing with ashlar regular masonry stone
		Roof system	Pitched Roof system and dome roof
2	Material & substance	Structural Materials	Masonry sandstone
		Finishing materials	White paint, ceramic tiles, wooden openings and wooden balustrade
3	Use & function	Period Initial function Existing function	- Lusigian and Turkish period - Dwelling - Museum
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation Interior elements	- Traditional masonry techniques - Multi-layered historic building with several cultures - Gender oriented - Garden and courtyard life - Turkish Interior - Gothic exterior
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	- Eclectic style building - Introverted nature
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	- Center of the Walled City of Famagusta - Courtyard garden - Cafer Pasha Hammam, Gazi Elementary School, Efecan building complex, and Old Police Station - Twin Churches, Venetian Place, St Nicolas Cathedral and Namik kemal Square

3.3.2 Case Study Analysis of the Cafer Pasha Hammam

The Cafer Pasha Hammam currently known as the Hammam Inn, it was built as a typical traditional Turkish bath house but has been adapted to a Pub. It is located at the center of the Walled City of Famagusta. The Hammam would be analyzed with framework generated for the analysis of existing building for conservation through adaptive reuse.

1. **Form & design Analysis**

The form and design analysis of the Cafer Pasha Hammam is critical to be able to appreciate and document the visual properties of the building which can be seen as the tangible aspects of the building, which also possess within it selves the qualities of the intangible and dynamic aspects of the building. The form and design analysis of the building would include form of the building, space organization and relationship, openings, circulation, structural system and roof.

a. Form of the building

The Cafer Pasha Hammam has a linear form with an I shape plan, the building is made of one floor sinking below the normal ground level of the surrounding buildings.

b. Space Organization and relationship

It has a typical linear spatial configuration/ organization that is known to Ottoman styled Hammam, having an adjacent relationship into four parts; the first part from the south is the cold area, where people are welcome; the second part is a warm area where people undress and enter the hot area; the part are where the boiler are located.

The hot area has a radial spatial organization which is divided introverted compartments for private bath having space relationship of space within a space that are four in number, all orienting towards the central space with the central dome. The access space which was the welcoming area is now used as the main bar space and the hot area introverted spaces as storage and Pub private spaces, so also the boiler space used for storage. The semi hot space was also converted to a toilet for the guest. The access doorway from the south is a meter below ground level of the adjourning street.

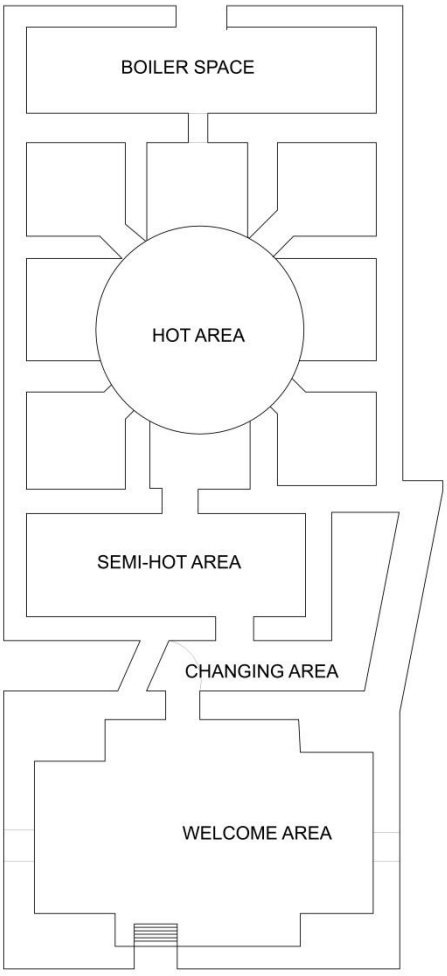
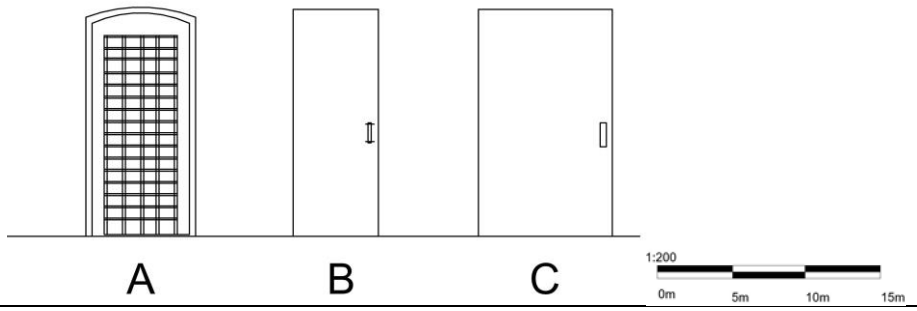
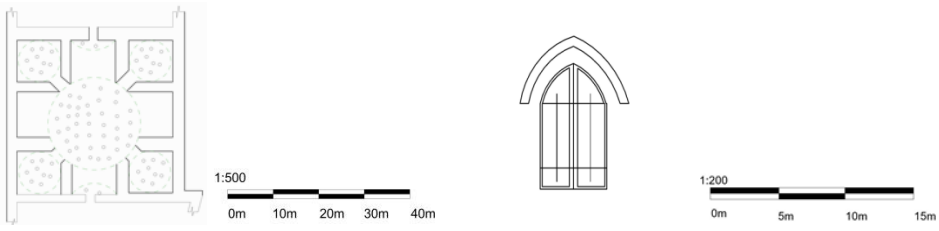


Figure 17: The Floor plan of the Cafer Pasha Hammam; (Bagiskan, 2005).

c. Openings

The Cafer Pasha Hammam is a unique building with it openings, it is affected by the initial function of the bath house, which needed less opening to conserved the heat within the building. The degree of opening for the access, the entrance door is within the plane of the south elevation but not centered. The doors accesses for the interior are also not centered, with the hot area having openings at the right angles of the introverted spaces. The exit opening from the hot are to the boiler space, is centered at the plane, so as the rear exit from the building. The openings for light and ventilation are also unique. The windows with both in the welcoming area, one at the west, which is not centered but positioned from the ceiling plane, with the window at the east positioned from the ceiling plane. The other areas of the bathhouse or pub have openings at the ceilings (cylindrical elements) bring in light into the interior. The outlook of the windows to the west is the ruining of the St Francis church, to the east is the mixed building.

Table 15: The openings of the Cafer Pasha Hammam (Author, 2019)

Doors	
windows	

The table above describes the various openings for Cafer Pasha Hammam, as stated above the Hammam has limited openings because of it design, the interior flushed door was added during it adaptive reuse as a pub. The openings for windows were also added during the adaptive reuse project. Door A as the entrance door, with door B are the interior flushed doors, while door C is the exit door of the boiler area. The ceiling opening been shown in the section of the building highlighting the domes and the openings bring light into the hot area of the Hammam, in order to conserve heat that is much needed in the Hammam.

d. Circulation

The analysis movement to within the Cafer Pasha Hammam is critical to appreciation and documentation of the building. The cultural significance of the building can also be seen in the circulation of the building;

- **Approach**; the approach to the entrance of the Cafer Pasha Hammam is Oblique from the west and east direction to the building's entrance.
- **Entrance**; the entrance of the Cafer Pasha Hammam is a flushed entrance that is a meter below ground level of the access road.
- **Configuration of path**: the configuration of the path of the building is mainly linear configuration however in the hot area having a radial configuration.
- **Path- Space Relationship**; the path space relationship of the Cafer Pasha Hammam is passing through space.
- **Forms of configuration of space**; the form of configuration of space for the Cafer Pasha Hammam is the enclosed form.

e. Structural System Analysis

The Cafer Pasha Hammam is made of a load bearing stone masonry structure, the masonry stone walls supports the multi vaults and a dome in the hot area of the bath house transferring the load to the walls of the building , the welcoming area has a groin vault that carry the load of the roof. The wall system of the Cafer Pasha Hammam is constructed with coursed ashlar masonry technique.

Figure 18: the dome roof Cafer Pasha Hammam; (URL 7)

f. Roof

The roofing system employed for the Cafer Pasha Hammam are vaulting system with the major hot area having a central space with a central dome radiating to other introverted spaces having pointed arches and four barrel domes at each of the cardinal directions. The welcoming area which is used as the pub space has a Groin vaults supporting the stone roof.

Figure 19: The dome of the Hammam and opening the dome. (Author, 2019)

2. Material Analysis

As done in the previous material analysis of the Chimney House, the analysis of materials would be divided into two parts which are Cafer Pasha Hammam

a. Structural material;

For the structural material employed in the Cafer Pasha Hammam is the masonry sand stone material concrete has been used at stages of repair.

b. **Finishing materials**: the finishing material of the Cafer Pasha Hammam is described in the table below

Table 16: Finishing materials of the Cafer Pasha Hammam

Planes/ Objects	Interior	Exterior
Wall	Stone wall	Stone
Floor	Stone slab	Stone slab
Ceiling	Masonry stone	-
Doors	Paneled wooden door	Paneled glazed metal door
Windows	Glazed casement windows	-
roof	Dome stone	Sandstone

From the table above the analysis show that the Cafer Pasha Hammam does not have much finishing, but left on the raw surface texture of the materials of various planes, which is predominately sand stone.

Figure 20: The walls of the interior of Cafer Pasha Hammam; (URL 7)

3. Use and Function Analysis

The Cafer Pasha Hammam is located at the northwest of the Namik Kemal square. Some part of the Hammam was built on the remnant of the St Francis Church built in the Lusignan periods (14th century), built with well-cut sandstone, later on transformed into a traditional Turkish bath house known as the Cafer Pasha Hammam, built in 1601 and named after the Famagusta's Governor, who governed under the rule of Sultan Ahmet 1. The style of architecture of the Cafer Pasha Hammam is typical designed in the conventional Turkish bath with alternating cold and hot areas of Ottoman style, which is still in good condition (Bagiskan, 2005). However, Cafer Pasha Hammam have be converted to a pub, that is open during the summer period within the evening, giving customers the historic feeling of the building, with sitting elements place organized within the first three levels of the space. The welcoming space services the pub bar and sales points, from which drinks are ordered and customers sit, enjoy the historic atmosphere.

Figure 21: The approach view of the Cafer Pasha Hammam ; (Author, 2019)

4. Tradition and Techniques Analysis

The use of well-cut sandstone as the major material for construction for the Cafer Pasha Hammam shows the importance of using local building materials, which has left the building good condition, even the innovative ways in which the light is been brought into the interior space, is also what made the Cafer Pasha Hammam to stand out.

5. Spirit and feeling Analysis

Privacy is a very important factor that can be seen from the floor plan that shows the circulation within the space. The openings or door ways are not opened directly or parallel to the door facing it, each door is facing a wall, thereby not providing direct visual access to the next space.

Figure 22: Interior of the Cafer Pasha Hammam; (Author, 2019)

6. Location and Setting Analysis

The Cafer Pasha Hammam (URL 15) is probably the most historic pub in Cyprus. Space organization and the opening in the Cafer Pasha Hammam, makes it to be unique, with its traditional Turkish bath layout, which has an undress area, hot space with the boiler room. The landmarks that are close by the includes the Namik Kemal square to the south east of the buildings, the Venetian palace to the South; St Nicholas cathedral to the South East, the Twin Churches to the North East part of the building; the Chimney House to the north west and St Peter and Paul Church to the south. Since the remnants of St Francis Church is part of the space of Cafer Pasha Hammam at the southern part of the building, the multi-layered nature of the building is also felt when on comes into the area. The vegetation or green area around the Cafer Pasha Hammam can be felt more around the North West and north east of the building with trees and shrub.

Proposed Function

The Cafer Pasha Hammam was originally built as a Turkish bath house but as the years past lost it function, and was adapted to a pub. The Hammam building was built from part of the St Francis church with some of its walls still standing. Based on the analyses of use and function and tradition and techniques it would be important the initial function of the building be considered for the case conservation through adaptive reuse, in which it can be adapted to a health café and spa, which maintain the authenticity of the building, because the current function do not respect spirit and tradition of the spaces, by them opening the door openings to give visual continuity to all the other levels of the spaces, different from the initial that respect privacy of the users.

The table below includes the summary of the analysis of Cafer Pasha Hammam and elements and features critical to this analysis of Cafer Pasha Hammam.

Table 17: A matrix of summary of the analysis of Cafer Pasha Hammam

Parameters of Nara Documents		Features of parameters of Nara Document	Extracted features from Cafer Pasha Hammam
1	Form & design	Form of the building	Linear form, I shaped Plan
		Space Organization & relationship	Linear space organization with an adjacent space relationship
		Openings	Limited openings, with window opening to the ceiling level, i.e. not positioned central
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	- Oblique approach - Flushed entrance - Linear and radial configuration of path - Passing through space - Enclosed form of configuration of space
		Structural system	Load bearing ashlar regular masonry, with domes, vaults, groin vault
		Roof system	Vaulting systems
2	Material & substance	Structural Materials	Ashlar Masonry sandstone
		Finishing materials	Paneled glazed door and window
3	Use & function	Period Initial function Existing function	- Turkish period - Bath house - Pub
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation Interior elements	- Typical Turkish Bath house - Masonry stone - Gothic pointed arches
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	Spatial organization of a bath house that promotes privacy with introverted spaces
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	- Center of the Walled City of Famagusta - Chimney house, Gazi Elementary School, Efecan building complex, and Old Police Station - Twin Churches, Venetian Place, St Nicolas Cathedral and Namik kemal Square - Light vegetation

3.3.3 Case study Analysis of the Gazi Elementary School

The Gazi Elementary School is the second elementary school located at the center of the Walled City of Famagusta. In the analysis of Gazi Elementary School the framework generated from chapter two (literature review) would be used for the analysis of this building (Gazi Elementary School).

1. **Form & Design Analysis**

Form and design of the Gazi Elementary school is of a distinct character among the buildings that are it neighbors. These visual elements and features from the form to its roof are critical elements that contribute immensely to the tangible heritage of the building, the form and design would discussed under the following headings

a. Form of the building

As stated above the Gazi Elementary School is a distinct building, the building has a linear form, with an E-shaped plan like a three rectangular jointed together with a shortened hexagonal shape. The building is placed on a base of about 60cm; with the entrance porch extending through the outline of the building; this porch has a rectangular shaped stairs as inviting element of the approach view. The Elementary school building is consists of 8 classrooms, the head teacher's office and teachers room/ reception, with a colonnaded terrace or corridor.

b. Space Organization and Relationship Analysis

The users of Gazi Elementary School gain access from one part (porch) and can leave through another point (terrace), making it to be a linear spatial organization. The classrooms of the east is mirrored to the west with similar distribution of

openings, all the spaces are linked to the semi-opened colonnade terrace, thereby have a space relationship that adjacent in nature, with a space linked by a common space between the teacher's room, secretary and the head master. The approach view is also characterized by Doric ordered columns also serving as distinctive elements. The roof is pitch roof with various segments following the geometry or form of the building.

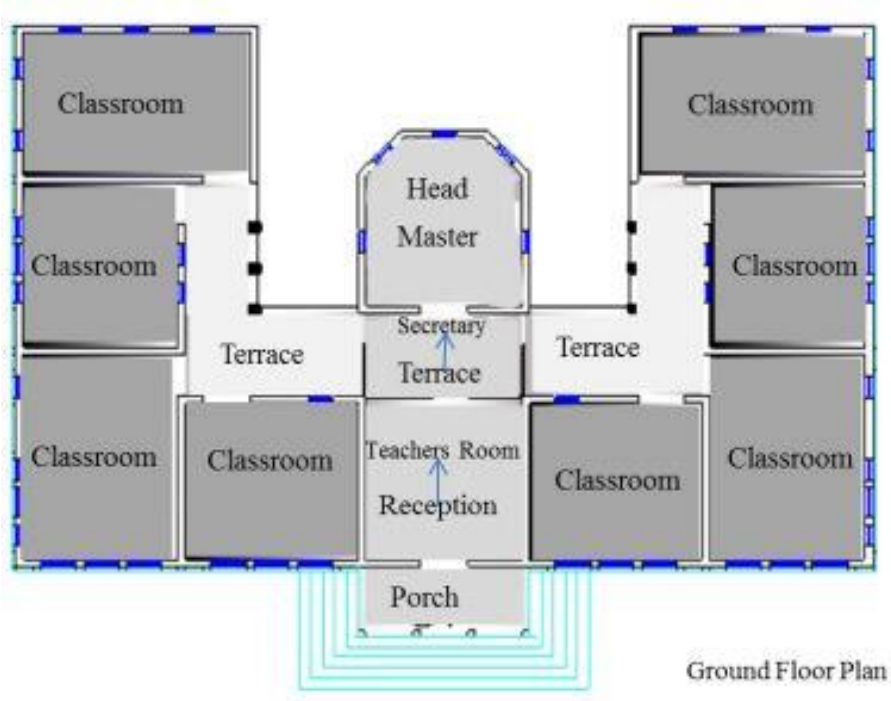


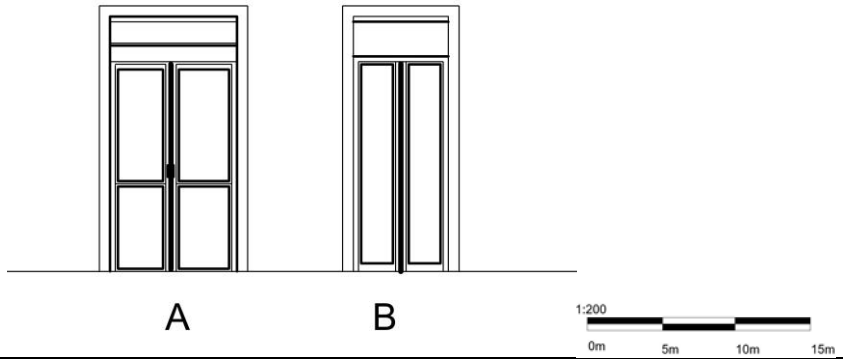
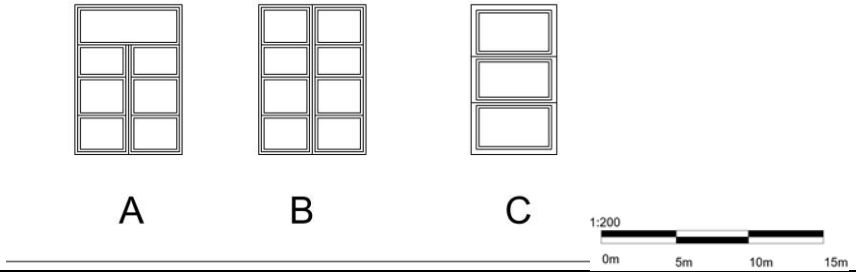
Figure 23: Floor plan of Gazi Elememtary School; (Author, 2019)

c. Openings

Gazi Elementary School being an educational building that requires lots of nature lights are evidence in it distribution of its openings around the building. The degree of opening of the access can be seen from the major entrance of which is double swing paneled wooden door that leads to the reception and the teacher's room, the next double swing paneled wooden door, which then leads to the terrace/secretary

office, from which the rest of the classroom can be accessed. The access doors of the classrooms are all linked to colonnaded space. The degrees of openings for ventilation and lighting in all the elevations are centered at their various planes and are grouped. The various outlooks for the openings are to the south is the mixed used building, Twin churches and Efecan building complex; to the north is the playground of the school; to the west are the Venetian palace, ruins of St Francis church and Cafer Pasha Hammam or Hammam inn. The table below shows the various opening of the Gazi Elementary School, in which the doors are of two types both double patterned doors with sky lighting at their headings, with door A being the approach door and B being the doors for the classrooms. The window openings are casement with A being three cases at both sides with a skylight. Window B being windows at the approach elevation. Windows C are current replacement of window A, at the north side of the school.

Table 18: The openings of the Gazi Elementary School (Author, 2019)

Doors	
windows	

d. Circulation

Being an educational building that requires efficient movement within and outside the building is very vital to the functioning of the school. Circulation in the Gazi Elementary School provide information sources on how the program of the school is been carried out. The analysis of the circulation would be looked into under the follow headings;

- **Approach;** The approaches to the Gazi Elementary School's entrance are mixed with frontal, oblique and spiral, all depends on the direction to which the building is approached.
- **Entrance**; the entrance of the Gazi Elementary School is a flushed entrance that is a meter below ground level of the access road.
- **Configuration of path**: the configuration of the path of the building is majorly linear configuration
- **Path- Space Relationship**; the path space relationship of the Gazi Elementary School are passing by space and passing through spaces.
- **Forms of configuration of space**; the form of configuration of space for the Gazi Elementary School is the open on one side.

e. Structural Analysis

The Gazi Elementary School's structural system is a framed structure; in which the columns carries the load of the roof and transfers it to the foundation. At the semi-open terrace at the south side of the building one could see the I beam steel columns supporting the building. The building is placed on a rusticated base making it be elevated from the ground. The approach view has a number of Doric order columns supporting the front porch.

f. Roof

The roofing system that is employed in the covering of the Gazi Elementary School is a pitch roof system, which is pitch at strategic points.

Figure 24: The ceiling and steel column; (Author, 2019)

2. Material Analysis

The building materials that were used for the construction of the school are of hybrid nature that is to say; there is the combination of traditional materials and were modern contemporary materials. The material selection and application is the reflection of the British Period's impression on their colonies. The material analysis would be seen in the following;

a. **Structural material**; being a framed structure, the major structural material is steel beam, which is in a grid system carrying the load of the building. The other major material is the masonry sand stone.
b. **Finishing materials**; the finishing materials of the Gazi Elementary School is categorized in the table below;

Table 19: Finishing materials of the Gazi Elementary School

Planes/ Objects	Interior	Exterior
Wall	White and cream paint	White and cream paint
Floor	Terrazzo slabs	Terrazzo
Ceiling	polyvinyl chloride	polyvinyl chloride
Doors	Paneled wooden door with glass glazing at the top	Paneled glazed metal door
Windows	Glazed casement windows	Glazed casement windows
Columns	-	I steel beam
roof		Red slate tile

The walls of the building are of traditional material of sandstone, that were gotten remotely and plastered cement then covered render with paint, the doors are made of hard wood of paneled door. Red roof tiles are the materials used for the roofing. The walls are rendered and painted in cream and white.

Figure 25: Interior of the Gazi Elementary School (Author, 2019)

3. Use and Functional Analysis

Education which is one of the tools of socio-cultural dissemination of the ideals or value of the British Empire, bought about the creations of schools around the island. One of such schools is the Gazi Elementary school. The name of the architect is Theodoros Fotiades (1878–1952), a Greek Cypriot, who was trained in Athens in classical architecture and the school was built in 1920s in a Greek revival style. The school is a symbol of Greek ethnic nationalism and the other Greek Cypriot schools that were built with that period copied the style of the school (Bilsel and Dinçyürek, 2017). The building is still functioning as an elementary school in the Walled City of Famagusta as of the time of writing this thesis.

Figure 26; The Queen Victoria ornamentation; (Author, 2019)

4. Tradition and Techniques

The British took the administration of the island of Cyprus from the Ottomans' in 1878. The time of the British in the island of Cyprus brought about advancement in port trading, decreasing corruption, education and architecture of the west. The major point is the growth of the settlement beyond the Walled City of Famagusta (Dodd, 1993). As stated in the material analysis, stating hybrid nature of building materials,

this shows the appreciation for the indigenous material in combination construction techniques of Turkish Cypriot and Greek Cypriot with the British.

5. Spirit and Feeling Analysis

The approach view porch has a gable roof with a cornice that gives a triangular form painted in white and also a stepped entablature. At the peak of the pitch roof is a ornamentation of Queen Victoria and also an ornament can be seen at the bases of the roof. The Doric order columns also made to stand out. The roof of the school is covered in red tiles with the queen ornamentations at the peak of the gables; the building is painted in white and cream with stone moldings around the windows. The building is also special because it is the only building within it setting with Cypriot revival style (Bilsel and Dinçyürek, 2017).

Figure 27: The approach view of the Gazi Elementary School; (Author, 2019)

6. Location and setting Analysis

The Gazi Elementary School building is a special building in its environmental setting; this is due to its character which is different from the surrounding buildings.

The space organization of the building is also unique from its surrounding settings of the school. The classrooms of the South mirrored by the classrooms of the West, with a linear circulation of in the building, where one enter from the porch and exist through another point.

Numerous landmark buildings and monuments are close to the Gazi elementary school; to the north is the Twin Churches, to the north east is the St Nicholas Cathedral and the Namik Kemal Square, to the east is the Cafer Pasha Hammam with the ruins of St Francis and the Venetian palace. To the west is the Chimney House. To the south is the old prison of the Ottoman period.

At the north side which is the approach towards the main entrance of the building, has rich vegetation with trees that shade that part of the site from the impact of the mid-day sun and at the east that shares the ruins of the St Francis church and the Cafer Pasha Hammam has some vegetation in the ruins of St Francis Church. To the south there is hard landscaping is much which serve an assembly area for the school.

Proposed Functional Analysis

The function of the Gazi elementary school has always been for education purposes. The function of the school building is still for education of elementary students. The school is relatively old and there are plans to move the students to another school. Based on the analysis of use and function, the credibility of the building heritage can conserved if the adapted function would still focus educational programs, in which the building was built for, the building can be adapted to exhibition hall and community center.

After the analysis of the Gazi Elementary School, the summary of the analysis is contained in the table below, with critical points of the analysis.

Table 20: A matrix of the summary of the Gazi Elementary School.

Parameters of Nara Documents		Features of parameters of Nara Document	Extracted features from Gazi Elementary School
1	Form & design	Form of the building	linear form with L-Shaped plan with focus to the courtyard.
		Space Organization & relationship	linear organization, with adjacent spaces, space within space relationship
		Openings	Grouped windows and doors central placed on the plane
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	- Frontal and oblique approach - Flushed entrance - Linear configuration of paths - Pass by space and passing through space - Enclosed and open on one side
		Structural system	load bearing with ashlar regular masonry stone
		Roof system	Pitched Roof system and dome roof
2	Material & substance	Structural Materials	Masonry sandstone
		Finishing materials	White paint, ceramic tiles, wooden openings and wooden balustrade
3	Use & function	Period Initial function Existing function	- Lusigian and Turkish period - Dwelling - Museum
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation Interior elements	- Traditional masonry techniques - Multi-layered historic building with several cultures - Gender oriented - Garden and courtyard life - Turkish Interior - Gothic exterior
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	- Eclectic style building - Introverted nature
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	- Center of the Walled City of Famagusta - Courtyard garden - Cafer Pasha Hammam, Chimney House , Efecan building complex, and Old Police Station - Twin Churches, Venetian Place, St Nicolas Cathedral and Namik kemal Square

3.3.4 Case Study Analysis of the Efecan Building Complex

In the analysis of selected periods in the Walled City of Famagusta, the Efecan Building Complex was selected to represent the modern period to its close proximity to the rest of the case studies selected for this thesis and also because of its historical context that would be described in analysis of the building. The Efecan Building Complex will be analyzed using the framework generated from the literature reviews.

1. **Form & Design Analysis**

The Efecan Building Complex represents the modern product of architecture selected for this research, thereby being a different from the rest of the case in its character.

a. Form of the building

The form and design of Efecan Building Complex, shows a lot of features of a modern building. The building has a linear form with a trapezium shape plan due the shape of the plot. It is made up of three floors, which are the basement floor, the ground floor and first floor.

b. Space Organization and relationship Analysis

Efecan Building Complex has a space organization that is linear, with several space relationship that are space linked by common space and adjacent spaces. The ground floor is made of various entrances, with entrances at the south elevation for three shops and at the east that provide access to the stair case for the first floor and the entrance to the west that give access to apartment at the ground floor. The building has three apartments; the first floor having two flats that are two bedroom

apartments, sitting/dining, a toilet/bath and a kitchen. Each bedroom having its balcony, so as the sitting/dining rooms having a terrace, the kitchen is given a connection to the sitting/dining room with a small opening on the wall partitioning between both space. The ground floor has one apartment which are two bedrooms, sitting/dining, kitchen, toilet/bath and entrance hall; the ground floor also provide access to the basement floor from the three shops. The roof of the building is a flat roof, which provides a large terrace overlooking around the walled city.

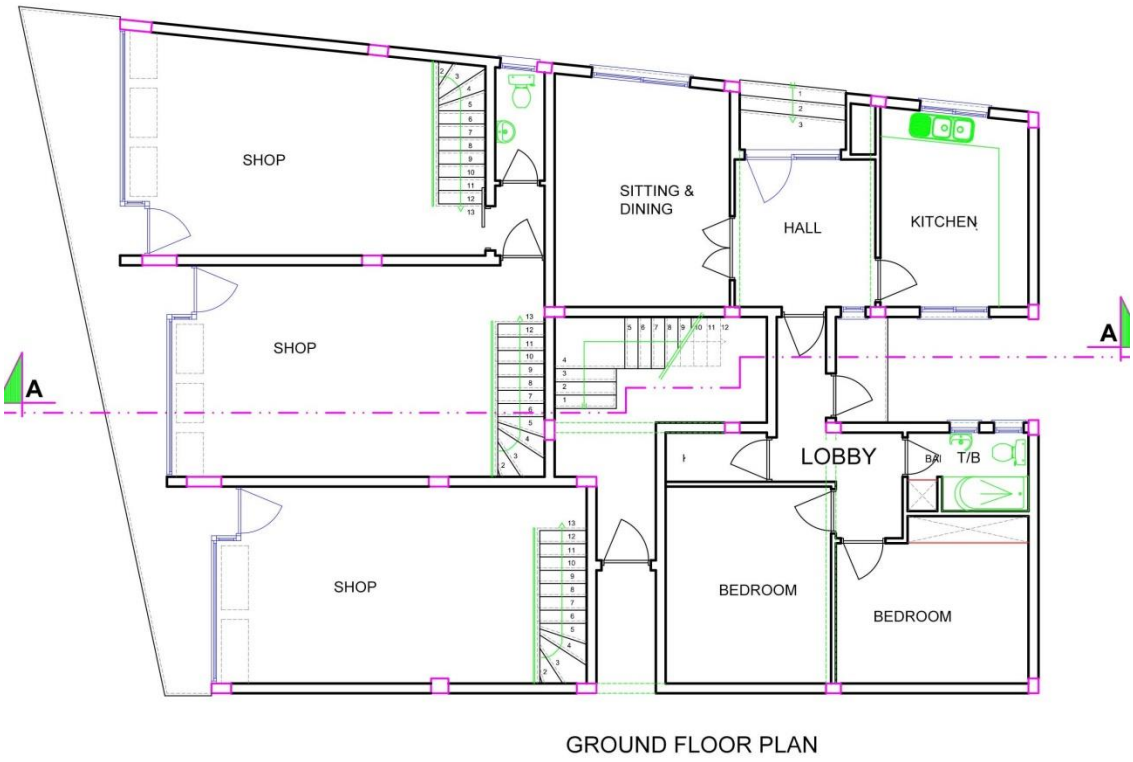


Figure 28: Ground floor plan Efecan Building Complex; (Owner, 1973)

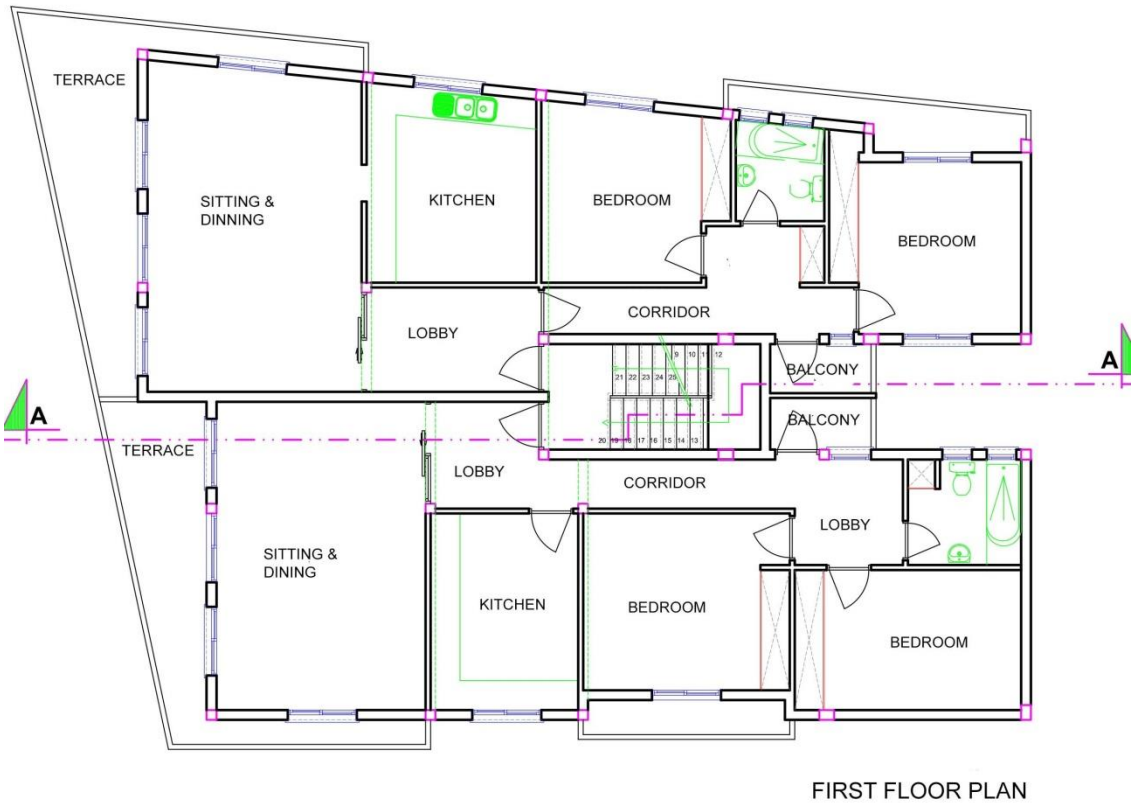


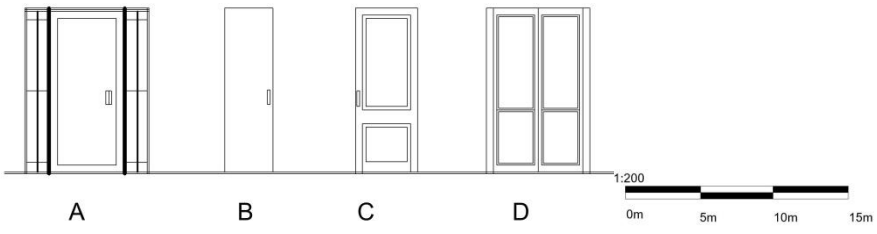
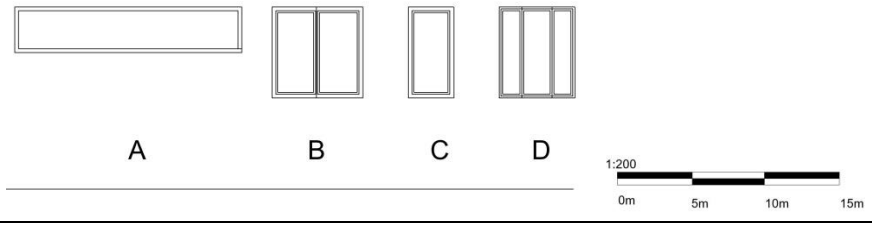
Figure 29: First Floor plan of Efecan Building Complex; (Owner, 1973)

c. Opening

Efecan Building Complex being a modern architectural product, its openings is also peculiar with the modern period. The openings for ventilation and lighting for the basement floor are at the ground floor. The openings for ventilation and lighting of the basement is the corner of the overhead plane, with it access openings are also from the ground floor. For the openings on the ground floor the west elevation which the approach view, have three openings that consume the vertical plane for the three store spaces, providing lighting, ventilation and access, having the Gazi Elementary school. The openings on the ground floor of the North elevation provide an access into the building leading to the staircase leading to the first floor, while the openings for ventilation and lighting are for the bedrooms, central located on the planes, with

an outlook of a residential building. For the east elevation there are no openings. The north elevation's openings on the ground floor provide an access for the apartment on the ground floor and the openings for ventilation and lightings are located at the center of the planes of the spaces. The openings of the west elevation on the first floor are all central located on their various planes with outlook of Gazi Elementary School and Cafer Pasha Hammam, there are also access openings to provide access to the terraces for the various apartment. The north elevation's openings of the first floor are centrally located on their planes and outlook of a Twin churches and the openings for access are also provided for the terrace. The openings on the first floor of the south elevation are also central located on their planes and outlook of a residential building. There also an opening to the roof terrace. There are also small openings between the living area and the kitchen on the vertical plane at the center, provide visual continuity between both spaces.

Table 21: The openings of the Efecan Building Complex (Author, 2019)

Doors	
windows	

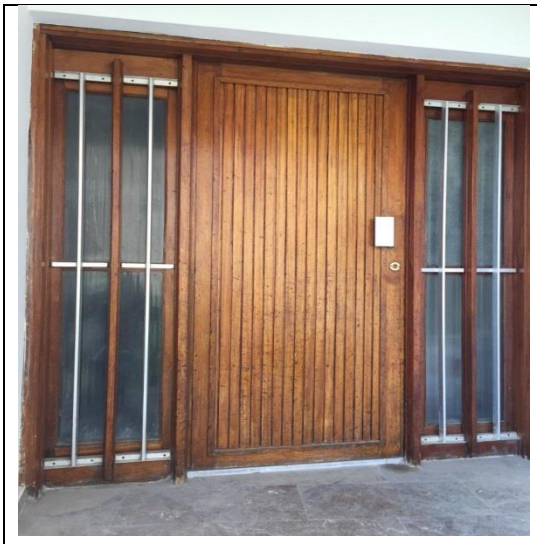



Figure 30: Openings of Efecan Building Complex; (Author, 2019)

Table 21 shows the opening types of the Efecan Building Complex; window A showing the opening elements for basement floor placed the ceiling which happens to be the ground floor. Windows B is the window for most spaces in the building, window D for toilet spaces and window C for additional covering during winter. The door openings has A has the entrance door for the apartment on the ground floor; door B are interior flushed doors, door C as the entrance doors for the stone and door D slides doors between kitchen and living area.

d. Circulation

Being a mixed use building that requires efficient movement within and outside the building for the proper functioning and utilization of spaces in the building. The circulation in the mixed use Efecan building complex is a critical information source for the appreciation and documentation of the cultural significance of the building, the heading follow would provide information relating to circulation of the building;

- **Approach;** the approaches to the Efecan building complex entrance are all Oblique in nature.
- **Entrance**; the entrances of the Efecan building complex are flushed entrance to the south, recessed entrance to the west and north elevation
- **Configuration of path**: the configuration of the path of the building is majorly linear configuration
- **Path- Space Relationship**; the path space relationship of the Efecan building complex is passing through spaces.
- **Forms of configuration of space**; the form of configuration of space for the Efecan building complex is enclosed form.

e. Structural Analysis

The modern building has a structural system of a framed structure, which is basically rein-forced concrete (RC) building. The building also has a basement floor that is built with RC structural system. The flat roof of the building is supported by the frame structure (columns and beams) hidden inside the walls, that transmit the load through the frame structure to the foundation.

f. Roof

The roofing system that is employed in the covering of the Efecan building complex is a flat concrete roof system.

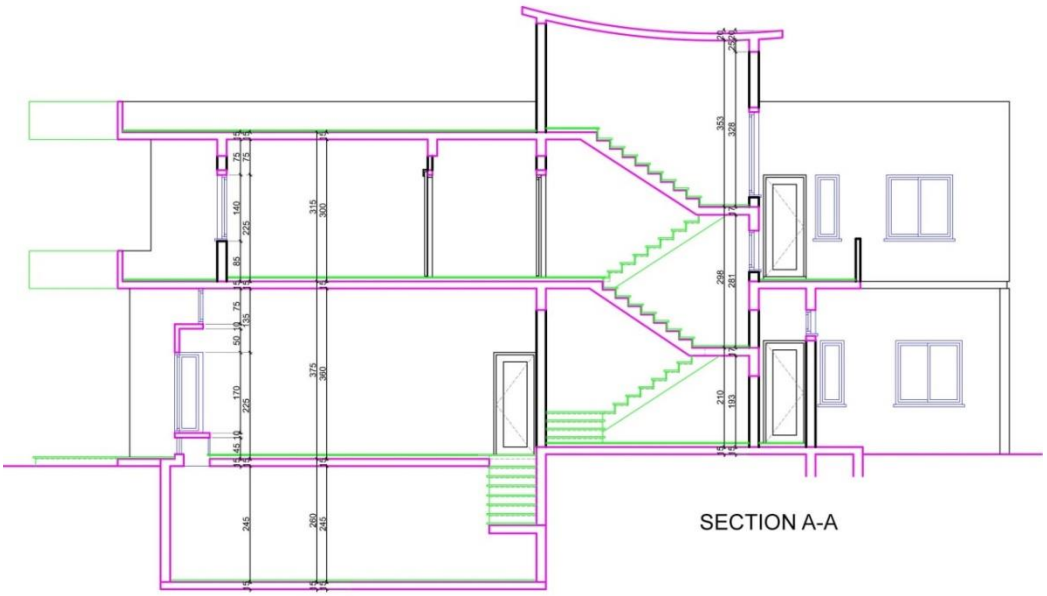


Figure 31: Section A-A of Efecan Building Complex; (Owner, 2019)

2. Material Analysis

The Efecan building complex is a building built during the modern period, thereby built with modern materials and since it is RCC framed building it is distinctness from the rest of the cases that are selected for this research. The material analysis of Efecan building complex would provide information that vital to comprehending it cultural important;

a. **Structural materials**; the structural materials employed for the Efecan building complex is concrete and steel. Those serve as framed system carrying the loads of the building.

b. **Finishing materials**; as a RCC framed building the in-fill panel is concrete block, which are covered by various materials that would be described in the table below;

Table 22: Finishing materials of Chimney House

Planes/ Objects	**Interior**	**Exterior**
Wall	White paint, clay tiles	White paint
Floor	Ceramic tiles, terrazzo, wooden floor	Stone slab
Ceiling	Concrete slab with a white paint	-
Doors	Glossy brown Wooden paneled, flushed wooden door, glazed wooden door	Glossy brown Wooden glazed and paneled door, metal glazed door.
Windows	Louvre windows, casement windows	-
Balustrade	while frame	-
Roof	-	concrete

The opening material for the windows for the apartment at the left of the west elevation have been change and replaced with casement windows, the wooden floor replaced with ceramic tiles.

Figure 32: Flooring elements of Efecan Building Complex; (Author, 2019)

Figure 33: Wall surface materials and interior opening of Efecan Building Complex; (Author, 2019)

Figure 34: Approach view of Efecan Building Complex; (Author, 2019)

3. Use and Functional Analysis

The owner of the building was interviewed, as it was not possible to access data related to the history of the building; the building was constructed in 1973. Accordingly the basement of the building was used as a place of refuge for women and children during the conflict. Originally, the building had a mixed used system, in which there was a clinic and shops on the ground floor, while the rest of the building is used for residential purpose. The residential part was for one family. During the 2000s the family moved out of the Walled City, like many other inhabitants of the City during that period due to the problems in terms of infrastructural issues, proximity of the Walled City to forbidden zone and also due to the underestimated values of the historic city where the inhabitants were not really aware at that time. Currently the building is being adapted to a guest house, where maintenance works are ongoing at the present moment.

Figure 35: Staircase to the Basement of Efecan Building Complex; (Author, 2019)

4. Tradition and Techniques

Efecan Building Complex as stated in the use and function analysis was built in 1973, with contemporary materials and construction method of the period in island, which is different from the other cases built with traditional techniques. The space organization are much different, that are also modern in it spaces relationship, but the traditional context of having terraces was adopted in the design. The mixed used approach that is modern permitted multi-function of the building, different other cases that is of one typology.

5. Spirit and Feeling Analysis;

The mixed use system of the building leaves multiple feelings and spirit. The residential use leaves the feeling of family in the building; the commercial use leaves the feeling of economical struggles of the walled city. The roof terrace leaves the feeling of the refreshed nature of the Walled City. The basement of the building was used as a place of refuge for women and children during the conflict giving it a strong connection to history of the Walled City of Famagusta.

Figure 36: Showing basement of Efecan Building Complex; (Author, 2019)

6. Location and Setting Analysis

The Efecan Building Complex is unique, because majority of the buildings within the Walled City do not have a basement floor. Each of the three stores or shops is connected to a basement through a staircase. The bedrooms at the apartments of the first floor are designed to have their individual balcony. The flat roof of the building is a large terrace which was used for relaxation and socialization of the family. The terrace gives this outstanding view around the walled city and beyond to the port.

The materials of the building of modern period with most of its materials or interior elements still in good condition; the elements like the flooring in the first floor, the doors, windows, furniture (dressing table, coat hangers, dining sets, and beds) and fixtures like lighting elements, wardrobes, door handles, ceiling fans, hand rails etc. still in good condition

The location of the modern building is also unique; located at the center of the Walled City. The building is in close proximity to some historic buildings in the Walled City; to the south are Gazi Elementary School and the Chimney House; to the west is the Twin Churches; to the southeast is the Cafer Pasha Hammam and the Venetian House; to the north east is the St Nicolas Cathedral and Namik Kemal Square.

Figure 37: The roof terrace of Efecan Building Complex; (Author, 2019)

Figure 38: The furniture and fixtures of the Efecan Building Complex; (Author, 2019)

Proposed Functional Analysis

Efecan Building complex has a huge role to play in comparison to the various architectural products of different periods in the Walled City of Famagusta. From analyses of the spirit and feeling, use and function analysis have stressed the impact of mixed use system on the building. it would be critical to the conservation practice of the multi-layered function feeling of the building is conserved and functions like guesthouse and a café to combined the typologies of residential and commercial.

. The table showed the summary of the Efecan Building Complex analysis and important elements and features vital to the period of architecture.

Table 23: A Matrix of the summary of Gazi Elementary school.

Parameters of Nara Documents		Features of parameters of Nara Document	Extracted features from Gazi Elementary School
1	Form & design	Form of the building	Linear form with a E-shaped plan
		Space Organization & relationship	With a linear organization and space relationship of adjacent spaces
		Openings	Grouped window openings that are centered on the plane.
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	- Frontal, Oblique and Spiral Approach - Flushed entrance - Linear configuration - Passing by space and passing through space - Open on one side
		Structural system	Framed structure
		Roof system	Pitched Roof
2	Material & substance	Structural Materials	I beam steel column and sandstone
		Finishing materials	White and cream paint, terrazzo, p.v.c, glazed casement windows and paneled door.
3	Use & function	Period Initial function Existing function	- British Period - Educational building - Built in 1920s
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation	- British mode of construction - Hybrid material and use of indigenous materials
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	- Approach view having Queen Victoria ornamentation - Cypriot revival style
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	-Twin Churches, Venetian Place, St Nicolas Cathedral and Namik kemal Square - Chimney house, Gazi Elementary School, Efecan building complex, and Old Police Station - Light vegetation - Center of the Walled City of Famagusta

3.3.5 Case study Analysis of Old Police Station

The Old Police Station is located at the center of the Walled City, which was the old police station of the Ottoman era in the Walled City; the analysis of the building complex would involve the utilization of data from the previous chapter in order document, and appreciate the building. Nara Document on Authenticity would be used to extract significant elements and factors that critical to conservation.

1. **Form & design Analysis**

The form and design of the Old Police Station in Walled City of Famagusta, is distinct, with the space running parallel between the buildings. The building has space that makes up the upper floor with the greater area of the buildings being on the ground floor.

a. **Form of the building**

The buildings have forms that are linear and an L-shaped plan. The form and design information source helps the analysis of visual interpretation of the building and how it relates to other intangible analyses of the building.

b. **Space Organization and relationship Analysis**

The space organization of the building is linear with various space relationships that are adjacent space and space linked by common space**.** The Old Police Station has two buildings that form “L” shape on plan. The buildings have a space of the same form running between them. The interior spaces in the building all radiate towards the space between them from which each of the spaces are accessed building, which makes that part of the building to look like a tower. At the north side of the Police

station is the six barrel vaulted roof spaces, facing the vaulted spaces are thirteen rooms with linear orientated circulation with their access from the space going across both buildings, also providing access to the vaulted spaces. At the east of the building are spaces for utilization convenience of (toilet spaces). Behind the convenience is space that can only be accessed from the south access road.

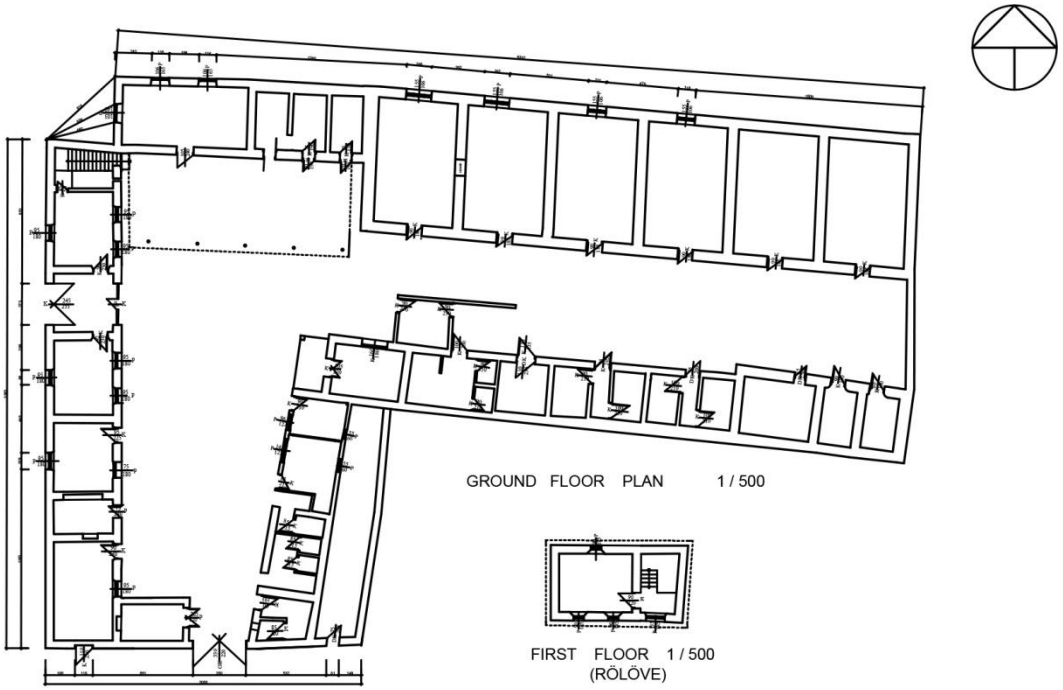


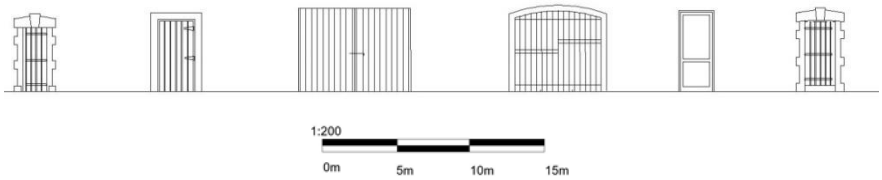
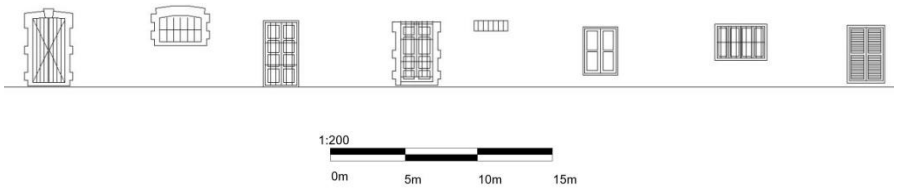
Figure 39: The Floor plan of the Old Police Station; (Department of Antiquities and Museums)

c. Openings

The information source of the openings analysis is critical to appreciation and documentation of cultural significance of the Old Police Station. To the north of the building, the openings are sealed with plywood and do not have an access opening; the outlook is the Chimney House and a residential building. The south does not have openings for ventilation and lighting (windows), however it has three openings for access, leading to various space, with one of them leading to space between both

buildings like a courtyard, from which the spaces orient to and access is gained from it. At the east elevation there are no openings. The west elevation has one access opening leading into the space between buildings, which is a double paneled wooden door, while the openings for ventilation and lighting are both at the ground floor and first floor, but not all the spaces at the ground floor of the west have an opening. The west opening outlook is to some residential buildings. In the opening analysis table of 24 various openings that make the Old Police Station shown below, with opening with moldings and the ones with molding are shown, with door openings that are made of steel bars, battened and ledged wooden doors and windows.

Table 24: The openings of the Old Police Station (Author, 2019)

Doors	
windows	

d. Circulation

Old Police Station has a linear space organization, in which the space running parallel between both buildings is critical to giving information required for the analysis of the building;

- **Approach;** the approach to the Old Police Station entrance is an Oblique in nature.

- **Entrance**; the entrances of the Old Police Station are flushed entrance to the south, recessed entrance to the west.
- **Configuration of path**: the configuration of the path of the building is majorly linear configuration
- **Path- Space Relationship**; the path space relationship of the Efecan building complex is passing through spaces and passing by space
- **Forms of configuration of space**; the form of configuration of space for the Old Police Station is enclosed form.

e. Structural Analysis

The structural system of the Old Police Station is a load bearing system. The walls are made of coursed ashlar masonry stone that supports its own weight; the spaces are adjoining to each other, to form a grid system, thereby transferring the load of the building along a network. The six barrel vaults gives the building another structural system as the spaces are larger than the other space's in the building. With the L shaped space dividing the buildings into two halves the load of the buildings are distributed evenly. The upper floor slab of the first floor space which is one room is supported by the ground floor walls. The roofing system employed is a gable roof, which is applied are all surfaces in which the barreled vaulted roof didn't cover.

f. Roof

The roofing system that is employed in the covering of the Efecan building complex is a pitch roof system and barreled vaults.

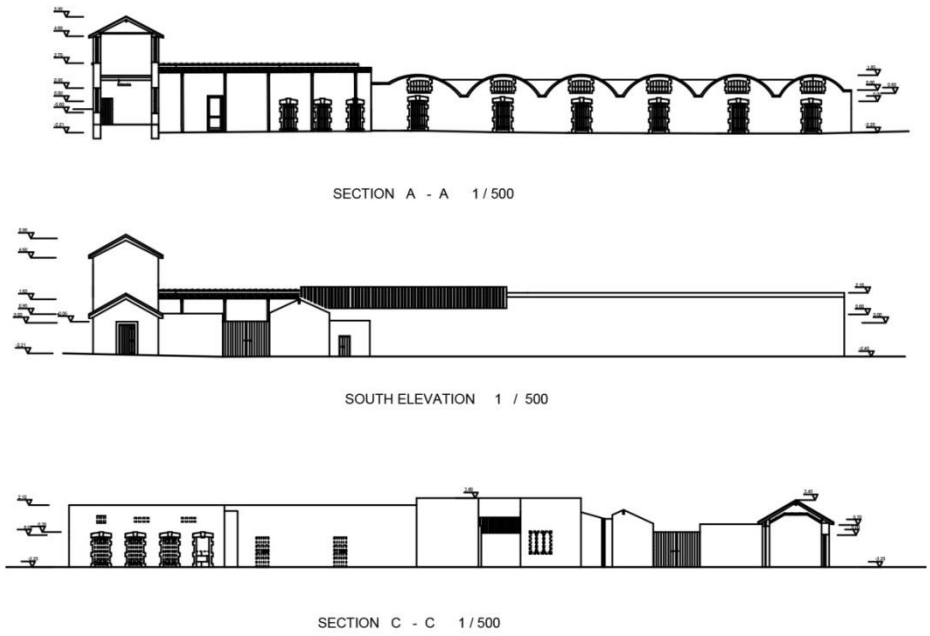


Figure 40: The section and elevation of the Old police Station; (Department of Antiquities and Museums, 2018)

2. Material Analysis

Being a building built during the Ottoman period, what was available in the environment were used for its construction, which result in using materials that would carry it whole load. The analysis of the materials would be looked into the following headings;

a. **Structural materials**; the major structural material is the masonry coursed ashlar sand stone. The masonry stone is loading bearing having the ability to carry the load of the pitched roof and with stand lateral load against the building.

b. **Finishing materials**; the finishing in the Old police Station are not much as compare to other cases, just finishing for the walls of the interior and floor. The rest of the finishing is shown below.

Table 25: Finishing materials of Old Police Station

Planes/ Objects	**Interior**	**Exterior**
Wall	White paint,	unfinished
Floor	Ceramic tiles, and stone slab.	Stone slab
Ceiling	-	-
Doors	Rusty brown Wooden door.	Rusty brown Wooden door and mesh steel gate
Windows	Rusty brown wooden window	-
Balustrade	-	-
Roof	-	Red slate tile

Figure 41: The exterior view of the Old Police Station; (Author, 2019)

3. Use and Functional Analysis

During the interview with the staff of Department of Antiquities and Museums, in Famagusta concerning Old Police Station data about the building is limited and the only known for its previous function as the Old Police Station for the Ottoman period and the barrel vaulted roof spaces were used as holding cells when it was a police

station and the first floor space is used as the office of the most senior police officer in the station.

4. Tradition and techniques

The period (Ottoman Period) in which the building was built has huge impact on the building design and space organization/ relationship of the buildings; these can be seen with the space running through between the buildings in which the spaces are oriented towards it. The technique used for the construction also reflects the period in which it was building with fine masonry coursed ashlar sandstone, with moldings serving as frames for doors and windows. The choice of types of doors and windows also reflect the cultural significance of the buildings. The barrel vaults openings also and roofing reflects the techniques used during that period to solve problem relating to space and lighting.

5. Spirit and feeling

The Old Police Station initial function being a public institutional building that brought order to the Walled City and also the period in which it was built have strong impact on the fiber of the building. The traces of order can be seen from the barreled spaces that were cells and the first floor space of the building at the west. The cells of the barreled vaults hold the spirit of detention and isolation, while the first floor holding the spirit of authority as the only first floor space in the building. it location at the center of the Walled City also gives it the feeling alertness to the security of the city.

6. Location and setting Analysis

Old Police Station located at the nucleus of the walled city with a Strategic location in the Walled City of Famagusta for the security. The barreled vault roof and plan formal design gives the unique context among the notable buildings surrounding it. The original use of building materials of sand stone and slate red tile roof making it stand out. The roofing system employed is the Gable roof system.

The buildings has close proximity to various landmarks; to its north is the Chimney House building, to south is the Venetian Palace and St Peter and Paul's Church, to its east is the Cafer Pasha Hammam alongside the ruins of St Francis church, to the south east are the St Nicolas Cathedral and Namik Kemal Square.

Figure 42: The approach view of the Old Police Station; (Author, 2019)

Proposed Functional Analysis

The existing function of the building is is not respecting spirit and feeling of the plac, and tradition of the building, which is presently used as storage facility by the Department of Antiques and museum. Based on the analyses of the form and design and the spirit and feeling, it is important to notice the cultural significance of the building as an institutional building with it space organization in the building. With these analyses the complex can serve varies of use, from a research center to craft workshop, which could contribute to conservation of the building.

After the analysis of the building it is important to set aside important elements that should be considered in case of conservation through adaptive reuse, and summarized the analysis.

Table 26: A matrix of summary of Old police Station analysis

Parameters of Nara Documents		Features of parameters of Nara Document	Extracted features from Old Police Station
1	Form & design	Form of the building	linear form with a L-shaped plan and with a space running between the building
		Space Organization & relationship	linear space organization with spatial relationship which are adjacent and space linked by common space
		Openings	central placed on the plane
		Circulation - Approach - Entrance - Configuration of paths - Path-space relationships - Forms configuration of spaces	- Oblique in nature - Flushed entrance - Linear configuration - Passing through space and passing by space - Enclosed form
		Structural system	Ashlar masonry load bearing system
		Roof system	Pitched roof
2	Material & substance	Structural Materials	Masonry Sandstone
		Finishing materials	Stone slab, ceramic tiles, rusty brown doors and windows
3	Use & function	Period Initial function Existing function	- Turkish Period - Police Station - Storage facility
4	Tradition & Techniques	Construction methods Culture and tradition Surface ornamentation	- Traditional Masonry techniques - Turkish law - Moldings on the surfaces
5	Spirit & feeling	Spirit of the place feeling and other intangible factors	- Central location - Institutional building - Barreled vaults of holding ceiling
6	Location & setting	Location Settings Neighboring buildings Natural landscape Close landmark	- Central location in the Walled City of Famagusta - Twin Churches, Venetian Place, St Nicolas Cathedral and Namik kemal Square - - Chimney house, Gazi Elementary School, Cafer Pasha Hammam, and Efecan Building Complex Walled City of Famagusta

3.4 Chapter Conclusion

The case studies selected for the purpose of this thesis are the Chimney House, Cafer Pasha Hammam, Gazi Elementary school, Efecan Building Complex and Old Police Station. They were selected because of their close proximity to each other and their central location in the walled city, with their diverse periods of origin. Each of the cases is analyzed using parameters of information sources mentioned in the Nara Document of Authenticity extracted from the literature review such as form/design, use/function, tradition/techniques, spirit/feeling, location/ setting for the analysis of selected cases, therefore the a proposed function was proposed based on the analysis as guide. In the analysis of the form and design it was discovered that no organic plan form among the cases, all the cases are linear form, with load bearing walls for the older building frame structure for Efecan Buildings Complex, which also have a distinct spatial organization and relationship, they are mainly adjacent spaces, spaces linked by common spaces and space within space, while in the analysis of circulation the buildings are mainly obliquely, with mostly flushed entrance, linear configuration, with most of the building having path-space relation of pass by space and pass through space. In the roof analysis Chimney House, Old Police Station, Gazi Elementary School have pitched roof, while Efecan building Complex has a flat roof, Cafer Pash Hammam has a collection of vaults and domes. The material analysis showed that sandstone is the major building material used for almost all the buildings except the Efecan building complex. The opening analysis indicated that the openings of the older buildings had Gothic pointed openings, with square and rectangular openings in which in most case were placed centrally on their plane, while the modern building have conventional residential building openings. The use and functional analysis showed that the buildings have all played a critical role in

their diverse functions in the Walled City. For the tradition and techniques shows how the various periods in which they were built have an immense impact on their design, form, function and the spirit and feeling of the building and how they all relate to the Walled City. It was discovered in the analysis of the location and setting that the case studies contributed critically to the history of the Walled City, while highlighting the diversity of the Walled City and showing their distinctness. For the proposed function a holistic approach was proposed make the cases work as one system; that have function and uses that would support each other and create a connection among them, which would permit a continuous use of the buildings, with neglecting anyone.

After the detailed analysis of each of the case studies, elements that play a critical part in the identity and context of the space were extracted from the analysis under the guide of Nara Document of Authenticity, which provided factors to be considered concerning Authenticity in conservation through adaptive reuse. These factors are aspects of authenticity (form & design, material & substance, function & uses, tradition & techniques, spirit of the place and location & setting).

Chapter 4

DISCUSSION OF THE FINDINGS

In the previous chapter, an in-depth analysis has been carried out for the cases that were selected for the purpose of this study. This analysis of existing buildings for conservation through adaptive reuse is based on criteria extracted from the literature review of Chapter Two. In this chapter, a comparative analysis of the case studies according to the principles extracted from the internationally accepted documents of conservation (IAD-C) would be used to generate guidelines critical to conservation through adaptive reuse process for the architectural products of varying periods.

4.1 Case Studies and their Adopted Conservation Principles/ Guidelines

The core purpose of charters, principles, convention document of conservation is to provide and constantly update the concepts, methods and guidelines for the management and conservation of spaces and sites of cultural and natural heritage (Basarir, 2009). These concepts, methods, and guidelines revolve around ethics of conservation; the ethics of conservation analyzes the implication of various levels of conservation like preservation, restoration and adaptation. The limitation of this research is to the third level of conservation through adaptive reuse. Therefore charters, principles and convention's document which have direct or indirect relation to conservation through adaptive reuse will be examined. In those documents paragraphs, articles, and definitions that provide guidelines, methods or concepts in relation to the parameters or information sources of Nara Documents of Authenticity

have been extracted, which would be relevant for the comparative analysis of this chapter.

The adopted conservation principles and guidelines for each case study are discussed in the table below. These dealt critically with the tangible and intangible aspects of conservation approaches of the case studies of the thesis.

CONSERVATION PRINCIPLES	CASESTUDIES AND THEIR ADOPTED CONSERVATION PRINCIPLES/ GUIDELINES				
	CHIMNEY HOUSE	**CAFER PASHA HAMMAM**	**OLD POLICE STATION**	**GAZI ELEMENTARY SCHOOL**	**EFECAN BUILDING COMPLEX**
VENICE CHARTER(1964) "The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the lay-out or decoration of the building". (ICOMOS V; Article 5).	The spatial configuration and eclectic nature of the building, small bath house, chimneys and sand stone must not be destroyed during adaptation of the House.	It structural system, lay-out of the building and major materials must not be changed during conservation through adaptive reuse	Spatial configuration of the building, it first floor and six barreled vault spaces must not be changed during conservation through adaptive reuse.	The Queen Victoria ornamentation, approach view and spatial configuration must not be changed during the process of adaptive reuse.	Structural system of the building, terraces and roof terrace must not be changed during adaptation.
BURRA CHARTER (1979) "Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives". (ICOMOS, 1981; Article 21.2)	Adaptation that would affect the stone mass staircases, chimney, openings, eclectic nature, surfaces and bath house must be minimal.	Adaptation that would affect the spatial configuration, surfaces and privacy context should be minimal.	Minimal effect on the six barreled vault space, spatial organization and the surfaces of the building must be considered during conservation through adaptive reuse.	Ornamental features of the school, spatial organization and surfaces must be minimal.	The wooden flooring, interior doors, entrance doors and the Louvre windows should have minimal alteration during adaptation
DOCOMOMO (1988) "Bring the significance of the modern movement to the attention of the public, the authorities, the professionals and the educational community" (DOCOMOMO, 1990; MISSION).					The history context of the building should be brought to the attention of the public.

"Oppose destruction and disfigurement of significant works of the modern movement" (DOCOMOMO, 1990; MISSION).					Disfiguration of the wooden materials, terraces and original fixtures must be avoided.
NARA DOCUMENT ON AUTHENTICITY (1994) "Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place". (ICOMOS N;1994)	The balustrades, doors, shutter, piece of tile in the bath house, sandstone should be conserved.	The dome roof, lighting elements from roof and sandstone should be conserved.	The barreled vault spaces, sandstone wall and upper floor should be conserved	The Queen Victoria ornamentations, approach view should be conserved	The wooden flooring elements and original fixtures should be conserved.
ICOMOS CHARTER (2003) A full understanding of the structural and material characteristics is required in conservation practice". (ICOMOS, 2003; 2.3)	The load bearing structural system and the sandstone must be full comprehended before conservation through adaptive reuse. Mimicking is not allowed	The structural system that include dome roof, spiral roof and the load bearing walls must be understood before conservation practice	The upper floor structure, six barreled vault roof and load bearing walls must be understood before conservation through adaptive reuse	The structural system of the approach view, the frame structure and the roof system has to be comprehended before conservation.	The frame structure of the building, the roof terrace support and the structure of the basement has to be understood before conservation.
"Checks and monitoring during and after the intervention should be carried out to ascertain the efficacy of the results". (ICOMOS, 2003; 3.21)	Monitoring of the walling system, materials and structural system of the House is critical before and after conservation	The structure and the walls must be check and monitored before, during and after conservation process.	The walls, upper floor, the six barreled vault spaces and structural system assessed before, during and after conservation process.	The structural system of the school has to be assessed before and after conservation process.	The condition of the basement, roof, structural, mechanical and electrical system of the building has to be checked and monitored before and after conservation process.

FARO CONVENTION (2005) Develop knowledge of cultural heritage as a resource to facilitate peaceful co-existence by promoting trust and mutual understanding".(ICOMOS F; Article 7c)	The multi-layered eclectic nature of the building should be made known to the public more to foster togetherness among people.	Its connection to St Francis church should be highlighted to show the richness of the Hammam that would promote trust among the people.	The traces of the previous function of the police station should be conserved to promote the important of law and order in the Walled City.	The important of education in promoting, and contribution of the Gazi Elementary School should be considered during conservation through adaptive reuse.	The role the building complex played in the safeguarding of people during the conflict period should be conserved during conservation process to promote peaceful co-existence.
"Develop the legal, financial and professional frameworks which make possible joint action by public authorities, experts, owners, investors, businesses, non-governmental organizations and civil society".(ICOMOS F; Article 11b)	Legal regulations that would foster and create framework for the cooperation of all entities concern for the conservation process of the Chimney House should be created	Legal regulation and legislation that would promote a public-private for the conservation process of the Hammam building should be looked into.	Financial, professional and legal framework that would allow all interested parts for conservation process of the Old Police should be encouraged.	Legal regulation and legislation that would guide the authenticity of the Elementary school, framework that promotes the cooperation of all interested parties for conservation process should be encouraged	Framework for financial, professional and legal support for modern building of important should be looked into.
ICOMOS CHARTER FOR THE INTERPRETATION AND PRESENTATION OF CULTURAL HERITAGE SITE (2008) "It should consider all aspects of the site's cultural, social, and environmental significance and values". (ICOMOS, 2008; Principle 3.1)	The introverted nature and gender orientation of it spatial organization of the Chimney House should be taken into account during conservation process.	The context of privacy that is shown in its space organization should be taken into consideration during conservation process	The traces of the previous function of the building complex being an Ottoman police station should be considered during conservation process.	The period of the architecture being the British period and the revival style should be taken into consideration during the conservation process.	The period in which it was built and it role it played during the conflict period should be taken into consideration.

"Interpretation should also take into account all groups that have contributed to the historical and cultural significance of the site".(ICOMOS, 2008; Principle 3.3)	The multi-layered nature of the Chimney house should be taken into account during interpretation.	The connection to the St Francis church and it present owners should be taken into account during the interpretation of the building.	The buildings contribution to law and order to the walled city during the Ottoman era should be conserved.	The history and the contribution of the school should be taken into contribution during the interpretation of the building.	The history of the building should be taken into account during interpretation.
VALLETTA PRINCIPLE (2011) "The intangible elements that contribute to the identity and spirit of places need to be established and preserved". (ICOMOS V; P.7)	The eclectic nature of the Chimney House and its gender disparity setting should be conserved.	Ottoman heritage and Privacy setting of the Hammam building should be conserved	The buildings role as a place that brought order and security to the Walled City should conserved.	The building role as place that united both Greek Cypriot and Turkish Cypriots should be highlighted.	The connection of the basement to the conflict period should be highlighted.
"Proper planning requires up-to-date precise documentation and recording (context analysis, study at different scales, inventory of component parts and of impact, history of the town and its phases of evolution, etc.)" (ICOMOS V; p. 9)	There should be proper documentation of all the building systems and history of the building and its relation to the Walled City.	Its history in relation to the Walled City and proper documentation of all it building systems should be carried out.	The relation of the building to the Walled City and neighboring buildings, with all building systems and history should be well documented.	The building systems, history, setting and connection to the Walled City and other building around it should be documented	The modern context, relation to the walled City and it building systems should be properly documented.

4.2 Chapter Conclusion

The need for differentiation of conservation approaches for various architectural products of varying periods were shown in the results of several analysis in Chapter four, the differentiation is guided by the internationally accepted documents of conservation. This chapter discussed the case studies and their adopted conservation principles/ guidelines critical to the process of conservation through adaptive reuse. The internationally accepted documents of conservation (IAD-C) addressed in this thesis tackle both tangible and intangible aspects of the various conservation approaches for varying architectural products of thesis. These IAD-C guidelines are summarized as follows; **Venice Charter (1964) Article 5**: changes to the lay-out or decoration of the building must be avoided, these guideline affect form, design and structural elements of the various buildings. **Burra charter (1979) Article 21.2**: minimal changes should be permitted in the case of adaptation, that's changes to the fabric of the buildings, should be minimal. **Docomomo (1988) Mission:** bring the appreciation of modern buildings movement to the world and opposing any destruction of important modern movement works. It is important to note that this document affects only the Efecan Building Complex as it is only the building among the cases that has pure modern movement features. **Nara Document on Authenticity (1994)**: elements that contribute to the cultural significance of the place should be retained, this is elements that are important to the tangible and intangible aspects of the buildings should be kept. **ICOMOS Charter (2003) 2.3 & 3.21**: Knowledge of the materials and structural system is vital and checks before, during and after the conservation is important; this guidelines to help measure the level of efficiency of the intervention. **Faro Convention (2005) Article 7c & 11b:** develop knowledge of cultural heritage for peace, trust and mutual understanding and

framework for legal, financial and professional framework which makes it possible for joint action among stakeholder of conservation, the charter promotes human participation in conservation. **ICOMOS Charter (2008) Principle 3.**1 **& 3.3**: environmental, social and cultural aspects should be conserved and all groups that have contributed to a conservation document are acknowledged**. Valletta principles (2011) P.7 & 9**: intangible features that add to the identity and spirit of the place should be retained and proper documentation and planning is required in the process of conservation of the buildings, this is very critical one of the purpose of the proper documentation, appreciation and guidance for various conservation approaches.

With the comparative done in the above table conservative approaches with their unique guidelines have been generated and in the next chapter recommendation for each of the case study would be discussed, also the implication of the study and a case for further study on the this topic would be made.

Chapter 5

CONCLUSION

5.1 Conclusion

The Walled City of Famagusta is a city of diverse cultural and Architectural heritage, from various periods of time each contributing to the richness of the city. The traces of these various periods of architecture can be seen through the city. To sustain this diverse architectural richness, the conservation of these architectural heritages for future generations is critical. But these selected periods of architecture in the Walled City of Famagusta require varying conservation approaches that are internationally valid

The core research problem of this thesis was built on an observation; that all the architectural periods of in the Walled city of Famagusta are being conserved in the same manner without much consideration on their special features periods or the principles from internationally accepted documents of conservation. The focus of this thesis is to deliberate on the conservation approaches through adaptive reuse for some selected buildings sited within the Walled City of Famagusta. Adaptive reuse, as embark on within this thesis, does not just alter the program or function of the spatial environment, but may also lengthen the authenticity of cultural and natural heritage of the place. Therefore, the key emphasis here is to shed some light on conservation of the authentic qualities of heritage buildings while at the same time assigning new uses considering contemporary needs of the users.

One of the main principles driven from the internationally accepted documents of conservation is the documentation and the appreciation of the heritage, and to provide technical and professional guidelines, which is also among the purposes of this thesis. Therefore to provide a foundation for the documentation and appreciation of several architectural conservation approaches for varying periods of architecture in the Walled City of Famagusta and to provide guidelines for their conservation that is peculiar to these buildings but also internationally sound. This was to answer the research question which is "what are the various internationally valid architectural conservation approaches that can be adopted for varying architectural products of different periods in the Walled City of Famagusta"?

The research focused on buildings of selected periods at the center of the Walled City of Famagusta, and adopted three phases of analyses to achieve the aim;
The first phase of this analysis is the literature reviews that explores conservation via adaptive reuse, space, Authenticity, internationally valid documents of conservation and formulates a framework for the analysis of existing building for conservation via adaptive reuse. The second phase is the analysis of the case studies of various periods with information generated from the literature review and conducted with on-site investigations as well as semi-structured interviews. The third phase is the comparative analysis of the various case studies through the extracted principles from the internationally accepted documents of conservation.

The result of the various analyses of the thesis shows that there is a need for differentiation of conservation approaches for different periods of Architecture which are guided by the internationally valid documents of conservation; like many IAD-C

such as Nara Document on Authenticity, principles extracted from the. Burra Charter, Docomomo, Faro convention, Valletta Principles should also be considered and adopted for the special needs of the concerned historic area and heritage buildings. During the analysis, it has been observed that, although the Walled City of Famagusta is a designated conservation area, an approach peculiar to the building and interiors scale is necessary where it focuses on special features of different architectural products of various periods- all located at a very close proximity to each other. An eclectic building complex such as the Chimney House requires a different approach compared to a building such as Efecan Building Complex that was built during the 1970s. Extracting aspects of both tangible and intangible elements (through the parameters or information sources of Nara Document of Authenticity) that needs to be conserved has to be the initial point in terms of deciding on adaptive reuse alternatives for these valuable heritages, which is also advised by the internationally accepted documents of conservation (IAD-C).

Another principle that was extracted from the internationally accepted documents of conservation is that, for long-term conservation, encouraging public involvement and inclusiveness is necessary, where heritage buildings should be open to public to appreciate. One of the case studies of this research, after the analysis of one of it information sources (use and function) discovered that Cafer Pasha Hammam for example, belongs to The Vakif Foundation and is rented to a private person where access during the winter period is possible. This valuable heritage should be controlled and at least become a semi-public space, to permit proper documentation of the building, and any addition or installation that would be injurious to the original condition of these cases must be avoided.

Function is an important aspect of conservation through adaptive reuse, as stated by the Nara Document on Authenticity, function and use is also a part of authenticity, which is a basic criterion for adaptive reuse. These kinds of international documents on conservation, as stated during the literature reviews, advice that at least traces of the original use should be perceivable after the adaptive reuse process. Here in this research, it should also be underlined that, given the close proximity to each other, functional selection of these case studies should also be holistically designed. Here the research proposes that Chimney House, Cafer Pasha Hammam, Old Police Station and Gazi Elementary School can be a cultural center for the city, where the Chimney House being a space for arts, Cafer Pasha Hammam being spa and healthy living café, Old Police Station being a research center and the Gazi Elementary School being an exhibition and learning center, because being within the same location and sharing the close proximity would also allow each building support the functions of each other. The proposals were all due to the analyses of various information sources or parameters of Nara Document of Authenticity covering both tangible and intangible aspects of heritage, thereby making it imperative that the authenticity of a building or architectural product has to be analyzed before proposing a new function.

As stated before, the main problem of this research is that there is a need for an up to date vision of internationally accepted documents of conservation for the different architectural products of the Walled City of Famagusta, where the existing legal legislation, principles and practices in the country are not in line with the current international agenda of heritage conservation. With the critical analysis of the IAD-C

and the various architectural products selected from several periods in the walled city of Famagusta, would encourage proper documentation, recording and conservative practices that are guided by IAD-C and promote creation of polices that are inspired by the cultural significance of the city with respect to the authenticity of the building.

5.2 Implication for further Study

Due to the limitations of this study, only the selected area from the Walled City of Famagusta could be studied. However the Walled City has many more monuments and other buildings that should be specially studied under the principles of contemporary conservation agenda, focusing on both the tangible and intangible aspects of conservation, in addition more information sources for the analysis of authenticity, would be require for efficient credible adaptive reuse process in the Walled City of Famagusta. It is hoped that this research can be a model for the documentation, appreciation and guidance for the conservation of selected products of architecture, located at close proximity however belonging to many different periods with respect to the cultural significance and authenticity of the adaptive reuse process of the place concerned.

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