FROM GÖBEKLİTEPE TO INDUSTRY 4.0: SMART BUILDINGS, SMART CITIES

Editör
İzzet YÜKSEK
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GECE AKADEMY

Kitap Adı	**:**	FROM GÖBEKLİTEPE TO INDUSTRY 4.0: SMART BUILDINGS, SMART CITIES
İmtiyaz Sahibi	**:**	Gece Kitaplığı
Genel Yayın Yönetmeni	**:**	Doç. Dr. Atilla ATİK
Kapak&İç Tasarım	**:**	Arzu ÇUHACIOĞLU
Sosyal Medya	**:**	Arzu ÇUHACIOĞLU
Yayına Hazırlama	**:**	Gece Akademi Dizgi Birimi
Yayıncı Sertifika No	**:**	15476
Matbaa Sertifika No	**:**	42539
Matbaa Adı	**:**	GeceAkademi
ISBN	:	978-625-7958-22-6

Editör
İzzet YÜKSEK
Özlem ATALAN

Gece Publishing
ABD Adres/ USA Address: 387 Park Avenue South, 5th Floor, New York, 10016, USA
Telefon/Phone: +1 347 355 10 70

Gece Akademi
Türkiye Adres/Turkey Address: Kocatepe Mah. Mithatpaşa Cad. 44/C Çankaya, Ankara, TR
Telefon/Phone: +90 312 431 34 84 - +90 555 888 24 26

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CONTENTS

OPTIMISING THE BUILDING DESIGN PROCESS IN ARCHITECTURE WITH LIFE CYCLE ASSESSMENT METHODOLOGY 9

H. ARSLAN, E. YILMAZ 9

SUSTAINABLE HOUSING DESIGN, (EXAMPLES of REINFORCED CONCRETE BUILDING) 23

İZZET YÜKSEK 23

SMART BUILDINGS AND ELECTRICAL-ELECTRONIC EQUIPMENTS41

HAYRETTIN GÖKOZAN 41

INTERNET OF THINGS BASED SMART HOME APPLICATIONS FOR SMART CITIES 59

MEHMET TAŞTAN 59

SOCIO-CULTURAL SUSTAINABILITY: THE CASE OF İZMİR INDUSTRIAL HERITAGE IN THE CONTEXT OF INTERIOR ARCHITECTURE (EDUCATION) 81

GÜLNUR BALLİCE, EDA PAYKOÇ, GIZEM GÜLER, IŞINSU DİKMEN, ELIF DEDE 81

ADAPTIVE REUSE OF ALSANCAK TRAIN STATION WITH INSERTION AND INSTALLATION STRATEGIES 105

N. EBRU KARABAĞ AYDENİZ, SERGIO TADDONIO 105

IMPORTANCE OF THE MONUMENTAL BUILDING IN HISTORICAL CITIES, "KULA- MANISA VIRGIN MARY CHURCH" 131

ÖZLEM ATALAN 131

SPATIAL EXPERIENCE OF PHYSICAL AND VIRTUAL SPACE: SALT RESEARCH TO VIRTUAL ARCHIVE 157

ELIF SÜYÜK MAKAKLI, EBRU YÜCESAN 157

Preface

For a long time, urban planning has been around and many of the concepts of urban planning date back to ancient times. The wide boulevards that intersect at the right angles and today's city centers can be attributed directly to the grid system and city planning structure implemented in the reconstruction of ancient Greek cities. Smart buildings and cities have, however, been a developing subject throughout the world in architecture, engineering and other social disciplines over the past few decades. But what are the cities that are smart? By reviewing the current literature and implementations, it is seen that there are very different smart city concepts and therefore different applications. Although there is no standard definition on this issue, we can consider smart city as a modernization effort that allows cities to make more effective use of their resources and provide better service to residents. From this definition, it can be derived that a smart city may face many challenges in many different domains, such as sufficient access to fresh water, cleaner energy, smart buildings that meet the needs of their residents, and the ability to travel efficiently while keeping the city greener.

A clever city needs to renew and reconsider where we lived for centuries. There are many reasons why we should change our cities and make them more intelligent on an ongoing basis: our cities are getting bigger and bigger, our traffic is longer, roads are bigger and the environmental impact is worse than ever. We need to look up our cities and try to refresh them with advanced technological tools to tackle these challenges. In reality, designing and planning our smart building and cities is no longer optional, especially in developing countries, given the significant population growth. The task will be to provide basic resources such as safe food, clean water and adequate energy to these communities, while also maintaining overall economic, social and environmental sustainability.

The book is the product of several months of hard work by all contributing authors who have worked tirelessly and enthusiastically. Without them, this plan won't see the light of day. I would like to appreciate all the chapter authors ' professionalism and dedication in this regard. Thanks to everyone.

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SOCIO-CULTURAL SUSTAINABILITY: THE CASE OF İZMİR INDUSTRIAL HERITAGE IN THE CONTEXT OF INTERIOR ARCHITECTURE (EDUCATION)

CHAPTER 5

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1. INTRODUCTION

This study aims to review the re-functionalization of İzmir's cultural heritage on the scale of interior architecture by considering the connection of this issue with socio-cultural sustainability. For this purpose, firstly, literature is searched on socio-cultural sustainability, cultural heritage, industrial heritage potential of İzmir city and the relationship between interior architecture and community. As a case study, interior design student projects within the context of cultural heritage have been selected in which all these issues can be addressed and analysed. Re-functionalization of the industrial buildings in the same area –rear port of İzmir– was evaluated in terms of socio-cultural sustainability, which was studied in different years in the undergraduate and graduate project studios of Yaşar University Interior Architecture and Environmental Design Department.

As a result, it was understood that socio-cultural variables should be considered together with physical requirements for a successful reintegration project in the sense of community wellbeing and even these cannot be considered separately. In this sense, it was concluded that sustainability in interior design education and professional life should be emphasized not only on environmental and economic aspects but also on social and cultural dimensions.

2. SOCIAL AND CULTURAL SUSTAINABILITY

Sustainability is defined as the ability to sustain or continue and originally quoted to “environmental sustainability” or “ecological sustainability”, the long-term capacity of the Earth to accommodate ever-growing human needs and wants, given their duty on the natural ecology (Chiu, 2004). The concept of sustainable development was defined as an improvement that meets the needs of generation to generation without compromising the capability (WCED, S. W. S., 1987). Sustainability has various interpretations and definitions, and its components become open to discussion throughout the years. The concepts of economy, environment, and social are the three foremost components of sustainability (Chan & Lee, 2008) (Figure 1). The components of sustainability including the cultural aspects that are also essential elements of development are attributed and should not be isolated: the tracing of one affects the others (Chiu, 2004).

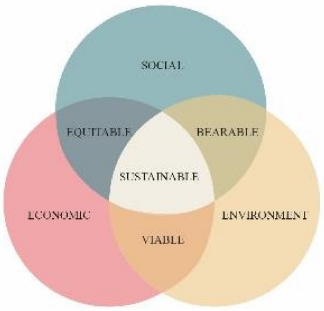

Figure 1: Venn Diagram of Sustainability

To mention the definition of social sustainability, Social Life[2] addresses "a process for creating sustainable, successful places that promote wellbeing, by understanding what people need from the places they live and work. Social sustainability combines the design of the physical realm with the design of the social world – infrastructure to support social and cultural life, social amenities, and systems for citizen engagement and space for people and places to evolve." (Woodcraft, Hackett & Caistor-Arendar, 2011). There are three interpretations called development-oriented, environment-oriented and people-oriented of social sustainability, which has strict connections with each other. According to development-oriented approach, the social limitations are set by social norms related to the components of the society. Specific social relations, customs, structures, and values are important components of social sustainability. The second interpretation determines the social preconditions about the balanced distribution of resources and assets within and over a generation for sustainable development. Rules, values, preferences, and norms can be indicators for the environmental development of social sustainability. The last interpretation of social sustainability supports or improves the wellbeing of people from generation to generation and aims for social cohesion and integrity, social stability and improvement in the quality of life. Equitable distribution and consumption of resources and assets with harmonious social relations are the primary issues in this approach (Chiu, 2003).

The concept of culture was introduced primarily to explain cultural sustainability. As defined by the anthropologists (Blake, 2000), culture is "a totalizing concept because everything becomes, or is considered, culture. There are material, ritual, and symbolic culture, social

[2] UK based social enterprise, specializing in research and innovation about social life in communities

institutions, patterned behaviour, language-as-culture, values, beliefs, ideas, ideologies, meanings and so forth. Second, not only is almost everything in a society culture, but the concept is also totalizing because everything in the society is supposed to have the same culture (Foster, 2020). The meaning has changed through time as well, from early ideas of culture as action in real life-worlds and its interaction with nature. Anthropological use of the concept is still relevant even today, meaning as the cultivation of the human mind and behaviour. In its broadest sense culture covers all spheres of life, and therefore also of society (Dessein, Soini, Fariclough, Horlings, Battaglini, Birkeland & Mihailova, 2015). Rapoport has distinguished two initial dimensions to determine culture: the social dimension including kindship, family structure, social network, identity, status and such; and the ideological dimension encompassing values, ideals, images, norms, standards, expectations, rules, and such. First, culture is stored and passed on from one generation to the next and in the process; it accumulates and improves or evolves, but may also become extinct. Another is the diversity of culture: there are many separate cultures and each is different from others (Rapoport, 2000). An important characteristic of culture particularly related to the sustainable development context is that "culture is how humankind adapts to his environment and secures things that he needs for his survival" (Schusky and Culbert, 1973: 45). Therefore, the culture of a place is also inseparable from the natural environment and it certainly has a role to play in the concern of environmental sustainability of a place.

Figure 2: Three Roles of Culture in Sustainable Development

Culture takes on its evolutionary, holistic and transformative role, giving a new paradigm to the question of sustainable improvement (Dessein, et.al, 2015) (Figure 2).

Social and cultural sustainability are often connected and are sometimes indistinguishable. Culture affects the social structure, social values, and lifestyles of society, and therefore the impact of human activities on the natural environment. The relationship between social and

cultural sustainability is even more intimate when social sustainability refers to the repair or improvement of people's wellbeing in the present and future generations. All these developments which are related to culture involve social relations, the distribution of resources and benefits, and quality of life. Specific concerns and manifestations of social and cultural sustainability are explained including also their common concerns in Figure 3 (Chiu, 2004).

Social Sustainability		Cultural Sustainability
Specific concern Social wellbeing **Manifestations** Social cohesion/dissolution Social stability/instability Social equality/inequality Social equity/inequity Social peace/conflict Social inclusion/exclusion	**Common concerns** Socio cultural limits to and preconditions for sustainable development- values, norms, customs and life style	**Specific concern** Continuation of culture **Manifestations** Arts, music, performing arts, literature and religion

Figure 3: Specific Concerns and Manifestations of Social and Cultural Sustainability

3. CULTURAL HERITAGE

Before starting to analyse what cultural heritage is, it would be better to understand the concepts of culture and heritage separately. As the broad meanings of culture were introduced in the first part, here only the meaning of heritage will be defined. Heritage can be defined as the unique and historic property of the architecture. It may go beyond the architecture to its immediate surrounding; as being a value of a public or community (Foster, 2020). The objects, collections, buildings and places can all be listed under the concept of heritage (Avrami, Mason & De La Torre, 2000). The chart[3] composed by Vecco shows the chronological development of heritage concept in the international arena, including the recommendations, the conventions, tangible and intangible heritages by using subjective and objective criteria (Vecco, 2010). As an attitude towards cultural heritage, the cycle of it can be listed as below (Culture in Development, N.D.): by understanding it (people value it), by valuing it (people want to care for it), by caring for it (it will help people enjoy it) and from enjoying it (comes a thirst to understand).

According to UNESCO[4] (1989), the definition of cultural heritage is as following: "…the entire corpus of material signs – either artistic or

[3] https://www.sciencedirect.com/science/article/pii/S1296207410000361?via%3Dihub

[4] United Nations Educational, Scientific and Cultural Organization

symbolic – handed on by the past to each culture and therefore to the whole of humankind…" (Jokilehto, 2005).

Cultural heritage is defined with broader covering: "…is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions (The Council of Europe, 2005 as cited in Güner, 2015). It includes all aspects of environments derived from the interaction of people and places through the time…" (Güner, 2015). Until 1960, cultural heritage is accepted as a term that contains only the historic monuments, historic buildings, archaeological sites and the monuments. In the following years, the individual buildings are also added under cultural heritage with their environment. When it comes to 70's, the term cultural heritage was started to be discussed within the people's lives also with the integration of the social factors. In 80's, the conservation of cultural heritage was accepted in public scale with an increasing awareness (Güner, 2015). According to UNESCO, there are three types of cultural heritages with examples for each. Tangible Cultural Heritage contains moveable (paintings, sculptures, coins, manuscripts, etc.), immovable (monuments, archaeological sites) and underwater (shipwrecks, underwater ruins and cities, etc.) heritages. Intangible Cultural Heritage includes oral traditions, performing arts, rituals, practices, knowledge skills, etc. Natural Cultural Heritage involves natural sites with cultural aspects like cultural landscapes, physical, biological and geological formations (UNESCO, 2017; Axelsson, Angelstam, Degerman, Teitelbaum, Andersson & Drotz, 2013).

The cultural heritages are actually important elements of the well-being of society and community (Tweed & Sutherland, 2007). For something being named or entitled as cultural heritage, it should have a value for the society. In other words, in cultural heritage; "society and values are thus intrinsically linked" (Munjeri, 2004). All the elements of the past are not actually the part of heritage but they should be a selection by society (Cultural Heritage – Wikipedia, N.D.). The built environment that we are living in is also socially constructed with the meanings or functions assigned to the entities (Müller, 1998). Built heritage is important part of the cultural heritage both in urban and architectural scale. Their importance comes mainly from attracting tourists and reanimating economy (Tweed & Sutherland, 2007). When the cultural

heritage is discussed under the process of sustainable development, the following can be mentioned in terms of the positive effects towards sustainability parameters: Economic (effectiveness and performance), Social (exposure and openness to public) and Environmental Sustainability (environmental behaviour) (Pop, Borza, Buiga, Ighian & Toader, 2019). In the protection of the cultural heritage in the built environment, the main aim should not be avoiding the cultural heritage to be changed but being sure that it has a direct connection with people for having a long-term life span of it (Burström, 2001).

While making adaptive reuse of the cultural heritage buildings, the main target should be keeping the unique historic and cultural characteristics of the structure (Foster, 2020). Thinking with sustainability with its all dimensions, adaptive reuse of cultural heritage buildings has several positive affects as following (Bullen, 2007): reducing resource consumption, energy use and emissions, extending the useful life of buildings, being more cost effective than demolition and rebuilding, reclaiming embodied energy over a greater time frame, creating valuable community resources from unproductive property, revitalizing existing neighbourhoods, reducing land consumption and urban sprawl, enhancing the aesthetic appeal of the built environment, increasing the demand for retained existing buildings, retaining streetscapes that maintain sense of place, and retaining visual amenity and cultural heritage.

3.1. The City of İzmir and Its Potentials

İzmir being one of the symbolic cities has played an important role in Turkey's liberation and establishment. İzmir's population has reached to 4.000.000 in 2013 according to the statistics of TUIK (Turkish Statistical Institute). According to the same data source, when compared to other cities of Turkey, its population density is the third greatest in Turkey and currently West Anatolia's fastest-growing city. As being one of the most important trade cities, Izmir still maintains this characteristic (Stratejik Plan 2015-2019, p.43). When it is looked to employment division of 2006, service sector takes the first place whereas industry sector takes the second place (İzmir Kümelenme).

In addition to its developed and complex economy, İzmir is also an important culture and art centre. Its geographical situation, the richness of its culture and history, being Turkey's most European state settlement

and the easiness of transportation and its convenient climate makes it suitable for tourism. The followed politics, which caused changings in city economics after the 1980s, also changed the spatial structures. As a result, Konak and Kemeraltı transliterated into places where wholesale and retail trading rolled up. However, there was no big difference in the trading and entertainment traditions of Alsancak but the profile of inhabitants here, changed with a great impact (Barbaros, 1999).

3.1.1 The Meaning of Industrial Heritage

The issue of how to intervene in the industrial heritage of the current agenda in Turkey is among the current problems of protection. The industrial revolution that took place in Europe in the 19th century left an interesting and instructive legacy in the periphery of the centres and developments in this geography. Although various production structures and equipment before the industrial revolution can be examined under the name of industrial archaeology or industrial heritage, this interest is directed especially to the pioneers of the modern industry.

Industrial heritage in Turkey has two channels: the first channel in the modernization process of the Ottoman Empire in the 19th century, European and non-Muslim heritage group that reflection of the largest centres in the emerging industrial activities through investors from Ottoman subjects. In the second, there is a legacy group that exists in different sized Anatolian cities with the modernization-industrialization project of the Republic. This important accumulation exhibits the production methods and architectural approaches of the past, and records socio-economic and cultural data; however, in a world where technology is developing rapidly, these records are in danger of extinction (Kayın, 2013).

3.1.2 The Industrial Heritage in the scope of Socio Cultural Sustainability

Current debates relating to the industrial heritage mainly focuses on the transformation, conservation and transferring it to the future generations. Trends in transferring industrial areas out of the city also necessitate new investments in heritage sites. In this process, as well as discussions of expertise on how to intervene in industrial structures, controversial actions such as destruction, renewal, and rent-centred use emerge. Industrial Revolution is shaped by technological developments that emerged in Europe in the 18th and 19th century. Its cultural foundations based on intellectual movements in this geography since the 15th century. While the Industrial Revolution jumped to different geographies in the process, it has led to the existence of elements such as campuses, structures, building elements, equipment, and landscape elements that would later become objects of heritage (Kayın, 2013).

Tanyeli defines the industrial heritage as "a cultural heritage consisting of the specific architecture in which the activity of producing goods and/or services through mechanical means and devices takes place". As for the study of industrial heritage, the concept of industrial archaeology is adopted within the framework of Rix's conceptualization in the middle of the 20th century (Tanyeli, 2000).

There are international conventions such as the Council of Europe Recommendation 1990 on industrial heritage and the 2003 Charter of TICCIH (URL1). Cengizkan states that the structures built for functional-practical uses become aware of the artistic value they contain only when they become an element of memory. At the end of the 19th century, concepts such as "development value", "relative art value" and "use value" were introduced by Alois Riegl. Within this framework based on Banham's concept of "factory aesthetics", new coding, and re-architecture concepts took place in the act of transforming the industrial organization (Cengizkan, 2002).

Interventions on the industrial heritage in Turkey have evolved in different axis. The first of these is the destruction and renewal of industrial campuses and structures, ignoring the values that make them "heritage". The Ankara Havagazı Fabrikası (URL2), which caused controversy with demolition, and the İzmir Sümerbank Basma Industrial Campus (Arıtan & Sayar, 2009) where some units were built after the

demolition of some units with incompatible rational characteristics, and Zonguldak Lavuars[5] on the agenda are among the examples in this scope. The second type of intervention involves cases where the restoration is carried out but the characteristics of the industrial heritage cannot be properly emphasized. At the İzmir Havagazı Factory, the original industrial production scheme does not integrate with the circulation system/original spatial hierarchies are ignored (Kayın & Şimşek, 2009). The third type of intervention includes applications in which the industrial campus is integrated and functionalized with new context-based designs. In the intervention of the Silahtarağa Power Plant, which has been transformed into a power plant in Istanbul, it is positive that the original industrial equipment can be monitored and the new unit designed in the campus is designed as a neutral box closed to the outside. It is seen that cultural functions come to the forefront in conservation practices towards industrial heritage.

3.1.3. The Rear Port of İzmir

When it is looked to the existing building stock of İzmir from the perspective of industrial heritage, building stock where industry left is very large and these buildings have great potential in terms of social and cultural sustainability.

Before the 19th century, the rear port of İzmir, where there were more gardens and fields, was called the Darağacı. After the completion of Alsancak Train Station, Darağacı Region, which started to develop, is the first industrial zone of İzmir. Following the completion of the connection to the railway station and the port, the Punta District has been reconstructed and several businesses, warehouses, and residences have been built in a short time. The passing of the tramway between Alsancak and Halkapınar and this road revived business life. After the construction of the railway station and tramline, the commercial life in Punta has spread to the Darağacı area in a short time and the first warehouses, workshops, and factories were established here (Çıkış, 1999). Even though storage activities gained weight due to the distance between Punta Station and the Port, oil, soap, flour and cement factories were established from the beginning of the twentieth century and the region concentrated rapidly. For example; today still standing Coal Gasification

[5] Coal washing plant

Factory, Flour Factory, and Tile Factory can be listed among the important industrial facilities (Atay, 1978).

According to the Danger Plan (1925), the region extending from Alsancak Train Station to Mersinli was declared as an industrial zone and according to the plan, the coastal area of the region (today's port area) was started to be prepared for port construction. Besides, large industrial facilities such as Electric Factory (1928) and Orient Industry (1924) were established during the construction activities, whose application extended to 1935 (Şimşek, 2006). Alsancak Port was planned because the Passport Port was inadequate and it was put into operation in 1959. With the establishment of the port, the region was started to be used as a storage area since the 1950s (Barbaros, 1995). During the 1950s and 1960s, multi-story warehouses were built. During this period, Sümerbank Factory and various factories of Tariş were located in the south of the region. In 1953, the plan of the city of Izmir by Aru, Canbolat and Özdeş, was approved and entered into force. In this plan, it is planned to accelerate the process of turning Alsancak Port into a big commercial port, to protect the industrial facilities in the south of the Port and to develop this area in the direction of Halkapınar and Salhane. Thus, the skeleton of today's Izmir city fabric was created (Bilsel, 1999, p.17). In line with this plan, the coastline extending to Alsancak, Halkapınar, Salhane, and Turan was developed for the use of industrial zones (Karadağ, 2000). In the 1989, Revision Development Plan, a decision was taken to renovate behind the port and the region was planned as central business area. Since the 1990s, structures have been built in the function of management and service, and developments have been observed in which different types of users have been addressed. For example, some prestigious business centres, as well as some historical warehouse and factory structures have been changed function (Işık, 2006). Since the zoning plan in 1989 failed to accelerate the desired transformation of the region, the Port behind the region was included in the southern boundaries of the new city centre project extending to Turan and was included in the international idea and design competition opened in 2001 (Bal, Altınörs & Doğmuş, 2005). The new zoning plan provided a new motivation for the transformation of the region, but the desired success could not be achieved due to some problems.

4. INTERIOR ARCHITECTURE AND COMMUNITY ENGAGEMENT

Interior architecture is a comprehensive notion that concerns the whole society rather than a profession. As the needs and problems of society increase or change, the scope of interior architecture changes accordingly. Interior architecture often deals with the interior or physical environment of space by defining the relationship between humans and the environment. According to Harvey and Moralı (2003), this concept of space both shapes people and is shaped by them. Therefore, space can be defined as the totality of social processes and varies not only from person to person but also from time. The diversity of space needs that change over time leads to varieties in the design of interior spaces. While the content of interior architecture is always changeable, it sometimes addressing just a person, sometimes focuses on the problems or needs of society with different scales.

Interior architecture profession, that's purpose is to benefit society and people, can be handled holistically with community engagement. Community engagement is the work of a defined group of people who compose society. People want to contribute to their community and improve it. Therefore, the profession of interior architecture does not design for community, but design with the community (Lommerce, 2014). Thus, social and cultural sustainability is ensured. Interior architecture is a field aimed at the implementation of social and cultural sustainability. As a result, Lommerce (2014), defines the profession of interior architecture as a community of practice and defines community engagement as a way of operation, not as a task. Interior architecture, while trying to solve the problems of society, allows people to participate in society and this increases the power of society.

Contrary to what is thought, interior architecture is not a standard profession and does not use all of its potentials. Interior architects contribute human wellbeing that provides a sense of belonging to individuals. Therefore they contribute to the development of the environment and ensure social and cultural sustainability (Smith, Metcalfe & Lommerce, 2012).

Making a design for society plays an important role in the progress of the community. Projects that involve cultural heritage also emphasize the values of society. Thus, community engagement is ensured by working

with the community. In this context, Ergül (2015) mentions interior architects raise the level of society by providing solutions to the needs and problems of people in the community and recognize society. Besides, training architects with high social awareness is important for the future of society and this is possible with education. Therefore, the scope of interior architecture education should be determined according to the society's problems and needs by focusing on current issues. Raising awareness by dealing with the projects involving social and cultural sustainability should be considered in the interior architecture education and profession. Interior architects' designs must be based on not only tangible but also intangible notions. If interior architects establish the social context (intangible) correctly, they can attain a good physical design (tangible).

Interior architecture students should have high awareness in producing community-oriented projects and finding solutions to different social needs with different project areas and subjects. While raising awareness of students and society, designs have been made to contribute to the community with conserving the cultural heritage. As the conservation and revitalization of the cultural heritage is limited except for historical or famous buildings, which is always the problem of society, this issue can be offered as the subject of the interior design studio projects.

4.1 Analysis of Case Studies

Interventions on the industrial heritage in Turkey have evolved in different axis. Some of these are known as demolition, renewal, repair and contextual based functionalization. In many of the faculties of architecture in our country, students are given the opportunity to work in industrial building areas within the scope of architecture design project courses and they are asked to present ideas for context-based functionalization which is the third type of intervention. As a result of these projects, it is aimed to highlight the value of industrial structures as the concept of heritage and to learn the basic contexts of functionalization by the students. But the basic problem of this kind of interventions is related with the scope of the projects that offer physical improvements neglecting social and cultural sustainability issues. Therefore, interior architecture studios must include refunctioning and conserving these

kinds of industrial heritages focusing on community needs, human wellbeing and social amenities for citizen engagement and space for people and places to evolve specific to the context.

In this context, re-functionalization of industrial buildings in the rear port of İzmir that will ensure the social and cultural sustainability of the society were given to interior architecture students in undergraduate and graduate levels as studio projects at Yaşar University, Faculty of Architecture, Department of Interior Architecture and Environmental Design.

Within the scope of second year undergraduate interior design studios, in the spring semester of 2015, "Loft Living Project in Rear Port of İzmir", in the spring semester of 2019, "Co-living Space Design in Rear Port of İzmir" project was studied. Both of the projects are located in the rear port of İzmir and the project sites were the industrial depot buildings. Parallel with these topics, in the fall semester of 2016 graduate studio project topic was selected in the same area, "Design Museum in Alsancak Seaport".

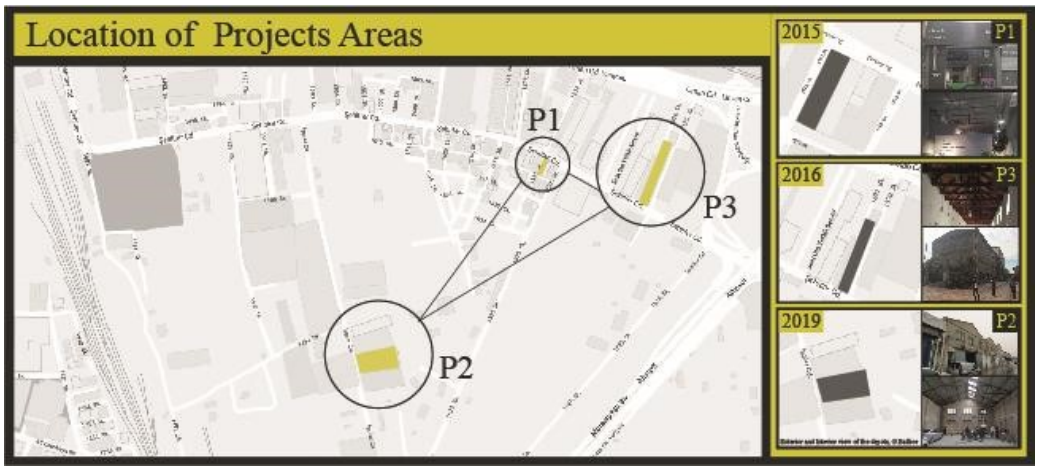

Figure 4: Location of Project Areas, Project 1: Aden Design, Şehitler Street, 110, Alsancak, Project 2: MedMar Depot, Şehitler Street, Alsancak, Project 3: Yaşar University Alsancak Campus (Former), İşçiler Street, Alsancak

Project Keywords: cultural heritage, socio-cultural sustainability, industrial buildings, user profile, social wellbeing, community engagement, semi-open or open public areas, accommodation spaces, mobility, flexibility, modularity, compactness

The main goals of the projects; 1.Exploring living, working, socializing spaces and privacy needs and create a residential program:

offering an array of flexible interior layouts and housing a mixture of personalities and profiles, 2.To develop students' holistic interior design skills, considering the functional, structural and visual organizations through design applications by focusing on socio-cultural sustainability, accommodation spaces, and 21st century scenarios with flexible interior layouts, 3. To raise students' understanding and creating concept ideas by considering social wellbeing and community engagement, 4. To increase students' awareness that their designs must be based on not only tangible but also intangible notions, 5. To design furniture that is compact, flexible, transformable, modular, demountable and sustainable considering the potentials of cultural heritage, 6. To formulate a solution to create an interior space by enriching the existing environment, 7. To evaluate a comprehensive program of an interior architecture project according to the needs of community.

Project 1: Loft Living Project in Rear Port of İzmir (Site: Aden Design, Şehitler Street, 110, Alsancak)

This studio provided the students to study flexible interior design approach by re-functioning an old industrial building in the city center. Students were expected to design a residential living and working interior environment in the given loft-space building. The required modular system let the users to re-form their private and working areas to suit group and individual needs. The students searched for how it can be re-adapted by suited up into today's conditions as a loft house-atelier. Besides, they examined how the urban identity can also be "re-adapted" like the buildings and how the structures can contribute to the urban identity with the proposed new ideas.

At the beginning of the course, the students searched on the history of İzmir and the Harbor area. They also studied the social and cultural issues for developing their concept ideas. Within this framework, they studied social and cultural history of the city focusing on the Harbor area, the "urban character" of the area by searching the history, patterns, important landmarks of the area and literature review about "loft living", adaptive re-use of industrial buildings in inner city areas. It is obtained as a result that the reconstruction of a loft landscape further depends on local cultural forms. Additionally, it is possible to map and translate the loft lifestyle and aesthetic in the local material environment and build

relationships between local conditions and identities through these cultural entities.

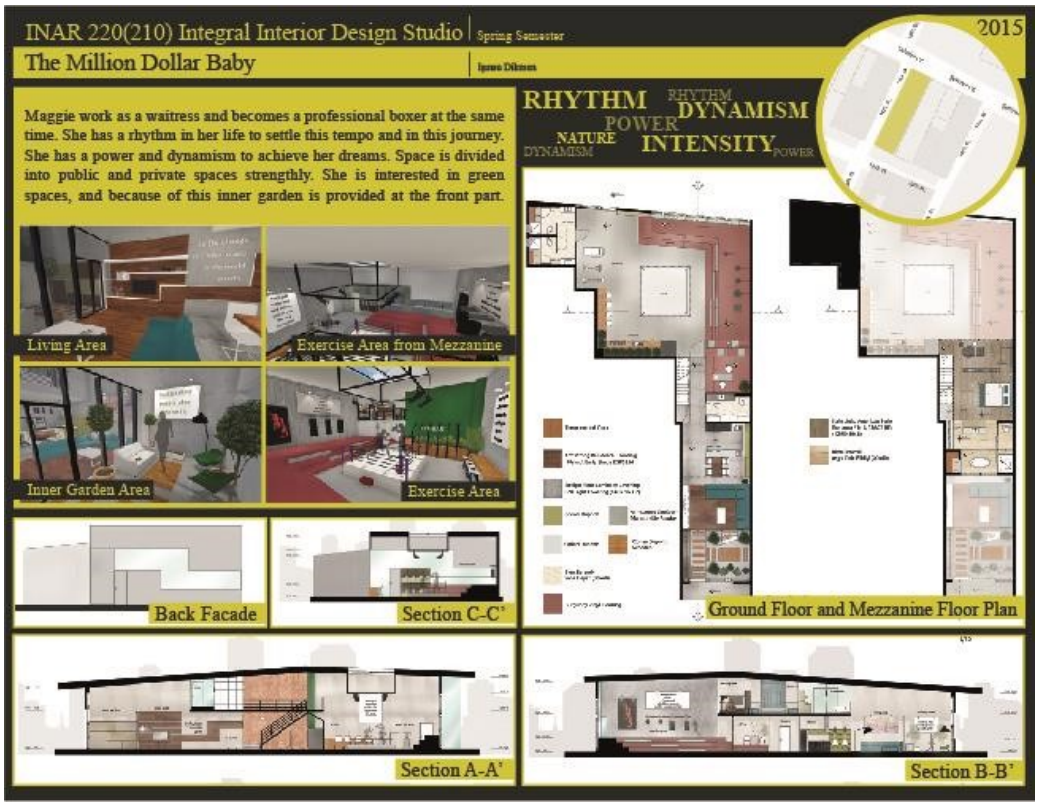

Figure 5: Final Project Submission, Loft house-atelier proposal for the characters of "The Million Dollar Baby Movie", Işınsu Dikmen, Spring 2015

Project 2: Co-living Space Design in Rear Port of İzmir, Alsancak (Site: MedMar Depot, Şehitler Street, Alsancak)

Students were expected to design a residential living/learning/socializing interior environment for different groups in the given loft-space building: Co-Living Space. User groups were determined as professionals, makers, entrepreneurs, artists, and creatives. The required modular system let the students to re-form their private and communal areas to suit group and individual needs. With this aim the design of spaces where creativity-promoting activities for these user groups can be carried out. Also, accommodation units were designed for different user types. For social and cultural sustainability, exploring spaces for defined user groups to experiment, learn, live and accommodate in a building that embodies sharing, creativity and innovation were studied.

Figure 6: Final Project Submission, Co-living Space Design for digital media artists and visual communication designers, Ayten Erva Turan, Spring 2019

Project 3: Design Museum in Alsancak Seaport (Site: Yaşar University Former Campus, İşçiler Street, Alsancak)

In this graduate studio project, the existing building refunctioned as a design museum which is a place for dialogue with design in order to make a good foundation of design value understanding, innovation and attractive environment for designers and who are interested to join to this domain. Such museum brought the real values of designing to reality through presenting the simple, memorable and accessible experiences to everybody and redirects the visitors mind to a new idea of designing. The first stage of the project was to protect the main face of an old building, after finishing this step, the process proceeds with replacing the entrance face with vitreous one and designing a transparent building that extends from the old one. This extension building was inspired by the old. The combination of old and new in this project mentions the birth of art based on traditional experiences and ideas. In addition, respecting the value and proportions of the old one, this extension building creates pleasant variety, visual views in forms and interior spaces' experience by using new material and forms. Moreover, this extension that work as a

contemporary exhibition of museum by itself, is also a symbol of design that represents the function of building.

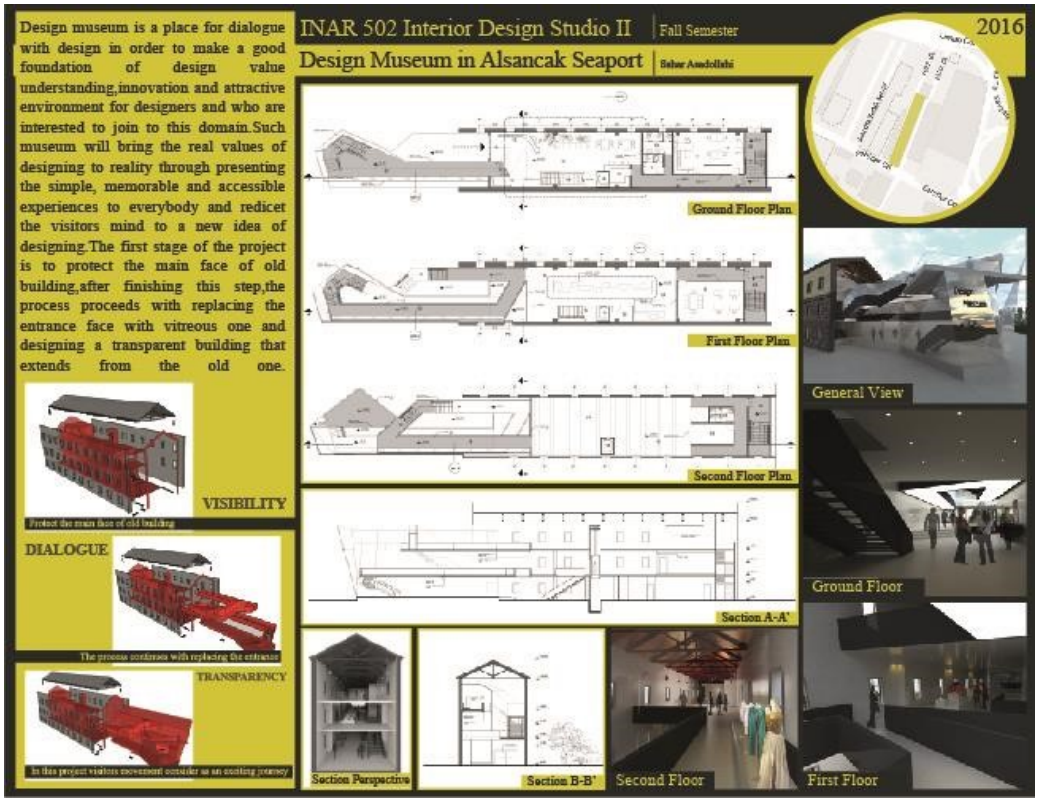

Figure 7: Final Project Submission, Design Museum in Alsancak Seaport, Sahar Asadollahi, Fall 2016

5. DISCUSSION AND CONCLUDING REMARKS

In this paper, the industrial heritage of İzmir and their contributions to socio-cultural sustainability through re-functioning were discussed upon the selected student projects of Yaşar University, Faculty of Architecture, Department of Interior Architecture and Environmental Design. In literature review; after defining what social and cultural sustainability are, the concept of cultural heritage is described. As the case study area; geographic, demographic, economic and social characteristics and statistics of İzmir are also noted down in detail. Further, the importance of industrial heritage both in Turkey and specifically in the rear port of İzmir are in the focus. The profession of interior architecture and how it deals with built heritage is also mentioned from the perspective of community engagement, social wellbeing and socio-cultural sustainability. After the literature review, three selected projects are addressed with focusing their main goals and their learning objectives in common. In addition, each project is represented with their descriptions and final presentation boards.

It can be concluded up from the analysis that projects that include and cover topics like social and cultural sustainability should take place in interior architecture and environmental design both in education and profession. This covering of social and cultural sustainability related topics will increase awareness of professionals as well as students. Regarding the common characteristics of cultural sustainability and cultural heritage, *which is working with community*, it can be put into words that interior architecture discipline should work *not for the community but with it*. When it is thought from a professional point of view; through working with community, interior architects can increase the social wellbeing through renovating the area both physically and socially which can be listed under social sustainability of the city or the project area. Also, with re-functioning the cultural heritage of a city, the public awareness will be increased with creating a focus in that architectural texture. As working a catalyst between the built environment and the community; which is socially constructed, the reanimation and revitalization of these heritages can be provided both in physical and cultural aspects. The contributions will not only be in interior architectural scale but also will be in architectural and urban scale in built environment. In addition to these, re-functioning of these heritage buildings make a significant contribution to social life and customs. When the heritages are reconsidered as a design problem, these buildings will become an attraction point both in that immediate surrounding and whole city. When it comes to the perspective of interior architectural education, studying and making analysis in real-environment cases will increase the awareness of students in both physical issues like materials and structure as well as in social infrastructure. They can also get familiar to the city that they are working in. Students who work on cultural heritages can also gain the ability of making designs on the grounds of the different social levels and classes of the society. As concluding remarks, it can be put forward that interior architects, either students or professionals; are making designs based on both tangible – *physical and concrete*– and intangible – *invisible and social* – issues related to architectural disciplines. The retackling of cultural heritages can be successful only if we can set up the socio-cultural – *intangible* – networks successfully in such a manner that they are working together with the tangible parameters.

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