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Functional Continuity in Adaptive Reuse of Historic Buildings: Evaluating a Studio Experience

Nilüfer Sağlar Onay, Deniz Ayşe Yazıcıoğlu*

Istanbul Technical University, Faculty of Architecture, Department of Interior Architecture, Taşkışla, 34437 Taksim, Istanbul/Turkey
*Corresponding author: denizayseyazicioglu@gmail.com

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Abstract Interior architecture is mainly concerned with adapting existing buildings to new uses and requirements. While determining the extent of intervention, the historic and cultural background of the building plays a very important role. Therefore in adaptive reuse, before starting to develop design proposals, buildings of cultural significance need to be analyzed carefully in order to determine architectural and spatial potentials. This paper aims to evaluate the process and results of a design studio, which was realized during 2014-2015 Fall Semester in the ITU Department of Interior Architecture. The main purpose of the studio experience was to create adaptive reuse proposals for a historic commercial building by focusing on the theme of "functional unity". In the first phase of the study, course program was organized in three basic steps: analyzing spatial potential, determining compatible use and developing project proposals. At the end of every step there was a jury to evaluate each phase. Every step had its own priorities and criteria for the jury. After evaluations project proposals were classified according to their main foci as well as advantages and disadvantages of different approaches in terms of functional unity. As a result it was observed that in historic buildings there are different ways of maintaining functional unity based on the intention of the intervention. While identifying compatible use or uses for a historic building, functional unity needs to be evaluated as one of the basic design criteria in order to retain its cultural significance. This is mainly because a historic building can fully reveal it's potential only if it is experienced and evaluated as a whole.

Keywords: *historic buildings, reuse, spatial analysis, spatial potentials, functional continuity, compatible use*

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1. Introduction

It is necessary for the practice of interior architecture to work with other disciplines like architecture, product design etc. and comprises various subjects like adaptation, reuse and conservation. In interior architecture education, design studios differ from the other courses because of their involvement in all knowledge areas in the body of the discipline. Therefore in many institutions that give interior architecture education, design studios focus on different subjects and themes.

The methodology of design studios at ITU Department of Interior Design also reflects the multiple character of the discipline. Within the undergraduate program first two semesters that are organized by the department of Architecture aim to enrich students with the basic principles of design through various short-term studies with different objectives. After laying the foundation of interior architecture education through architecture studios the program starts to focus on interior architecture scale during the third semester. Therefore the third semester can be regarded as a transition from architectural scale to interiors scale during which the relationships and continuity between the city, building and interiors are discussed. As it can be seen in Table 1, in the ITU Department of Interior Architecture, different level studios all have different focus and theme. The first Interior Architectural Project Studio is at the 4th semester and it basically aims to evaluate the human proximate environment. Interior Architecture Studio II focuses on design process related to corporate identity through proposals for commercial interiors. Interior Architecture III focuses on the historical environment through case studies and proposals on historic buildings. The final studio, Interior Architecture Studio IV aims to evaluate the design potentials of more complex and mix-use buildings. This studio differs from the others in terms of the studio experience. In this step, the students develop design proposals on their own. They only have access to the remarks of the jurors during the preliminary juries and try to convey all their previous experiences within their final project.

Interior Architecture Studio III can be regarded as one of the most critical courses in the program because of its emphasis and intensity. Evaluating the historic environment in order to develop new proposals needs a deep involvement in it. As interior architecture is concerned with existing buildings, it always requires analysis of buildings and their interiors in terms of their potentials. But historic buildings are mostly defined as the

melting pot of different historic, cultural and social layers. Understanding the hierarchical relations between all these layers needs to be evaluated as the most critical step of adaptive reuse.

Table 1. Project Studios According to Their Thematic Groundings in ITU Department of Interior

Semester	Theme	Aim	Content
3rd semester	Urban Infill	To evaluate the relationship and continuity between city, architecture and interiors by focusing on different scales	Urban space, Interior space
4th semester	Domestic	To understand and evaluate components of the interior environment in relation to human scale and senses.	Domestic environment
5th semester	Commercial Corporate	To discuss corporate identity and design process in interiors	Commercial Interiors
6th semester	Historical Adaptive Reuse	To adapt buildings of cultural significance to new uses and discuss the relationship between old and new in interiors.	Historic Buildings and interiors
7th semester	Human-centered	To discuss the design potentials of public/private mix-use and complex buildings in terms of human needs	Mix-use buildings
8th semester	Holistic	To develop innovative, creative, practical solutions to the problems defined by the jury and convey all the previous experiences to the design process.	Various buildings

Therefore, Ali Pasa Han, with considerable historic and cultural background, was given as a task to the students of ITU Interior Architecture III Project Studio during the 2014-2015 Fall Semester.

Ali Pasa Han is one of the most typical examples of Ottoman City Hans [1] (Figure 1). Han can be defined as a building typology developed by the Early Ottomans. While some hans served as a roadside inns where travelers could rest and recover from the day's journey, some were used as a place for commercial production and exchange of various goods [2]. They were usually two storey buildings characterized by identical spaces called cells surrounding a courtyard. Gülenaz [3] classifies hans in two groups as commerce hans and accommodation hans. The ground floors of accommodation hans were reserved for depos(storage) and the first floors were used for accommodation. On the other hand in commerce hans while the ground floor was used for stores and depos, the first floor was used for ateliers and offices.

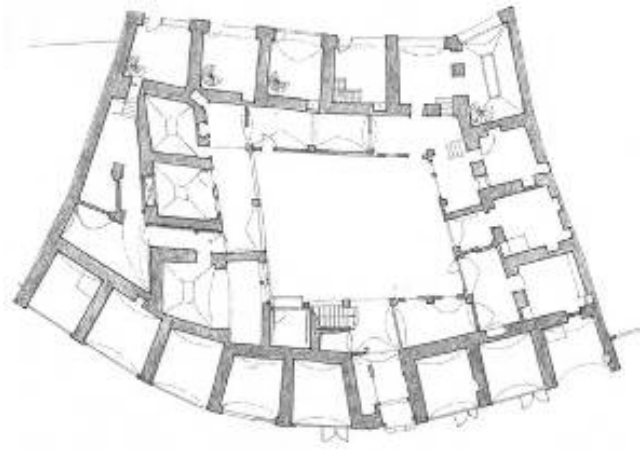

Figure 1. The Ground Floor Plan of Ali Pasa Han [4]

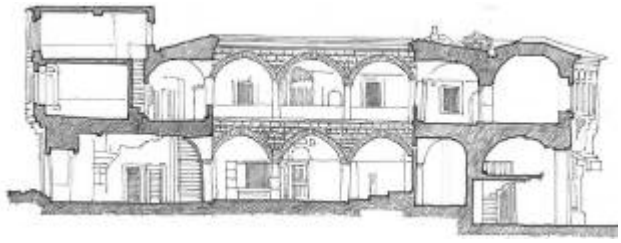

Figure 2. The Section-Elevation of Ali Pasa Han [4]

Ali Pasa Han is located in Eminönü on the Golden Horn and it is in a predominantly commercial zone within which various products can be found. Typical of Ottoman Hans, it is built of stone with brick horizontal stripes. It is a two storey han which has a rectangular courtyard in the middle surrounded by arcades (Figure 2). The arcades create access to cells. While each cell is of private property, the courtyard is public.

After evaluating the data gathered from the thesis of Aksu [1], distribution of the cells according to the activities they are used for were defined in Figure 3. According to the situation in 1999, only 12 cells out of 58 cells are used for commercial activities. Half of these commercial units sell traditional products such as hand made blankets and candies. Among 10 cells that are used for production, all of them belong to old artisan groups like coppersmiths, knife makers, steelyard makers, candy makers, harness and saddle makers. But 24 cells located upstairs are empty and 8 cells are used as depos. Most probably all these empty units were also used both for production and commercial activity during the initial phases of the building. While the cells facing the street attracted passerbys, the rest of the building functioned in relation to the spatial organization of the building. When we evaluated the change in the present situation of the Han, we observed that only the courtyard is now used as an open-air temporary theater. In general the distribution of activities has remained as it was in 1999.

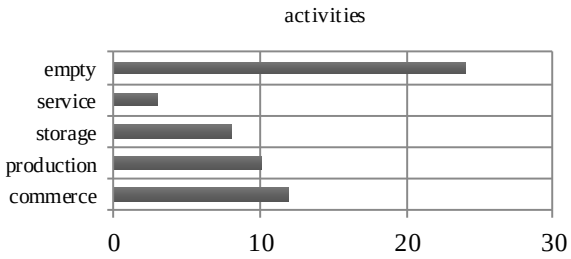

Figure 3. The Distribution of Activities in The Cells of Ali Pasa Han

2. Purpose and Methodology

Basic steps of adaptive reuse can be identified as analysis, determining compatible use, developing project proposal and realization. This study includes only the first

three steps as the last step requires specific expertise and knowledge [5].

The purpose of this study is to create adaptive reuse proposals for a historic building of commerce by focusing on "functional continuity". In other words, the students were asked to consider the importance of cultural interaction in a commercial building with significant historic background and they were expected to create proposals by evaluating its spatial potentials in functional continuity.

In the first phase of the study, the course program will be organized in different steps according to the course catalog form and 14 weeks program. At the end of every step there will be a jury to evaluate the different phases of the proposals. Every step will have its own priorities and criteria for jury evaluation.

3. Determining the Basic Steps of the Course Program

The students were asked to develop a holistic reuse proposal for the building in order to create cultural interaction. As the student group was an international one with several Erasmus students, the theme of cultural interaction also had a practical grounding. All the activities and functions were to be defined by the students. Table 2 shows the course program in relation the studio process. As shown in Table 2, at the first step they were asked to analyze the building by using a framework defined by the tutors. Then they were to create a scenario in relation to the context and define all the activities and their interrelations. After creating the building program, they started to develop their proposals.

Table 2. Summarized Course Program of ITU Interior Architecture Project III, 2014-2015 Fall Semester

ITU Interior Architecture Project III Course Program	
Weeks	Process
1	Analyzing the context, Eminönü, Golden Horn
2	Analyzing the building and its interiors
3	1st JURY_ Determining architectural and spatial potentials
4/5/6	Discussions about compatible use and scenario
7	2nd JURY_ Determining a compatible use and creating a scenario
8/9/10	Developing the project proposal
11	3rd JURY_ Discussions on proposals
12/13/14	Developing the project proposal_ details
	Final JURY_ Evaluating final projects

As discussed before, interior architecture is concerned with existing buildings. Therefore analysis is essential for all activities concerned with interior architecture. On the other hand, especially for buildings with cultural significance the extent, purpose and functional change is extremely important. Therefore the basic steps of the course and jury sessions are defined as follows:

- Step I: Analyzing the building to understand spatial potentials
- Step II: Determining a compatible use and creating a scenario
- Step III: Developing the project proposal

The results were discussed and evaluated by a jury, which was formed of specialists with different professional backgrounds related to the steps above. Therefore, the composition of the jury changed according to the priorities of the process. At the first jury, while discussing the results of analysis and determining architectural potentials, the leader of the project team who has prepared the restoration project for Ali Pasa Han, was invited to the jury. At the second jury, while determining a compatible use, a specialist with considerable experience about reuse was asked to evaluate proposals. The third jury was enriched by the contributions of architects from practice. All the findings of the process will be discussed according to the basic steps defined above.

3.1. Step I: Analysis for Understanding Spatial Potentials

There are many different methods in analyzing architecture with different concerns.

However, priority of the analysis in adaptive reuse is to understand architectural and spatial potentials embedded within historic buildings and their components. These potentials help us understand the cultural significance of a building and define compatible use.

During the analysis for understanding spatial potentials, students were asked to analyze historic buildings through the criteria defined below [6]:

- Contextual Ties
- Tectonic Order and Material
- Geometric Relations
- Spatial Organization
- Spatial Circulation.

3.1.1. Contextual Ties

In order to understand a building, it is necessary to grasp the exterior forces that shape it. While analyzing the relationship between the building and the urban environment that surround it, it is necessary to look at the urban spatial envelope, predominant paths, density, important buildings, structures and landmarks around the building.

According to the evaluations in the studio about the present situation of Ali Paşa Han, it is observed that the building is within a very dense urban infrastructure and this can be regarded as one of the most important potentials of the building. Although the building faces the shoreline of the Golden Horn on the Northern side, the main entrance of the building is from a narrow street at the South West. But the entrances of all the ground floor cells both on the shoreline and at the back are directly from the street. The density on the shoreline side is considerably high. As the cells on the shoreline are not connected to the courtyard, there is no passage between the streets through the building. So, the building has no direct relation with the main street except the cells facing the street.

3.1.2. Tectonic Order

Tectonic order arises from the relationship between architectural elements that come together with the principles of gravity. Gravity helps to define a hierarchy, which is vital for the consistency of the building. This hierarchy can be easily read in section starting from top

towards the ground by looking at architectural components, elements and the ground. In Ali Pasa Han, the hierarchical relations between cross vaults, barrel vaults and thick loadbearing walls can be observed at both levels. The repetition of the identical units or cells limit interventions on loadbearing walls as the walls also support the original vaults. The courtyard composed of galleries with barrel vaults face the courtyard by Ottoman pointed arches.

3.1.3. Geometric Relations

Resolving geometries in a historic building is one of the most important steps of architectural analysis because all buildings are defined by the togetherness of basic or complex geometric forms and these geometries create spatial forces according to their articulation. While analyzing Ali Pasa Han by focusing on the geometry of building mass and void, it can be seen that the building fills the urban space defined in linear organization and it has a rectangular void or courtyard that has direct relation to the contour of the building. The togetherness of the cells defines an overall geometric grid and spatial character.

3.1.4. Spatial Organization

In a building program spaces with different intentions and priorities come together. Usually in historic buildings different spatial organization types are used together in order to define spatial hierarchy. In the ground floor plan of Ali Pasa Han, while the cells around the courtyard are articulated with centralized organization, spaces along the entrance axis and service corridor are arranged in linear organization. The ground floor cells through the streets at both sides of the building are also arranged with linear organization. The first floor resembles the ground floor in terms of spatial organization except the courtyard. Although the first floor cells are also arranged around the central courtyard they come together in linear organisation because of the void in the middle.

3.1.5. Spatial Circulation

Spatial circulation is the way or path that is predefined by the architect in order to create hierarchical access for all spatial components in a building. In order to understand spatial circulation it is essential to consider the starting point, the layout and the architectural definition of the path. In Ali Paşa Han, the starting point is the archway on the narrow street at the southern part of the building. This archway leads to the main circulation system, which is articulated around the courtyard. The cells are attached to the rectangular circulation system in both floors. Access to the first floor is provided by stairs, which are also part of the main circulation system. The architectural definition of the path is characterized by barrel vaults and galleries facing the courtyard

3.2. Step II: Determining a Compatible Use and Fuctional Continuity

Determining a compatible use necessitate the functional evaluation of the building's present situation and the effects of all previous interventions. According to the Burra Charter [7], fabric, uses, associations or meanings of different periods, or different aspects of cultural significance should be respected. So, the present situation of a historic building can be regarded as a multilayered structure of evidence. Therefore, at the step of "Determining a compatible use and functional continuity" the evaluation criteria was defined as follows:

- Evaluating the present functional properties
- Determining a compatible use.

3.2.1. Evaluating The Present Functional Properties

After analyzing the building, the students were asked to evaluate the existing situation of the building in order to understand the complications related to the activities and functions that take place in it. Main problems related to present functional properties of the building were defined as follows:

- Functional discontinuity
- Detachment of spatial and functional organization
- Misuse of innate functional properties.

After evaluations in the studio, it was observed that the functions of cells were mostly determined by their roles in spatial organization. While the ground floor cells around the courtyard are mostly used for production, the cells connected to the streets are used as retail units. On the other hand most of the cells on the first floor are empty and the upper level is devoid of activity. All ground floor units are subject to interventions that have different objectives and priorities. A historic building situated at the commercial core of Istanbul is used for different purposes and activities that do not have any practical or conceptual relation to each other. The most important reason for this spatial and functional discontinuity is the fact that the cells belong to all different individuals and the way they utilize the space is not organized at all. As a result each cell or unit is modified according to its owners' expectations and needs thus the building suffers from the lack of overall operational organization.

The initial use of a building reflects its overall intention and its contextual role. The spatial organization is mostly determined by the activities that are predefined in the building program. But just like the example of Ali Pasa Han, in time these activities change according to social, economic and cultural factors, which usually have certain contextual ties. Due to the effect of these changes, integrity of the building program starts to be dispersed and parts of the building start to be used for different activities. This inevitable fact leads to a certain detachment between the functional and spatial organization of the building.

Functional organization is about the relationship of activities that take place in a building. Just like spatial organization every space has a functional role in the overall functional organization of the building. But there are some innate functional properties that are hard to change. For example a building's functional organization often hinges on delineating service and served spaces. According to Jenkins [8], regardless of scale or segregation degree, delineating and balancing service and served zones remain vital in the life of a building. The degradation between public and private is also another functional property that is hard to change if the fabric of the building is not changed. Today on the ground floor of Ali Paşa Han we can observe that the initially public galleries that surround the courtyard are closed and isolated from the central courtyard and have lost their

public character. As these types of interventions ruin the innate functional and spatial character of the building, they need to be removed. Innate functional properties need to be evaluated in order to define the new functions that will take place in a building.

3.2.2. Determining a Compatible Use

The Burra Charter [7], defines the aim of conservation as retaining the cultural significance of a place. According to the Charter, cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

As the functional organization of a building reflects its role and intention, it is a part of its cultural significance. On the other hand it is generally very difficult to preserve all the initial functions of a building. At this point, it becomes important to define a compatible use for historic buildings which is defined as a use that respects the cultural significance of a place [7], Such a use involves no, or minimal, impact on cultural significance. Changes which may reduce cultural significance should be reversible and be reversed when circumstances permit. Therefore, while determining a compatible use for Ali Pasa Han, the students were asked to proceed in 3 steps:

- Proposing a conceptual model or diagram
- Creating a scenario
- Defining the building program.

At the first step of determining a compatible use, students were encouraged to define the role of the building within the context of Eminönü. After the analysis students became aware of the building's different phases, changing functional character and potentials. It was also important to develop an idea that could enhance new ways of functional continuity. Even if the cells belong to individuals, public role of the building was to be underlined. Therefore, the new use needed to consider:

- The initial uses and spatial potentials that were discussed during analysis
- The present situation and complications
- The contribution of the building to new ways of functional continuity.

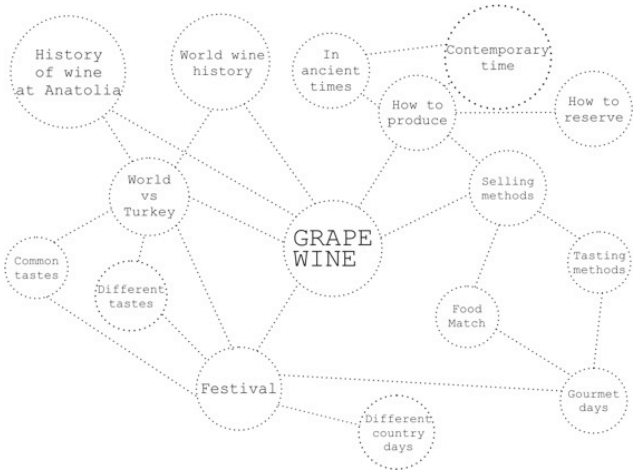

Figure 4. The Conceptual Diagram of A Student Work [9]

Figure 4 shows the conceptual model developed by one of the students. The intention of the student was to create cultural interaction by creating a center for the exhibition, degustation and sale of various local Anatolian wines through events such as festivals and thematic gatherings. The bubble diagram can be regarded as an interpretation of the main theme and its relation to history, context and activities.

After defining the intention of the proposal, the students tried to develop a scenario to explain their projections for the course of actions that are supposed to be a part of spatial experience. According to Ertugrul [10], when architectural scenario illustrates the architectural space, it should be narrative and supplementary to the visual material as an additional medium for representation. So the scenario can be regarded as a tool to narrate the "story' of the building, which may not be expressed in visual terms. Figure 5 shows the representation at one of the student's scenario. The student has tried to define the activities and their spatial complements by using a section. Her aim was to design a center called "Lab" to create cultural interaction through music and sound which can be regarded as one of the most important components of culture.

Figure 5. The Conceptual Representation of The Scenario [11]

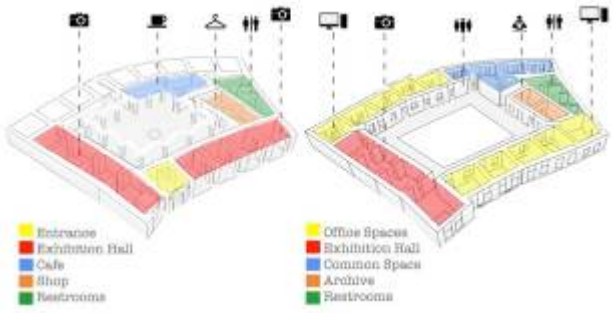

Figure 6. The Building Program and Its Relation to The Building [11]

During the last phase of defining compatible use, the students created their building programs according to their scenarios. After defining the activities and their spatial requirements they started to work on different configurations of the program by discussing alternatives on plans. Figure 6 shows the program of proposal developed for the same project Lab. The student has proposed use of both levels for exhibition. While commercial activity was concentrated around the courtyard on the ground floor, experimental studies were organized on the first floor. Exhibition spaces were distributed to the whole building creating spatial continuity and increase the attraction of the first floor.

3.3. Step III: Developing the Proposals and Project Results

At the third step of the study, which has been defined as "developing the proposals and project results" studio outcomes were evaluated in terms of "functional continuity". Every intervention on historic buildings needs to consider both adaptation and conservation. While conservation focuses on the continuity of the building, adaptation aims to increase its functionality. Therefore "functional continuity" cannot be discussed independent from adaptation and conservation. Because the term functional continuity does not only deal with the relationship of current activities in a building but it also involves the relationship of these activities with the building's previous phases and context.

After creating the building program students started to develop their proposals. Consciousness about the generally accepted principles of conservation was regarded as an important issue so at this step the students needed to define the extent of intervention by taking into account some of the basic principles described by the tutors. These principles can be regarded as an interpretation of the basic conservation principles defined by the Venice Charter for interventions in interiors:

- Authenticity: respect for the valid contributions of all periods
- Reversibility: ability to undo all interventions
- Differentiation: difference between old and new layers.

According to the Venice Charter [12], the present situation of a historic structure even destroyed or damaged represents "a state of understanding". Due to the requirement of the preservation of as much of the original material as possible, any intervention should be kept minimum [13]. Conservation theory has also placed value on "reversibility" which is defined as the ability to undo repairs that later generations regard as substandard or incorrect [14]. For interiors reversible interventions are even more important as they are changed more often according to changing human needs. Differentiation between the new intervention and the existing building helps to maintain reversibility since additions are often structured as independent bodies and they are built of different materials and techniques with a new design language [15].

Other than the principles of conservation, as mentioned before, students were also asked to take into account the essentials about adaptation. According to Forsyth [16] too much focus on conservation can cause loss of vitality and historic cities can become heritage museums. Conservation has as much to do with breathing new life into old buildings as it has with repair. Cities and all their components including buildings and their interiors are living structures. If they are abandoned without a use, they become frozen in time. Reuse is the way to make them breathe and make them a part of our lives.

Adaptation to new requirements in public and commercial interiors can be discussed in many ways that can be summarized as functional requirements, human comfort and health requirements, aesthetic requirements and expression of brand identity [15].

Starting from the eight week of the semester, students worked on developing their proposals by considering both principles of conservation and adaptation requirements. At the end of the third step at fourteenth week of the course, the jury made its evaluations by focusing on the theme of "functional continuity" and proposals were classified according to their main approaches. The most important advantages and disadvantages of every different type of approach are identified in Table 3.

Table 3. The Evaluation of the Studio Experience in Terms of Functional Continuity

Result		Jury evaluation	
		The Most Important Advantage	The Most Important Disadvantage
I	Central point	Highlighting of the spatial potential of the courtyard by defining a specific use	Diminishing the functional continuity between ground floor cells and the courtyard
II	Interpretation of the circulation system new stairs, new paths	Strengthening the relationship and continuity between different levels	Changing the original circulation system and breaking down the originality of the building typology
III	Overall conceptual organization	Equalizing the importance of different parts and levels of the building	Decreasing spatial hierarchy
IV	Relationship of activities	Lessening the spatial isolation between the cells.	Decreasing the functional multiplicity between different parts of the building
V	Emphasizing urban continuity	Strengthening contextual ties of the building	Decreasing the individuality and distinction of the building

The results, which are summarized in Table 3, will be discussed in detail with examples from the studio.

3.3.1. Result I: Central Point

The most important challenges of the approach to central point were to utilize the courtyard as a place for cultural interaction and enhance its innate role as the central component of spatial organization. Figure 7 shows the proposal of one of the Erasmus students whose intention was to use the courtyard for traditional and contemporary shadow art shows and exhibitions. Therefore she needed to define a structure to embrace all the technical equipment without detracting from the spatial character of the courtyard. The student proposed open exhibition spaces in the cells opening to the main street and created visual relation with the courtyard. On the ground floor there was a mixture of ateliers and sales units practically in relation to each other. The first floor was mostly used for ateliers, workshop spaces and cafeteria. The building program was developed in order to create a center to exhibit, design, produce and interpret ottoman patterns on different platforms and products. The interiors were also embellished by surfaces and products produced in the ateliers (Figure 8).

As it can be seen from the student project, the approach that emphasizes the courtyard as central point highlights the spatial potential of the courtyard but it diminishes the functional continuity between ground floor cells and the courtyard because of the specific use defined for the courtyard. On the other hand the attraction of the courtyard creates ta strong spatial hierarchy and enriches spatial experience.

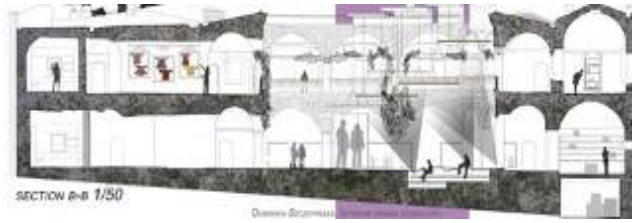

Figure 7. Student Proposal, Section-Elevation From Courtyard [17]

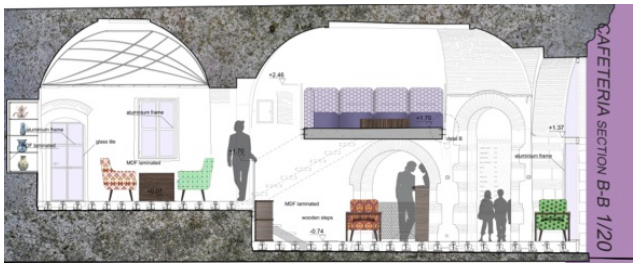

Figure 8. Student Proposal, Detail of a Cell [17]

3.3.2. Result II: Interpretation of The Circulation System-New Stairs, New Paths

Figure 9. Student Proposal, Section-Elevation [18]

Figure 10. Student proposal, ground floor plan [18]

Some of the students proposed to strengthen the relationship between the two levels by adding new stairs to the courtyard. Figure 9 and Figure 10 shows the proposal of one of these students that used the stairway as an element to connect the flow from the street facing the Golden Horn and the narrow street at the backside and direct them both to the upper floor. She proposed a center within which coppersmiths and carpenters could work and exhibit their products. Her aim was to increase the importance and accessibility to the upper level through stairs. While the ground floor was used for ateliers and shops, the first floor was used for exhibition.

3.3.3. Result III: Overall Conceptual Organization

All student proposals were developed by organizing spaces and activities within a holistic conceptual approach. Some of the projects, however, this conceptual organization was used a tool to maintain functional continuity. In a student proposal that was developed according to this approach, the visualization of sound was used as a tool to create functional ties between the cells (Figure 11). The aim of the student was to create a center within which disciplines such as visual arts, architecture, performance, computer programming and music could work together to enhance activities related to experimental studies about music and sound.

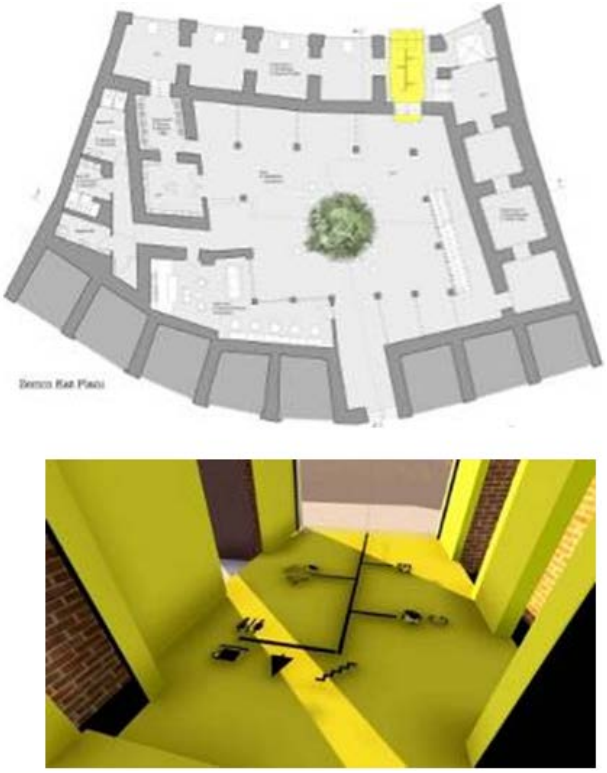

Figure 11. Student Proposal, Ground Floor Plan, Perspective From The Entrance and A Cell [11]

3.3.4. Result IV: Relationship of Activities

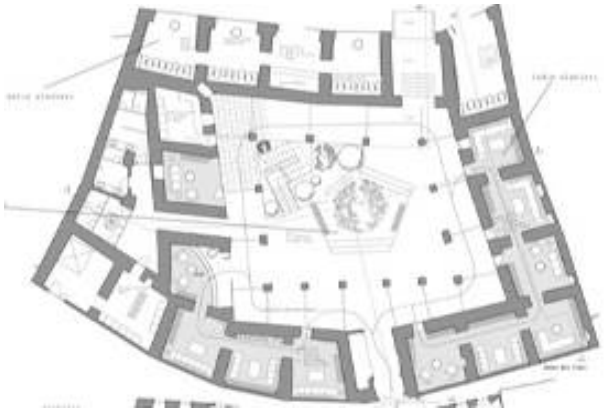

Figure 12. Student Proposal, Ground Floor Plan [9]

Relationship of activities can be regarded as one of the most efficient tools in order to maintain functional continuity. One of the students that used this approach has studied the history of the production of Anatolian wines

and transferred his findings to the spatial organisation of the building. Spatial activities were linked to each other in relation to the chronology of the production of different types of Anatolian wines (Figure 12).

3.3.5. Result 5: Emphasizing Urban Continuity

Especially in city centres the ground floors of historic buildings have great potential as continuations of open-air public spaces. When accompanied by a socially useful purpose, this great potential can be regarded as an attraction to increase the accessibility and reveal the cultural significance of the whole building [19]. In one of the projects that was developed with this approach, ground floor cells facing the street was used as open-air meeting and multi-purpose working spaces (Figure 13). Therefore the penetrability of the building shell was greatly increased and contextual relations were strengthened. The spatial and functional continuity between the street and cells was also evaluated as an approach that enriched the activities on the street. On the other hand the individuality of the building was lessened because of the ambiguity of spatial borders between the street and the cells.

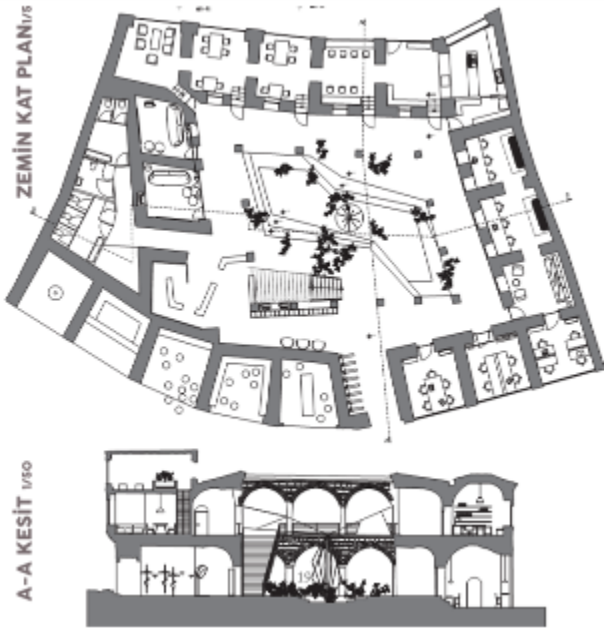

Figure 13. Student Proposal, Ground Floor Plan and Section [20]

4. Conclusions

According to McCallum [21] reusing buildings is a simple way of achieving sustainability and it helps to reinforce a strong sense of place. Once the historic environment is evaluated appropriately, it contributes to the quality of life and enriches people's understanding of the diversity and changing nature of their community and it becomes a powerful focus for community action.

Historic buildings are characterised by the inseparable relations between form, structure material and function, which defines both their architectural identity and cultural significance. In design education, focusing on buildings like Ali Paşa Han gives the possibility to experience real problems and increases the consciousness of students related to the historic environment. The evaluation of the buildings past and present functions enriches future projections.

Interventions on historic buildings need to establish a balance between adaptation and conservation. This balance can only be achieved by analysing the building's spatial potentials and determining a compatible use. While identifying compatible use or uses for a historic building, functional unity needs to be evaluated as one of the basic design criteria in order to retain their cultural significance. This is because a historic building can fully reveal its potentials only if it is experienced and evaluated as a whole.

In historic buildings there are many different ways of maintaining functional continuity. But every approach has its own advantages and disadvantages. In this study probable design approaches to a han building were discussed through examples and compared with a systematic method.

Heritage buildings like Ali Paşa Han are to be used for socially beneficial purposes. As they are also a part of cultural heritage, it is not enough to conserve their fabric (all the physical material of the building) but also their cultural significances in order to make them a part of spatial experience and strengthen their roles in social life.

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