

URBAN REGENERATION: ENABLING SOCIAL SUSTAINABILITY IN
HISTORICAL QUARTERS VIA ADAPTIVE REUSE: CASE OF GAZIANTEP
HISTORICAL QUARTER

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ABSTRACT

URBAN REGENERATION: ENABLING SOCIAL SUSTAINABILITY IN HISTORICAL QUARTERS VIA ADAPTIVE REUSE: CASE OF GAZIANTEP HISTORICAL QUARTER

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Urban regeneration in historical sites is widely performed in these days. However, not only in the context of Turkey, but also in the most of urban areas from the world, the concept of social sustainability in regeneration practices has been ignored intentionally or unintentionally. The community who live in historical sites cannot provide their maintenance in the region by the reasons of only conservation and regeneration initiatives of tangible values of the area are performed, and conservation and adaptation to current conditions of intangible values which constitute manner of life with the identity, belonging and sense of place cannot be provided. In this context, the aim of this study is to establish a general framework with its objectives, processes and strategies on adaptive reuse as a solution tool for social sustainability in urban regeneration processes and to discuss this framework through the results of the practices on the Gaziantep Historical Quarter. In the study, firstly, social sustainability concept in urban regeneration context and the problem definition on why it is deficient in regeneration practices are clarified, then theoretical framework on adaptive reuse concept, its position in urban regeneration context and its relationship with the concept of social sustainability are provided as a solution. Adaptive reuse practices are dominant in the cases which in building scale, street scale and neighborhood scale;

and adaptive reuse in these scales in Turkish and worldwide literature are examined, and the results of all three scales and their findings on social sustainability are investigated. These findings and strategies to ensure social sustainability through adaptive reuse from the literature are constituted an assessment tool in holistic perspective. This assessment tool is being tested on adaptive reuse practices applied in Gaziantep Historical Quarter. Monumental Gaziantep Castle in building scale, Culture Route in street scale and Bey Neighborhood and Kepenek Neighborhood in neighborhood scale which is a fundamental urban planning unit to examine social sustainability are investigated via assessment tool respectively. According to the results of this study, the applicability of the new assessment tools constructed with controllable strategies in terms of social sustainability is discussed and the applicability of these instruments for future practices is determined.

Keywords: Urban Regeneration, Social Sustainability, Adaptive Reuse, Gaziantep Historical Quarter

ÖZ

KENTSEL YENİLEME: TARİHİ ALANLARDA YENİDEN KULLANIMA ADAPTASYONLA SOSYAL SÜRDÜRÜLEBİLİRLİĞİN SAĞLANMASI: GAZİANTEP TARİHİ ALAN ÖRNEĞİ

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Tarihi alanlarda kentsel yenileme çağımızda oldukça yaygın bir biçimde uygulanmaktadır. Ancak sadece Türkiye bağlamında değil, dünyanın birçok kentinde gerçekleştirilen bu yenileme çalışmalarında sosyal sürdürülebilirlik kavramı istemli ya da istemsiz olarak göz ardı edilmektedir. Tarihi alanlarda yaşayan toplumun bölgedeki devamlılığını sağlayamaması genellikle yapılan yenileme çalışmalarında alanın sadece taşınmaz değerlerinin korunması ve yenilenmesinin sağlanmasından ve toplumun yaşayış biçimini oluşturan kimlik, aidiyet, mekan algısı gibi taşınmaz değerlerin korunarak günümüz koşullarına uyarlanamamasından kaynaklanmaktadır. Bu bağlamda çalışmanın amacı, kentsel yenileme süreçlerinde sosyal sürdürülebilirliğin sağlanması için bir çözüm aracı olarak yeniden kullanıma adaptasyon üzerine hedefleri, süreçleri ve stratejileriyle genel bir çerçeve oluşturmak ve bu çerçeveyi Gaziantep Tarihi Alanı üzerindeki uygulamaların sonuçları üzerinden tartışmaktır. Çalışmada, öncelikle kentsel yenileme kapsamında sosyal sürdürülebilirlik kavramı ve eksikliği konusu nedenleriyle birlikte açıklanarak problem tanımlanmakta, ardından çözüm önerisi olarak yeniden kullanıma adaptasyon kavramı kentsel yenileme içerisindeki yeri ve sosyal sürdürülebilirlik kavramı ile ilişkisi hakkında teorik bir çerçeve sağlanarak, ve bu kavramın baskın olarak

görüldüğü yapı, sokak ve mahalle ölçeği olmak üzere üç temel ölçekteki Dünya ve Türkiye literatüründe yer alan örneklemeleri incelenerek her üç ölçekteki sonuçları ve sosyal sürdürülebilirliğe dair bulguları araştırılmaktadır. Bu bulgular ve literatürden gelen yeniden kullanıma adaptasyonla sosyal sürdürülebilirliğin sağlanması konusundaki stratejiler bütünüyle bir değerlendirme aracı oluşturulmaktadır. Bu değerlendirme aracı, Gaziantep Tarihi Alanda uygulanan yeniden kullanıma adaptasyon pratikleri üzerinde test edilmektedir. Yapı bazında anıtsal Gaziantep Kalesi, sokak bazında Kültür Yolu ve sosyal sürdürülebilirliğin en uygun incelenebileceği kentsel planlama birimi olan mahalle bazında ise Bey Mahallesi ve Kepenek Mahallesi üzerinde sırasıyla her bir değerlendirme aracı üzerinden incelenmektedir. Çalışmanın bu alanlardaki sonuçlarına göre, kontrol edilebilir stratejilerle inşa edilen yeni değerlendirme araçlarının sosyal sürdürülebilirlik açısından uygulanabilirlik konusu tartışılmakta ve bu araçların gelecek dönemlerdeki diğer pratikler için uygulanabilirliği gösterilmektedir.

Anahtar Kelimeler: Kentsel Yenileme, Sosyal Sürdürülebilirlik, Yeniden Kullanıma Adaptasyon, Gaziantep Tarihi Alan



To My Family....

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CHAPTER 1

INTRODUCTION

“It is not the strongest of the species that survives, nor the most intelligent. It is the one that is most adaptable to change.”

Charles Darwin

1.1. Problem Definition

The inexpugnable speed of urbanization on the mother earth leads to problems which is not possible to return on people each passing day. These problems are not restrained with physical and environmental impacts which directly affect human health negatively due to increase in built environment and natural resource consumption. Besides, they also result in changes which provokes destruction of sustainability in terms of community life due to socio-spatial segregation; increase in the fact of individuality which leaves collective life on urban space, change in technology, alterations of development pattern on city, contemporary necessities and new living spaces.

With the intent of ceasing this spatial consumption and social dissolution, experts on particularly environmentalist, urban planners and other specialists who study on urban policy, design and decision-making have brought forward an idea of “sustainable development – which covers development on environment, economy and society” – as a solution in Stockholm Conference in 1972 (WCED, 1987). Urban planners and other experts who adopt sustainable development as “*urban sustainability*” in city scale have made an attempt on “urban regeneration” via re-evaluating existing housing and land stock – especially in historical quarters -, and thus, they integrate these lands to city for reducing resource waste by preventing urban sprawl. Urban change and transformation, urbanization and including the social, economic, religious (and the

rituals reflected on the space) and natural life in the process of change formed by urbanization, with different types of intervention from the past to the present exist even though much longer than the planning of urban regeneration, in particular, after the 1980s - in parallel with the sustainable development - the most important intervention strategy for the recovery of abandoned urban spaces has taken its place in the urban planning literature.

Although urban regeneration, is a strategy adopted for reutilization of history, initially, physical intervention was the forefront, but the applications were inadequate in social and economic terms in its practice. However, the idea of being an active part of the urban space by preserving the identity of the historical sites was crucial to ensure social continuity. Therefore, the necessary protection, restoration, rehabilitation, clearance of constructions against historical images, protection of the monumental image, creation of a healthier living space and environmental sustainability are required to be supplied. Additionally, the inclusion of local participation, the gradual and controlled process, and the continuation of the distribution of duties in balanced and coherent manner also provide benefits to social context and economic life. However, especially failure in efficient management of the process in the realization of projects on the regeneration of historic areas in particular to Turkey raises negative consequences than positive due to imbalance distribution of authorities and utilities of stakeholders' problems and to ignore social context in Turkish cities (Uzun, 2017). Although - regardless of the context and location - this situation has provided a healthier living space in almost all urban regeneration projects, in the renewal areas (especially in the historical neighborhoods), a gentrification has occurred; in other words, it has led to the abandonment of the living local community from the space and the replacement of the high-income group (Uzun, 2003) or the transformation of historical areas into tourism centers. Because of the recent increase in these results in practice and the social and economic failure of the aimed community life, discussions have been started reconsidering urban regeneration strategies and practices and how to ensure the continuity of society in existing space.

In last two decades, social sustainability has gained a significant place in urban planning and regeneration discussions on historical areas, and there has been a paradigm shift that social continuity is an input that needs to be treated equally with all other dynamics in the implementation process, not as a result of regeneration practices. (Colantonio & Dixon, 2011). The most significant feature of this paradigm shift is that in the process of physical spaces regeneration, not only tangible values, but also the fact that the intangible values that contain the sense of identity and belonging in the space are preserved and upgraded in the renewal process. Therefore, the principles that should be provided in urban regeneration projects have to be re-established within the framework of the sustainability of society. Although these practices contributed to sanitary requirements by taking their places on the historical sites, they were still lacking in the explanation of effects about social sustainability in regenerated historical quarters and the necessary criterions in terms of scale, context and space they were applied to. For this reason, this study focuses **the problem of inadequate strategies and principles be adopted in the context of historical quarters in providing social sustainability in urban regeneration projects.**

1.2. Aim of the Study and Research Questions

In the light of mentioned problem definition of the study and the negative results mentioned earlier in the majority of urban regeneration projects have been put forward, the concept of “adaptive reuse” has recently started to prove its validity as a necessary strategy in urban regeneration projects, and preserving the existing structures within their both tangible and intangible values in accordance with today's conditions and needs has been on the forefront of ensuring social sustainability. Particularly, the most important reason for adaptive reuse as one of the most effective tool for social sustainability in regeneration areas is that while rehabilitating the historical entities, it prevents “museumification (UNEP, 2004, p. 25)” and “facadism” of the space, it takes into account the needs of the local people and ensuring that these needs are supplied in the most appropriate context, architecture and location (Eyüce & Eyüce, 2010; Commonwealth of Australia, 2004). That is, it interiorizes the users'

lifestyles and their use of space as a guide in order to determine the refunctioning criteria on the site as it is not carried out independently from the context. Adaptive reuse which is seen recently in urban regeneration cases in the context of Turkey and from the world, has begun to prove its validity in the urban planning and architectural literature; in different contexts within the city have begun to be implemented at different scales and discussions on the social aspects of this practice has taken place in the professional theories. Therefore, the main aim of this study is **to analyze the importance of urban regeneration practices in terms of social sustainability in historical areas and to explain the reason why many practices related to this issue have failed; and creating framework on the adaptive reuse as a solution tool in social sustainability to ensure the community continuation, via explaining the objectives, processes and strategies that these practices should have by referring to the results of Gaziantep Historical Quarter example.**

To reach this goal, urban regeneration and the evolution of regeneration – specifically in the historical quarters – with its objectives, strategies, benefits, results in the context of Turkey and the side of the point where lacking in terms of social sustainability as well; besides, social sustainability in the planning and regeneration literature, as a result of today's historical urban interventions, the context of the conceptual paradigm changes and as a result of these changes are clarified. Later on, the reasons the adaptive reuse in the field of regeneration as a tool for ensuring social sustainability is determined. Urban regeneration in historical sites and social sustainability which are two major concepts of three – included adaptive reuse – placed in planning and implementation literature are aimed to determine their interdependence and chain relationships one another and their problematic circumstances on social sustainability while delivering urban regeneration. This study also aims, after clarifying social sustainability deficiency in practices, focusing how the criteria in defined scales of adaptive reuse ensures social sustainability in Gaziantep Historical Quarter, as an example of historical area regeneration via adaptive reuse. Within the framework of this problem definition and solutions, this research will focus on the question of

“What are the adaptive reuse strategies and implementations applied in urban regeneration projects in historical quarters to provide ‘social sustainability’?”

Five sub-questions that will provide a framework for the determination of strategies for the adaptive reuse in regeneration projects that will ensure social sustainability, respond to the main research question and ensure that the study will be followed up more easily and comprehensively will be answered in the study. The first of these sub-questions **“What are the conceptual aspects of urban regeneration and social sustainability in historical areas within their paradigm shifts through the period of time?”** examines the conceptual and contextual change of urban regeneration and social sustainability in historical areas through the literature review. **The second question, “What are the urban regeneration strategies in historical quarters and what kind of problems do they face in terms of ensuring social sustainability?”** explains the principles that enable the realization of the urban regeneration projects in the historical areas and explain the problems in social aspects. The third question **“What is adaptive reuse and what are related implications and strategies at different urban scales?”** investigates examples of adaptive reuse applications, solutions put forward in historical sites through Turkey and World examples and examining strategies and policies at different scales in terms of physical, social, economic and environmental implications. The forth question **“What is the conceptual nature of adaptive reuse in providing social sustainability as a tool in historical quarters?”** is providing the conceptual definition of the strategy of adaptive reuse to ensure social sustainability in the process of regeneration in the historical areas and the solutions that it brings to provide social sustainability. Besides, via examining the adaptive reuse case studies on different scales and their positive outcomes on social sustainability, the assessment tool is framed for thesis case investigation. Finally, the question of **“Is the adaptive reuse as an appropriate tool for a ‘successful’ urban regeneration project in historical quarters for socially sustainable revitalization?”** investigates Gaziantep Historical Quarter urban regeneration project via adaptive reuse by testing it as a formalized assessment tool

successful in terms of ensuring ‘social sustainability’, its evaluations and further implications to maintain social life in historical quarters in urban regeneration context. Thus, the main question of the study will be answered with the guidance of these sub-questions.

1.3. Methodology of the Research

The method of this study is explorative research and Gaziantep Historical Quarter is investigated as case study. In order to clarify urban regeneration in aspect of social sustainability, adaptive reuse and its implications on the society is investigated with an extensive literature review. This review enables to construct a theoretical framework on the problem statement, the hypothesis to propose a solution and section of assessment tool in hypothesis. Defining urban regeneration and social sustainability in urban planning discourse with its aims, principles and paradigm changes helps to detect their interrelationships in contemporary discussions. To answer the problem statement, explanation and principles of adaptive reuse in contextual framework to identify initial assessment criteria from theoretical framework (Table 1.1) to deliver social sustainability. Later on, previously conducted spatial case studies in different urban scales – which are neighborhood scale, street scale and building scale – would ensure a ground on an assessment tool which includes the principles tested in case study in terms of social sustainability in general denotation (Table 1.2). After the literature-based discussions are explained, the initiative assessment criteria of adaptive reuse strategies is shaped excluding local variables as a first stage.

Table 1.1. Initial Assessment on Principles for Social Sustainability Delivery

PRINCIPLES FOR SOCIAL SUSTAINABILITY DELIVERY	Principles: ➤ Physical construction of the structures, their relations and integration with each other for secure environment and embracement by dwellers. ➤ Partnership Approach with public, private institutions and local community cooperation. ➤
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Table 1.2. Outcomes Derived from Case Studies in Three Scales

SCALES	CASES	TYPE OF INTERVENTION	OUTCOMES
BUILDING SCALE	Case 1	Spatial: - Traditional Façade Material Choice	Spatial: •(+) Authenticity Value •(-) Over Alterations
		Social:	Social:
		Economic:	Economic:
		Environmental:	Environmental:
	Case 2		
STREET SCALE	Case 3		
	Case 4		
NEIGHBORHOOD SCALE	Case 5		
	Case 6		

In conjunction with assessment criteria derived from theory and cases, an assessment tool for socially sustainable regeneration is constructed; and data collection and data analysis methods are generated (Integration of Table 1.1 and 1.2).

Table 1.3. Adaptive Reuse Assessment Tool for Social Sustainability, Its Data Collection and Analysis Methods for Case Study

ASSESSMENT SCALE	ASSESSMENT CRITERIA / TOOL	DATA COLLECTION	DATA ANALYSIS		
BUILDING SCALE	Spatial: (+) Authenticity Value	Primary Data Collection: - Systematic Site Observation - Face-to-face Interviews with Professionals involved in the adaptive reuse and regeneration in general according to established assessment tool - Face-to-face interviews with local community affected from the regeneration practices according to established assessment tool	Qualitative Data Analysis: Grounded Theory: Analyzing the cases in in defined scales but in different contexts and creation of assessment tool and using derived data to explain causal relationship with constituted theory to enable new evaluation instrument valid for all cases in defined scales. Content Analysis: Documents are analyzed in the form of research questions and established assessment tool. Discourse Analysis: Analyzing interactions and interviews with the local community. Analyzing the communication between the author and the respondents in their own day-to-day environment and documenting via field photography.		
	Social:			Face-to-face interview with Conservation Master Plan Developer	
	Economic:			Face-to-face interview with Conservation Regional Council	
	Environmental:			Photographing the case site in detail according to assessment tool	
STREET SCALE	Spatial: Layout Protection			Secondary Data Collection:	
	Social:				
	Economic:				

NEIGHBORHOOD SCALE	Environmental:	• Preservation of green spaces	• Official publications on the projects delivered from KUDEB Archive. • Official publications delivered from Şahinbey Municipality. • Official publications delivered from Gaziantep Metropolitan Municipality. • Conservation Master Plan, Base Map and Registered Structures' Plan. • Official documents published and accessed from official websites of municipalities and non-governmental organizations (i.e. ÇEKÜL)	• Classifying the Data: Each data is analyzed in the scale aspect it belongs to and causal relationships are explained evaluated according to this scaling. At the end, data constitutes scale-based argument.
	Spatial:			
	Social:			
	Economic:			
	Environmental:			

After the constitution of the assessment tool, Gaziantep Historical Quarter is investigated as a case study. The selection of the case study is based on three reasons: First, Gaziantep Historical Quarter Regeneration is a project where adaptive reuse strategies were used. Second, the adaptive reuse practices in larger scales, apart from building scale, is rare in Turkey. Besides, in spatial perspective, Gaziantep Historical Quarter comprises three adaptive reuse implementation scales – i) building scale with monumental structure, Gaziantep Castle; ii) street scale with Culture Route (Project) and iii) neighborhood scale with Bey and Kepenek Neighborhoods (Figure 1.1). The final reason is that regeneration in Gaziantep Historical Quarter includes ongoing projects in Kepenek Neighborhood and it allows the comparison of two residential neighborhoods one of which was completed, and the other is in still via adaptive reuse strategies and suggestions for regeneration.

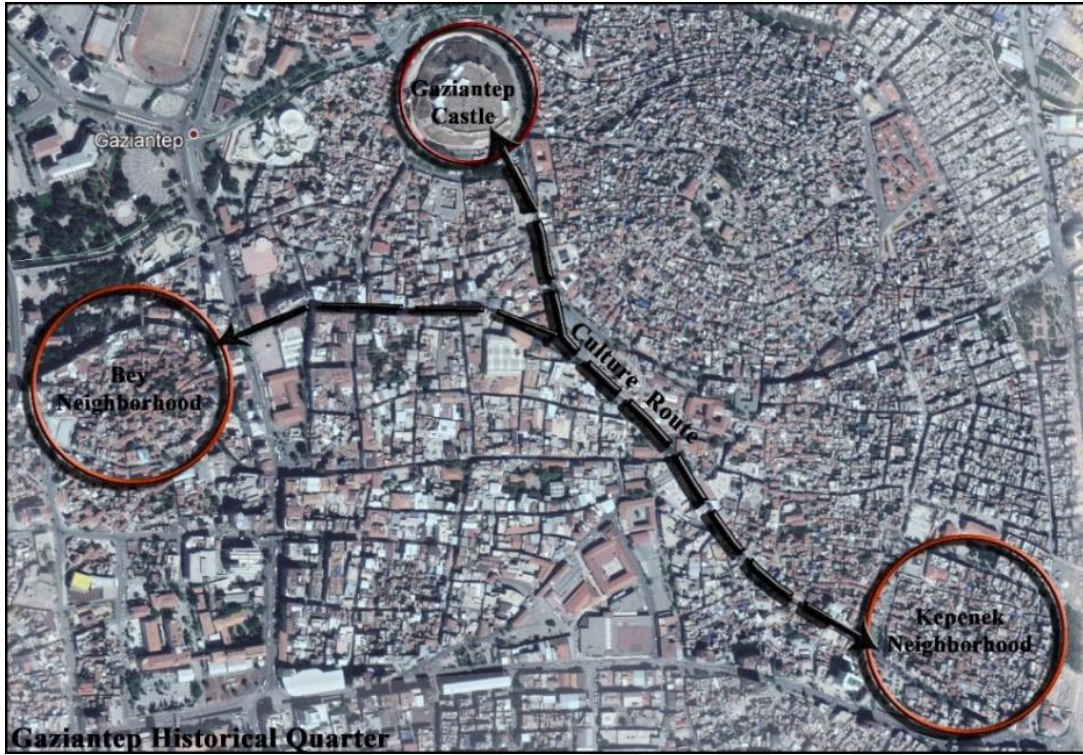


Figure 1.1. Gaziantep Historical Quarter Comprises Three Scales of Adaptive Reuse with (Monumental) Building Scale, Street Scale (Culture Route Project) and Neighborhood Scale (Bey Neighborhood and Kepenek Neighborhood)

To investigate the case study, data is gathered in two ways: as a primary data collection and secondary data collection. These data collection typologies are explained in detail in Table 1.4. These interviews divided into two categories: 1) Interviews for professional assessment was made with urban planners in Şahinbey Municipality, KUDEB (The Bureau of Conservation, Implementation and Monitoring), Conservation Regional Council engaged with Gaziantep – Şahinbey (Local) Municipality, in Gaziantep Conservation Committee and Conservation Master Plan Developer and more local level, headmen of Bey and Kepenek Neighborhoods, 2) the interviews with users of the site: people who run local businesses, local residents, daily users / consumers and tourists who travelling to the historical quarter (Table 1.4).

Table 1.4. Assessment Categories which Assessment Tool Performs

PROFESSIONAL ASSESSMENT	USER ASSESSMENT
Local Government (Urban Planner – Şahinbey Municipality) comprises the historical center and the neighborhoods	Local Dwellers • Dwellers in Bey Neighborhood (completed practice) • Dwellers in Kepenek Neighborhood (practice in process) Local Retail Owners • Retail owners in adjacent site of the Gaziantep Castle • Retail owners along the Culture Route Visitors comes from another cities to experience historical, cultural and gastronomic tourism life of the quarter
Plan Developer of Conservation Master Plan (Ege Plan)	
The Bureau of Conservation, Implementation and Monitoring (KUDEB) – Inspection Department Manager (Urban Planner) related with Metropolitan Municipality established for Culture Route Project and Bey Neighborhood	
Conservation Regional Council (Urban Planner) of Gaziantep	
Headmen of Bey and Kepenek Neighborhoods	

They are asked questions on spatial, social, economic and environmental to evaluate the outcomes of the project. In addition to the interviews, systematic site observation was also made by taking photographs as a researcher point of view. This study concerns existing literature review meshes with implementation procedures via re-analyzing the site in the scope of the study. Later on, comparison with the literature, outcomes of the case study research are evaluated as a conclusion and further research questions are established.

1.4. Structure of the Study

This study is organized in six parts for coherent persistence (as seen Figure 1.2). **Chapter 1** consists of the problem definition which gives also the general context; the aim of the study and research questions to be answered; the methodology used in the conceptual discussions and case research and the structure of the study. In **Chapter 2**, the conceptual framework of the study, namely the concepts of urban regeneration, social sustainability, and the relationship between these concepts is elucidated in light of the literature. In this section, urban regeneration with its reasons, aims, principles and its operations in historical context in general and specifically in Turkey is provided. Social sustainability is also given by literature-based study as a term with its definition and principles should be ensured to achieve and its historical background, paradigm shifts and current perception in planning literature. Lastly, in this chapter, how social sustainability is located in urban regeneration notion and the problematic issue which is subject of the study are revealed. In **Chapter 3**, the concept of adaptive reuse within its reasons and definitions as a tool in urban regeneration is clarified. The reasons of reusing the structures, re-functioning factors and appropriate strategies and principles are given in this section. Additionally, adaptive reuse implementations in three scales – building, street and neighborhood – is delivered. Later on, adaptive reuse as a strategy for enabling social sustainability and evaluation of cases and assessment tool for case study delivered from case study evaluations is shaped in this chapter. **Chapter 4** is carried out by case study which is Gaziantep Historical Quarter. In this section, reasons of the site selection as a case area, history of the site and assessment of the urban regeneration project in each scale included its aims, actors and implementations are explained. After given context on quarter and project, case area is investigated via assessment tool and findings are provided. **Chapter 5** concludes the study with implications in the process of adaptive reuse in enabling social sustainability in urban regeneration and discussions for further research.

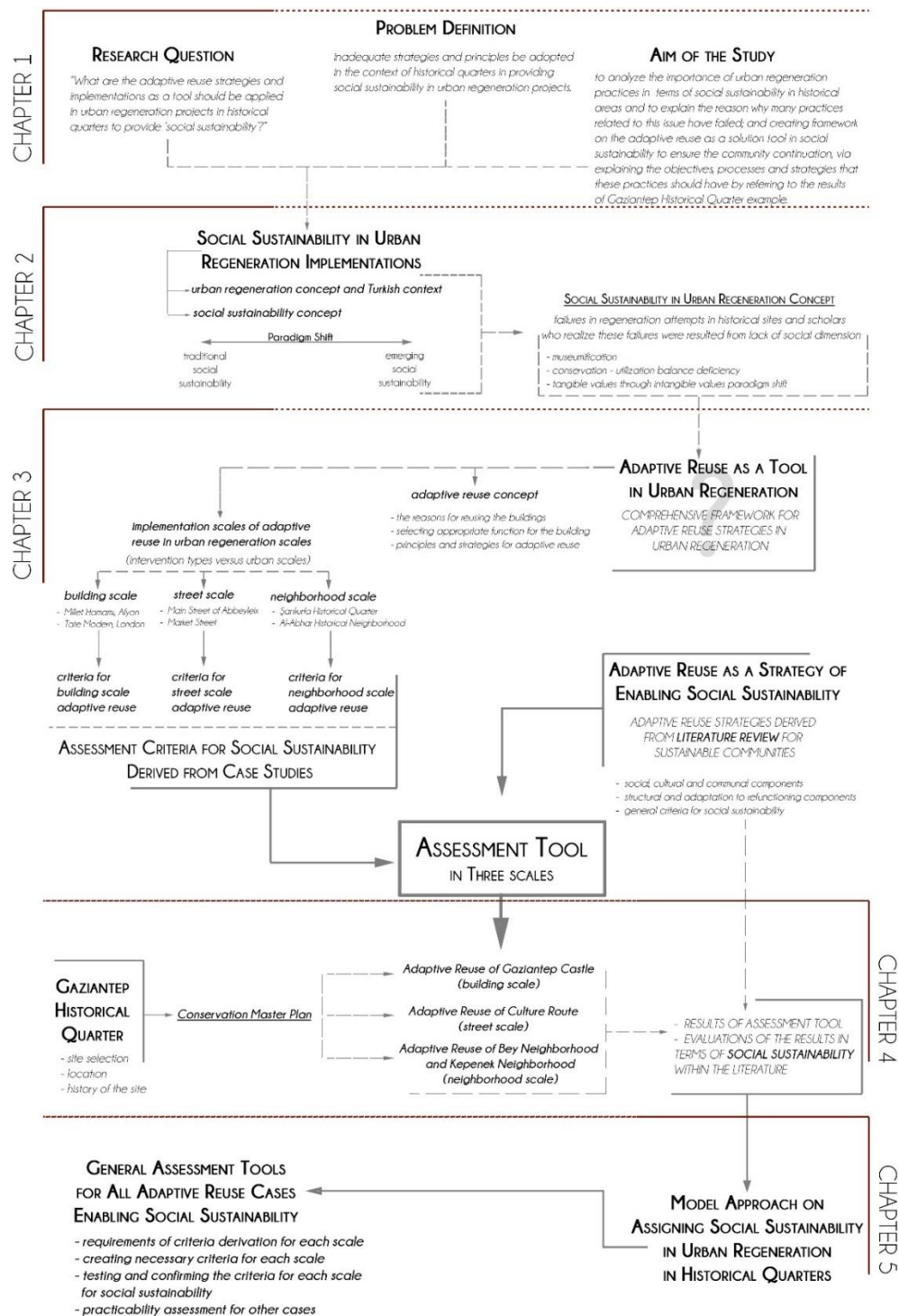


Figure 1.3. Research Design of the Study

CHAPTER 2

SOCIAL SUSTAINABILITY IN URBAN REGENERATION IMPLEMENTATIONS

“Comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change”
Roberts and Sykes, 2000

In this chapter, as a theoretical framework, urban regeneration and social sustainability concepts in urban planning context are explained. Urban regeneration is characterized within its reasons, aims, principles and all dimensions affected and affecting the process of practices; and followingly, its presence in historical environment in general and in Turkey context to comprehend case study of the thesis. Later on, social sustainability, its emergence, definitions, alterations of its context through the time and the principles which enables continuity of the society in cities are expressed. Lastly, social sustainability in urban regeneration context and their interrelations are clarified; and in a more substantial manner, the problem statement generated from this interrelation is propounded to resolve throughout the study.

2.1. URBAN REGENERATION

2.1.1. Reasons and Definition the Term of Urban Regeneration

Urban areas are, undoubtedly, systems affected by change of physical, social, economic, environmental dynamics and today even technological improvements, meanwhile they are the reason of these changes. Urban areas should orient themselves to these changes for their persistence and for the people who involve the urban systems as a dynamic element which responds the changes at most. Urban regeneration is one

the most crucial processes and actions respond these changes in urban areas, and it enables internalization of these changes, adapt them to physical areas and social life, and initiate further improvements in cities. These facilities are accomplished by physical interventions, social and economic development strategies and environment-oriented actions (Çiftçi et. al., 2010) due to more qualified and livable urban areas which are previously degraded in so many aspects in existing situations and also needed to integrate rest of the city again. Each urban space have different character, so each site needed regeneration is context-depended; that means the strategies and interventions with its necessities such “*involved stakeholders and actors, finance system, organizational structure, legal framework, maintaining the process, a long-term perspective, political will and commitment*” (UNEP, 2004, p.11) and also technical competency may vary in terms of physically, socially, economically and environmentally but they have also common ground and expectations in terms of better life conditions in all its aspects locally and maintain urban system as whole. Therefore, briefly, urban regeneration can be defined as **a set of well-ordered strategies and actions which responds the current changes of cities to adapt improvements and advance itself in the city via physical arrangements, social visions, economic performance and environmental improvement in a specific urban context.**

In literature, the most well-known definition of urban regeneration is made by Peter Roberts (2000, p.17), and according to him urban regeneration is “*comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change*”. According to this definition, urban regeneration should be evaluated in holistic perspective; and long-term approach with its interventions and process in all perspectives; therefore, strategies on regenerated site should be integrated with surrounded urban spaces and their future development visions to solve current and expectative issue (Jones & Evans, 2008; Roberts, 2000). The reason of abandonment of urban spaces and setting

off on a quest new spaces is that existing urban spaces or their dynamics cannot meet the needs of people subject to leave, so replacement to the areas where they can satisfy their requirements becomes indispensability (Ertan & Eğercioğlu, 2016). Another inclusive definition of urban regeneration belongs to report of UNEP, Priority Actions Program (2004, p.7) and it describes urban regeneration in the most developed economies as *“return the city, revitalize the city center, restore activity in a fiercely competitive international context, and implement initiatives to improve the quality of environment operating in a wide sense of smart growth.”* Economically deprived urban areas are unconnected and out of step with region’s predominating market sectors and urban regeneration is an instrument to associate dominant common market with local economy via evoking site-specific production. Additionally, reutilization of degraded areas enables source and habitat protection to be caused by new development on empty terrain rather than urban land, so efficient use of urban land and resources decrease the potential environmental problems such as pollution (air, water, noise etc.), urban heat island, climate change and global warming. Last and more recent definition mentioned in this section is clarified by Scottish Government (2011, p.2) as *“the holistic process of reversing the economic, social and physical decline of places where market forces alone will not suffice.”* Therefore, urban regeneration cannot cover only physical interventions, because it also relates with social problems such as destruction of existing social connections or social exclusion of vulnerable groups (Chan & Lee, 2007), detention of failures in economic market and hindering degradation of environmental quality (Çiftçi et. al., 2010). Urban regeneration will be successful only if all objectives of all its dimensions’ improvements are achieved comprehensively on equal basis and meaningful as a whole. According to some scholars, e.g. Said et. al. (2013), urban regeneration is a revitalization frequently introduced in devastated historical quarters; likewise, outdated residential areas in a risk of disasters, slum areas, illegal high-density apartment blocks, functionally problematic areas, obsolescent industrial and harbor sites and ancient city centers are stimulated in the city via urban regeneration (Boussaa, 2017; Roberts, 2000; Keles,

2004 cited in Uysal Sahin & Sahin, 2016). However, the revitalization of historical districts has greater emphasis for cultural identity of the city.

In order to mention urban regeneration, there should be urban changes; because urban changes and their contradictive outcomes give a rise to need for urban regeneration. Therefore, it is very significant to explain reasons of urban changes and their effects on urban space. There are several reasons cause urban change, problems and need for urban regeneration. They may affect urban areas separately or together, and they may occur due to external changes which affect the city or region in larger scale and its reflection on particular urban space or internal changes which consist of demand for basic requirements and problems of social exclusion, unemployment and deprivation of spatial quality; and these changes may differ according to urban contexts, and even different quarters in the same city (Colantonio & Dixon, 2011). Roberts (2000, p.24) categorizes the reasons of urban change which provoke regeneration under four main title; *“economic transition and employment change, social and community issues, physical obsolescence and new land and property requirements, and environmental quality and sustainable development”*.

The first reason of urban change is related with economic transition which is very observable in today's global world. Economic remodeling, according to competitive market, their effects and requirements – in terms of spatial reflection, labor force and infrastructure – may change; therefore, existing land use, need for appropriate skills, level or type of education may no longer available (Roberts, 2000) and urban space may become idle and it induces local citizens to relocate in city again – especially through the zones where potential new economic trend and production system will appear (Özden, 2016). Additionally, associated with rise in service economy over last decades results in “social polarization” vocational and income contradiction in the societies (Uzun, 2003); this polarization causes some parts of the city as derelict land. Economic structuring and high employment levels are substantial inputs for continuation of living; so, if these inputs cannot be provided in urban areas, regeneration becomes essential to prevent the consequences mentioned above. The

second reason of urban change is evolution of social structure and differentiation of community dynamics (Roberts, 2000). Particularly in older settlements, community relations are mainly subject to kinship and traditional families, however, by virtue of new social trends, change in economic organization and lifestyle, effects of technological developments on individuals' behaviors, change in social status and change in perception on family relations, degeneration of community (Roberts, 2000) and social stratification may occur. Besides, advances in communication technology and information society attain a place in the city centers and industrial production decentralized (Beauregard, 1986; Griffith 1995; Ley 1996; Smith 1986 cited in Uzun, 2003); that is, the social progress has triggered the spatial rearrangements in the cities (Uzun, 2003). Furthermore, according to Pendlebury et al, 2004, the social problems occurred in the community can also give rise to property speculation, sense of place loss, conflicts involving the cultural role of heritage, social exclusion, urban sprawl and gentrification (cited in Yung & Chan, 2013; Chan and Lee, 2008; UNESCO, 2004, 2005; UN-HABITAT, 2008, Yung and Chan, 2012). This degeneration and stratification lead people to abandon their communities and to seek for new environments where they desire and adapt themselves handily; because the space where they give up could not make correspond these changes from community through individuality and could not reflect these new variables on physical environment, so existing spaces – which are generally dilapidated old inner city quarters (Uzun, 2003) – became the areas as subject to regenerate. The third reason of the urban change is physical obsolescence and new land and property requirements (Roberts, 2000); that is, urban infrastructure depreciation such as degradation building quality, deficiency of social services, deficiency of outdated technical (water, sewage, electricity etc.) infrastructure and due to the change in economic and social pattern of the city, change in contemporary requirements occur through the time (Roberts, 2000); therefore, it may enable settlers move into more serviceable neighborhoods – even cities – physically and socially. The last reason of urban change is degradation of environmental quality in the city and ignoring the principles of sustainable urban development (Roberts, 2000). Urban areas consume, due to urban growth, natural

resources such as empty land, energy, water etc. in high levels and this consumption brings pollutions (air, water etc.), desertification, urban heat island and decrease in green areas/open space; this means decrease in standards of community health and increase in environmental cost in the city (Roberts, 2000). Citizens who are not satisfied these circumstances may also sprawl to urban fringe or rural lands to escape from the unhealthy conditions of repellent forces of the city. However, their replacement through the periphery causes more irrevocable consequences ecologically in terms of exploitation of natural resources, restrain ventilation of built land and new urban infrastructure construction. Development through the periphery and increase in natural resource consumption are contradictory conception to sustainable urban development; therefore, to hinder sprawling and to use existing infrastructure, urban regeneration come in possession of the most suitable solution.

Each urban change has different constitution; therefore, each of them should have unique processes and these processes have different benefits or consequences on the cities (Uzun, 2003) which required to solve.

2.1.2. Aims and Principles of Urban Regeneration

As a very basic explanation, the aim of renewing urban sites is giving answers to issues caused by changes in cities and circumstances depending on space and time (Özden, 2016). In urban regeneration cases, some of the aims may differ according to concept and the context of the area – such as historic central quarters, industrial districts (brownfield zones) or residential zones etc. However, there are common objectives needed to cover the expectations from all urban regeneration projects. Initially, urban regeneration aims recuperating dilapidated structures or territories (UNEP, 2004) and enhancing the spatial and functioning features of the topic area (Özden, 2016) related with its social context (Akkar Ercan, 2006). Secondly, local residents sustain their livings, if the neighborhood or the region where they live is convenient for maintaining economic activities and their living cost; therefore, another aim of urban regeneration is provision of economic improvement in compliance with changing modes of production and economic framework of the city or the region in integrated way

(UNEP, 2004) in both upper and sub-scales. However, adaption of contemporary economic activities may not be essential input for economic improvement in urban regeneration projects but upgrading traditional economic activities and production and integrating with local, national or global market are another way to regenerate economy in urban sites. Thirdly, community dwellers are willing to inhabit in neighborhoods where they have sense of belonging in addition to sense of place; and the way of enabling them is protection of community's identity. Urban regeneration projects determine conservation of local values and identity together with spatial enhancement in order to advance space perception and maintenance of the community (Darchen & Ladouceur, 2013). This objective is highly related with restructuring the space in terms of urban planning and design which enables unique fabric preservation (UNEP, 2004), revival of community rituals, heritage conservation and collaborative partnership. Lastly, cities have tendency to grow regarding to the population, so efficient usage of space gains importance in urban areas from the point of accessibility of urban functions and preserving natural environment. Urban regeneration is component of sustainable urban development strategies which aim to ensure reuse of inactive spaces and refunctioning them to hinder urban sprawl while also offers the continuation of the cultural system perception of the region or the city and sustainability of communities and their economic activities (Özcan, 2016; Uysal Sahin & Sahin, 2016); therefore, it provides efficient usage of space in urban areas and environmental protection which brings healthful and qualified living space (UNEP, 2004) and less natural resource consumption are ensured (ODPM, 2004). Besides, social sustainability concept is one of the key factors in sustainable urban development and also in regeneration sites to convince local people to stay and to protect the authenticity of their space; and it will be explained in detail oncoming pages of this chapter.

In addition to these targets, which are valid for all regeneration initiatives, some operative purposes to enhance social pattern of revitalized districts are also comprised in urban regeneration practices. These purposes to be accomplished are more

substantial than other practical experiences in the sense of long-running regeneration and adaptation to following diversifications, and, Franke et.al, 2007 (cited in Colantonio & Dixon, 2011, p.7) stated these aims as:

- i. *“Developing the labor market for all sections of population,*
- ii. *Ensuring adequate income and wealth for all,*
- iii. *Overcoming educational disadvantage,*
- iv. *Fostering family cohesion and equal rights for men and women,*
- v. *Guaranteeing adequate housing for all and*
- vi. *Promoting equal rights of access to services.”*

These determined aims of urban regeneration are valid especially human development which is one of the most necessary criteria for its accomplishment. Operations only on physical and economic development is not enough to establish a bond for locals in the site and to ensure the area not stay as vacant land.

As well as aims of urban regeneration, principles and strategies may differ in accordance with the context of the area; however, as its aims, there are also common principles which all regeneration cases needed to follow to reach mentioned aims. Primarily, as mentioned before by Robert’s (2000) definition and according to Jones & Evans (2008), urban regeneration projects should be comprehensive, strategic and long-term approach by reason of they comprise not only physical perspective, but also social, economic and environmental perspectives (Carter, 2000). According to Roberts (2000), structure-focused – stated in other words *“property-led”* – practices in urban regeneration cannot deliver well-resolution of urban problems for community socially, economically and environmentally; it only enables rent for developers; therefore, it does not procure well-integrated space, social integrity and economic liveliness. Additionally, these projects have strategies in accordance with for all perspectives in aimed vision; and they should integrative and consistent with each other to be feasible in long-term approach (ODPM, 2004). Secondly, urban regeneration projects should provide the consistent land use as possible with better accessibility because

space improvement or any kind of physical interference is a very substantial reflection of urban regeneration strategies in terms of recognition of life standards' enhancement. In other words, urban planning and design implementations in renewal activities embodies decisions taken in the process (Özden, 2016). New land use decisions on dilapidated urban areas have to be determined according to locals' requirements and wishes. Thirdly, according to UNEP (2004, p.18) urban regeneration should provide *“national policy directed towards the consolidation of urban social fabric and greater social mix of the area”* affirmatively; that is, protecting locality and its improvements should be registered by regulations and it should be represented on space as physical implications for sense of community creation again and mitigation of social exclusion. Fourthly, Carter (2000, p.44) identifies that urban regeneration should have *“integrated, coordinated and multi-faceted strategies involving a wide range of actors”* and he has assumed that to provide *“finance, education, business development and social provision”*, partnership approach is necessary tool. Interiorizing issues derived from site-specific scope within participation approach brings the most suitable responses in the process (Carter, 2000). Besides, constitution of regeneration strategies with laws and regulations which belongs the boundary site located in simplifies the intervention process. Distribution of the duties within the participators of regeneration initiatives ensures each step of the process carry into practice by specialists in their field; on that account, UNEP (2004, pp. 12-13) has formulated process as:

- i. ***“Organizing the framework*** – *strategy determination, data collection, evaluation, implementation and monitoring, political commitment and retaining the process*
- ii. ***Expertise needed*** – *urban planners, social planners, transport planners, environmental planners, transport planners etc.*
- iii. ***Institutional arrangements*** – *the public sector, occasionally international actors, the private sector and the civic society and delegation of duties*

iv. ***Legislative basis – public – private partnerships and legislative process***”
(UNEP, 2004).

Identified roles and duties enables preventing or overcoming lightly obstacles through the regeneration process. Besides, the participatory approach indicates the problems and requests to developers with regards to achieving the aims of regeneration (Evans, 2005; UNEP, 2004). According to Stewart & Snape, 1995 and Carter (2000), there are three models of partnerships: *facilitating, coordinating and implementing partnerships* (cited in Uysal Sahin & Sahin, 2016) which all of them should be taken into consideration sobersidedly, so that each process can proceed with smooth functioning. Facilitating partnership generally deals with political aspects of regeneration which determining the equilibrium point of authority issues between partners and finding the least common denominator in terms of their interests; while coordinating partnership enables the sharing of balanced tasks between partners via delegating the authority (Carter, 2000; Stewart & Snape, 1995 cited in Uysal Sahin, 2016). Implementing partnerships provide turning strategies to practice and reaching the fruition via appropriate use of natural and financial resources in a certain timetable (Carter, 2000; Stewart & Snape, 1995 cited in Uysal Sahin, 2016). Lastly, urban regeneration initiatives commonly occur in historical centers which need conservation and restoration of public buildings, destruction of structures which are illegal and irrelevant to the image, drive forward identity-focused architectural values and continuity of their local-specific traditions (Özden, 2016). However, if this protective treatment remains only in physical environment, and if regenerated historical area transform to the “museum city” which deprives of other aspects but only image is provided, the necessary development of the area and its sustainability will not be achieved; therefore, the regeneration attempts result in failures.

2.1.3. Dimensions of Urban Regeneration

Urban regeneration has multiple dimensions; it is affected by these dimensions and each strategy and practice affects them as a chain reaction. If there is spatial interference in mentioned districts, society, economy and environment of the district

respond simultaneously. Therefore, dimensions of urban regeneration could not be taken into account independently.

2.1.3.1. Spatial Dimension of Urban Regeneration

Urban regeneration is an integrity of spatial, social, environmental, economic and political strategies, programs, implementations and evaluations; nevertheless, spatial interventions are perceptible reflection of them as a whole (Özden, 2016). Physical instruments are not separately adequate solutions for adverse outcomes of urban change if they do not comprise systematical implementation plan and spatial arrangements should be made according to defined strategies in identified order. Rehabilitation of the environments and streets, restoration of residences or historical structures, upgrading infrastructure (UNEP, 2004), change in land use, urban functions and reuse of them, building block and open space design and architectural formation (Chan & Lee, 2010) may be exemplified as some of the physical interventions in urban regeneration. These interventions cannot be generalized due to each regeneration project has different context and each context has different spatial strategies to promote revival of the site. Each physical improvement makes a contribution to economic activities, environmental advancement and social life separately or together. According to Chan & Lee (2010), visual quality which local dwellers are in need of is determined according to architectural forms, used material in construction period, selected color scheme to assemble image, orientation and spirit of the urban area. Establishment of platform for economic activities via functional changes in land use or rehabilitation of streets and buildings utilize economic regeneration; preserving and enlarging existing natural habitat, generation of green space system enable environmental regeneration; and in addition to these implementations, renewal of residential infrastructure, restoration, demolition of irrelevant structures, provision of special needs of community in terms of their locality, creation of recreational areas and public facilities deliver social regeneration of the site. Additionally, in historical quarters, spatial practices should deliver heritage conservation within legal framework; and in risk-prone areas should be redesigned

and constructed in attempt to protect structures and community primarily (UNEP, 2004). Besides, reuse of existing structures and adapting current requirements of the city make all dimension of urban regeneration available and protection of the site within its paths, landmarks, architectural value (facades, interior and exterior design, materials, traditional features, timeframe etc.) and unique urban pattern (convergence of structures, closure, organic, inorganic, functional etc.). As a result, spatial instruments should ensure qualified, efficient and safe neighborhoods and urban parts are created and all other dimensions support these implementations in the city.

2.1.3.2. Social Dimension of Urban Regeneration

In urban regeneration, each application directly influence the society, its relations and its identity. The local communities live in their territories and they compose “collective memory” over the years; therefore, any kind of spatial implementation in regeneration project should conserve and improve their local distinctiveness to preserve their collective memory (Chan & Lee, 2010). According to The Office of the Deputy Prime Minister (ODPM) Report (2004), characterization of the society associated with common spaces, culturally specific gathering places and cultural infrastructure enables the site became “*somewhere rather than anywhere*”. Characterization is derived from landmarks, heritage structures, daily rituals, religious ceremonies (ODPM, 2004) on space; and education level of community, their social awareness and their demographic features in social context (Özden, 2016); so, their interaction typology in space and social configuration should be clarified.

Local residents are generally contended from their region in terms of their social interaction; however, their living costs, unemployment rates and healthiness of the neighborhood they live in enables input about willingness to lead a life (UNEP, 2004). Procuring working place for local residents benefits social interaction and social contact (Omann & Spangenberg, 2002 cited in Chan & Lee, 2010), and it creates sense of belonging and attachment to the site is enabled. Therefore, in addition to basic and community-based services, economic activities which they can actively involve should also be provided to vulnerable groups (UNEP, 2004). Participating them to the

regeneration process enables expressing themselves, their problems and their requirements to continue inhabiting the site. Local residents are key components for sustainable community and their cultural system; for this reason, empowering the community and determining local representative facilitate and accelerate problem-solving process, coordination of tasks among developers and to reach defined objectives (Özden, 2016). However, if defined strategies and implementation methodology of the decisions are not compatible with residents, aside from participation to process, they will take a stand against regeneration project and its owners (ODPM, 2004). Therefore, every stage and every intervention belong to project have very crucial impact on community and social dimension of urban regeneration.

Akkar Ercan (2006) identifies in addition to spatial and social interventions for public security, educational and health facilities should be driven into fore in brownfield zones; for good measure, cultural facilities (museums, exhibition halls, concert area etc.), community centers and housing in optimal circumstances to be acquired spatially are strategies that should be determined in order to increase the quality of society in urban regeneration. These upgraded social facilities promote individuals about commitment to the subject area and entrammel displacement.

2.1.3.3. Economic Dimension of Urban Regeneration

All kind of economic activities which human-being deals with designate complacency on space where they live in and life standards of the dwellers. In cities, today, economic movements and infrastructure incident to these movements determine site selection/change of the citizens to spend minimum living cost and live on as wealthy as they can. However, through the time, within the global economy framework and technological advancements, economic structure following with production typology has changing (Roberts, 2000), so sustaining same financial pattern is getting impossible in specific urban area. Under these circumstances, economic activities decrease, and unemployment rates increase dramatically; and societies which struggle with these high rates generally, deal with increasing suicide or psychological

problems, divorce or family disputes, alcoholism rates, social exclusion and disorder, poverty and welfare dependency either (Chan & Lee, 2010). Because of these reasons, urban regeneration should also enable economic regeneration in the site, especially to provide community health maintenance. According to Akkar Ercan (2006), in urban transformation projects, to provide economic revitalization, formation of education, courses and programs to raise quality of unskilled labor force, employment opportunities should be increased and appealing new economic activities into the site and its appropriate programs have to be provided through the implementation processes. As one of the types of intervention for urban transformation, urban regeneration should also have the same economic strategies. It is beneficial to allow the city and its territory or country to develop in a framework that will benefit the national economy while ensuring the maximum benefit of the people in the regeneration projects; so that investors interest in projects because of possible rents they could gain (Özden, 2016). However, it is very critical issue to authorize developers for investment: the concern about rent may become dominant rather than common interest of the society and regeneration may cause gentrification with the intention of economic viability (Özden, 2016). As a result, when economic revitalization is achieved accurately, social sustainability is positively supported; however, any mistake in decision-making or practice under inspection can reverse all possible benefits against the community.

2.1.3.4. Environmental Dimension of Urban Regeneration

Environmental problems gradually increase due to urbanization of world's population. Today, more than half of the population lives in the cities and it directly affects ecological balance of natural resources (Balaban, 2015). Urban areas conduce to energy and natural resource consumption, waste production which causes excessive greenhouse gas emission, pollution of land, water and atmosphere; and for these reasons, unfavorable effects of climate change and global warming are seen urban land dramatically (Balaban, 2017). To reduce these negative effects of environmental degradation, city authorities spend environmental cost; to mitigate these effects of

development activities on human-being and the city (Glossary of Environment Statistics, 2003). According to ODPM Report (2004), comparing with the new development on unoccupied land in the city, recycling of existing developed pattern and infrastructure, the reuse of old and historical structures are more efficient and sustainable with regards to use of raw material, decrease in demolition and construction waste and natural resource protection. Besides, revaluation of old settlements minimizes environmental cost in the city. The new development – especially if it occurs in a way of urban sprawl – causes increase in vacant land and insufficient use of urban land. Sustainable urban development concept also offers compact city modal to cities (Banai & DePriest, 2014; Gedikli, 2017) in which inactive vacant lands should be regenerated to make use of the site as a part of urban land again, to reduce need of bring into service of non-urbanized lands. Provision of efficient services, waste management systems, appropriate accessibility network which encourages public transportation, green design and open space in urban regeneration processes are the solutions of compact city (Balaban, 2017; Gedikli, 2017) – especially in sustainability theme. For these reasons, urban regeneration should also enable regenerating environmental potentials and protection of natural resources (Celikyay et. al., 2010) – in terms of fresh air, clean water, source efficiency and land infrastructure - and their benefits.

2.1.4. Urban Regeneration in Historical Urban Environment

Historical quarters, which previously-known as centers of urban areas, have become one of the idle spaces in the city and have lost their activity pattern through the time in connection with rapid urbanization and urban growth. Therefore, today, urban regeneration debates mostly comprise these quarters since they are irreplaceable part of the city; and also, urban development and transformation practices (Celikyay et. al. 2010; Ertan & Eğercioğlu, 2016). Even if these spaces have lost their operativeness, they still preserve and upgrade their uniqueness on urban identity, evidences of former dwellers' lifestyles and experiences, memory which creates spiritual values from ancient period of time, emotional values, belonging consciousness and urban character

which provides functionality both in located and adjacent areas via architecturally valuable structures and heritage sites (Boussaa, 2017; Celikyay et. al., 2010; Elsorady, 2013; Ertan & Eğercioğlu, 2016; Mısırlısoy & Gunce, 2016; Ozbek Eren, 2014; Said et. al., 2013). According to Boussaa (2017), urban identity is constituted by characteristic urban form brought by the historical experiences (Altınors Cırak, 2010), specific architectural style – with traditional materials, their orientation styles, color, textures and ornaments (Celikyay et. al. 2010) in addition to society values, its activities, culture and functions (Ozbek Eren, 2014) – and design solutions. In addition to tangible values, also intangible assets can also be named as “soft location factors” (Scheffler et. al., 2009) in historical sites formed by local culture and geographical context with its structural reflections (Boussaa, 2017), local beliefs, teachings, activities, spiritual values (Said et. al., 2013) – briefly rich social values (Yung & Chan, 2013) - and daily rituals. These soft factors with their images generate distinctive “identity” of a place and furthermore, it has crucial place in differentiation of mass-produced and uniformed cities from each other in global environment (Boussaa, 2017; Scheffler et. al., 2009). The assessment of urban identity is actualized the understanding of attachment to the community, social continuity, recognition of values and evaluation (Lalli, 1992 cited in Ozbek Eren, 2014).

Therefore, urban regeneration has greater significance than it seems; it has major role in bringing identity forward through especially with social interaction and activities within the locals (Ertan & Eğercioğlu, 2016). Additionally, regeneration of historical sites where include cultural heritage incentivizes economy and socio-cultural enhancement of the quarter which stimulates sense of community (ODPM, 2004), feeling of belonging and necessary compulsion for change (Boussaa, 2017). In order to reach favorable changes in the districts, urban regeneration offers creative solutions within reuse, conservation and renovation by reorganizing of traditional urban pattern (Ertan & Eğercioğlu, 2016). Besides, regenerating historical environment has not only spatial value in urban context, what is more is, it has direct impact on human relations.

“There is evidence that commercial schemes which reuse historic buildings have a higher value than new-build developments and can form the basis for regenerating a local economy” (ODPM, 2004, p.7).

Yung and Chan (2013, pp. 3-5) classifies the social benefits in revitalizing historical quarters and they explain these benefits as:

- ✓ **Sense of place:** *“feeling of belonging and attachment, sense of place arises from a multi-dimensional experience including, views, sounds, scents, textures, tastes, movement, individual impression, etc.” (White, 1999).*
- ✓ **Collective memory:** *“feeling that is shared, passed on and also constructed by a group or modern society related to an urban space; people's daily lives, communication, and the meaning of the culture with the physical environment and symbols” (Boyer, 1996).*
- ✓ **Cultural identity:** *“some common means/ ground of identifying with each other associated with the place in different time context”*
- ✓ **Local characteristics and uniqueness:** *“cultural heritage has a role to play for developing the place-specific character of urban regions” (Swensen, 2012). “Conservation and revitalization of historic buildings should improve the physical condition of the environment while maintaining and enhancing local life and culture and the uniqueness of the place” (Strange and Whitney, 2003).*
- ✓ **Educating present and future generations:** *“historic buildings can educate present and future generations on the history of the people, the place and the events connected with the district” (English Heritage, 1997; Atkins & IFA, 2004).*
- ✓ **City livability:** *“the extent to which that environment supports individual and collective needs” (Stevens, 2009).*
- ✓ **Cultural diversity:** *“equality and valuing different cultural experiences, whether they are due to ethnic identities, social or economic situations” (English Heritage, 2000).*

- ✓ **Community interaction and social cohesion:** “social networks and interaction can enhance mutual understanding, trust, sharing and increase in social capital” (Coleman, 1988, Putman, 1995).
- ✓ **Accessibility of use:** “Affordability in terms of ease of access and/or entry fees can be a prerequisite for equal access to historic sites, without encroaching on people’s rights to use, visit and appreciate the place”.
- ✓ **Social inclusion:** “It can be achieved by broadening access and education, acknowledging cultural diversity and multiculturalism and developing partnerships and community involvement” (Pendlebury et al., 2004).
- ✓ **Developing skills in heritage restoration & related activities:** “The revitalization of historic buildings can offer people the possibility of developing technical and/or social skills through work experience as volunteers or paid workers in heritage related activities (Atkins and IFA, 2004), such as the restoration of historic buildings and the provision of guided tours for visitors”.
- ✓ **Public involvement opportunity:** “Active participation in the historic environment can positively affect the sense of belonging that can help people develop social networks with others, increase their pride in and understanding of the local area, identify their common interests, aspirations, goals and courses of action and improve their self-efficacy” (Bramley and Power, 2009; Heritage Lottery Fund, 2009; Yung and Chan, 2011).
- ✓ **Illustrate the economic and scientific development took place in the district:** “Historic buildings can show evidence of economic, engineering, technological or scientific advances by which specific industries have contributed significantly to the development of the city” (Yung & Chan, 2013).

These benefits also constitute measures for sustainable communities, and they should be enabled in terms of social sustainability.

Each regulation should be managed without passing over substantial context. According to UNEP (2004, p.20), while developing regeneration strategies for central historical part of the cities, following operations should be applied:

- ✓ *“Cultural buildings must be constructed,*
- ✓ *Networks must be restored*
- ✓ *Pedestrian access must be created*
- ✓ *Traditional businesses must be maintained, and the service activities introduced to renew local economy (depends on the changes in the image & integration in the global economy of the metropolitan real-estate market)*
- ✓ *Avoid “trade-related” drift and to retain the residents*
- ✓ *Encouraging rehabilitation of architectural heritage*
- ✓ *Avoiding museumification”.*

Together with these operations, historical configuration of the site should be protected; so that attachment to the past – or its context – will be enabled (Said et. al., 2013). Besides, the dichotomy between old and new should be carefully managed in terms of heritage conservation and meeting current needs (Ertan & Eğercioğlu, 2016). In addition to these physical interventions to historical districts, there is also actors and participants aspects to reach the most efficient way of improving locality, following steps should also be follow through according to ODPM Report (2004, p.11):

- ✓ *“Strong leadership by local authorities with appropriate skills*
- ✓ *Clear guidance and commitment from public agencies at a national and regional level*
- ✓ *An easily understood flexible regulatory framework which encourages creativity and allows new uses for redundant historic buildings*
- ✓ *Adequate and easily accessible funds to support commercial schemes which are at the margins of viability”*

Integrating with the project executers and local community is a manner to manage old and new dichotomy and internalize the unique identity (Boussaa, 2017; Ertan &

Eğercioğlu, 2016). Furthermore, so as to establish a connection with community, its culture and historical environment; multidisciplinary professional team – with planners, designers, architects, landscape architects and social scientists – for valued spaces created via urban design process should be constituted (Celikyay et. al., 2010).

In addition to these emphasizes and actions to be taken on regeneration in historical quarters, Celikyay et.al. (2010, p. 1472) clarifies systematic framework regeneration and urban design in historical neighborhoods in following order as:

- i. *“Gathering all data in historical environment*
- ii. *Understanding historical environment and the relation between a part and the whole*
- iii. *Determination of opportunities and threats of place by SWOT analysis*
- iv. *Adoption of holistic approach for urban design*
- v. *Analysis of the visual image of the case area*
- vi. *Determination of current tendencies and urban needs of the community by means of a public survey*
- vii. *Culture led regeneration in addition to the heritage led regeneration*
- viii. *Scenario building for the part related to the whole*
- ix. *Comparing the scenarios protection, regeneration, ecology and sustainability point of view.*
- x. *Integration with social-economic objectives and environmentally objectives*
- xi. *Consideration of stakeholder ‘s views*
- xii. *Determination of the design strategies*
- xiii. *Giving a new function to the historical buildings*
- xiv. *Creation an attractive urban area sustaining original characteristics*
- xv. *Consideration of the historical texture*
- xvi. *Consideration of the architectural styles of the traditional buildings*
- xvii. *Determination of the typologies*
- xviii. *To enable design of building facades harmonic with the historical buildings*

xix. *Consideration of landscape potential and natural characteristics of the place”.*

2.1.5. Urban Regeneration in Turkey

In Turkey, after 1950s, the period of first wave of rapid urbanization started, it has lived through spatial problems which it had never experienced. Opening to foreign countries economically, industrial development and new occupational opportunities have triggered the migration from rural land to urban areas (Düzcü, 2006; Ertan & Eğercioğlu, 2016). Most of the cities were caught unprepared in terms of infrastructure, green space, urban facilities and housing supply which are inputs for ineligible cities (Ertan & Eğercioğlu, 2016), so do-it and settle-in yourself understanding – illegal dwelling – has resulted in unplanned, unhealthy and insecure zones (Ozbek Eren, 2014; Ulger et.al., 2016). Slum development in Turkish cities and the first initiatives on urban regeneration with Law No: 5218 for Ankara and its slum areas problem actualized synchronously in this period due to solve illegal – unplanned development (Uysal Sahin & Sahin, 2016); however, regeneration was understood as redevelopment, renewal and upgrading of these sites via clearing existing pattern and reconstructing rather than revitalizing the districts (Ataov & Osmay, 2007; Uzun, 2003). After 1980s, within effects of globalization, sustainable development and neoliberal economy approach, the migration from rural to urban in Turkey has accelerated; that is, to increase healthy environment, urban renewal and rehabilitations implemented and in historical sites, conservation and gentrification strategies were adopted for increase economic mobilization via changing social structure (Ataov & Osmay, 2007). Besides, middle- and high-income groups moved through the periphery and city centers started to be used by low income groups and outsiders: social problems – urban crime, insecurity, racial conflict etc. – and physical dilapidation were arisen (Uzun, 2003). These processes have reduced historical character in core of the city (Ertan & Eğercioğlu, 2016).

At the beginning of 2000s, due to 1999 Marmara Earthquake, regenerating disaster-prone areas has come into the agenda (Uysal Sahin & Sahin, 2016). Besides, the

concepts of participatory approach, equity and sustainability in urban planning agenda in Turkey, urban regeneration initiatives have increased; although participation of the actors – except central and local municipalities – remained limited (Ataov & Osmay, 2007). By virtue of participatory approach deficiency in legislations, urban regeneration practices in Turkey are restricted by only spatial implementations; socially sustainable and economically advanced districts could not be supplied (Ulger et.al., 2016; Uysal Sahin & Sahin, 2016). According to Ulger et.al. (2016, p. 5-6), due to lack of legislative background on urban regeneration, new laws, codes and actions should be determined in Turkey which comprises:

- ✓ *“Remove the uncertainties about property rights and supply righteous solutions for illegal settlements.*
- ✓ *Contain a multi-disciplinary approach*
- ✓ *Make an effort on not moving local people out of the regeneration area and care about the lifestyles of disadvantageous groups of the society.*
- ✓ *Do not adapt an approach only for “creating new lands for new investments” and adapt scientific principles of planning discipline.*
- ✓ *Adapt “value-based method” as an application method”.*

In addition to these strategies, cooperative and well-organized relationship between actors has significant input should be enabled for successful urban regeneration in Turkey (Ozbek Eren, 2014).

2.1.5.1. Urban Regeneration in Historic Urban Environment in Turkey

Turkey is a rich country in terms of cultural diversity and their reflection to space with heritage sites and historical centers (Celikyay et.al, 2010). To sustain these multicultural values in historical quarters in the long view, revitalization and refunctioning heritage sites are key formulas for sustainable urban development (Celikyay et.al. 2010). However, the movements which have continued through the time and mentioned in Turkey’s general framework (economic, political and global) inconvenience protecting and appreciating heritage values and quarters; additionally,

lack of conservation strategies in legislative regulations support this attitude (Akkar Ercan, 2010).

In Turkey, historical quarters are subject to regeneration commonly, but in action period, enabling unique identity which it deserves, spatially rearrangements in terms of their traditional orientation, proper infrastructure and qualified environment cannot provided most of the time (Ozbek Eren, 2014) and generally these sites have needed further regeneration scheme (Uzun, 2003). The reason of these failures are profit-based regeneration perception via public officials dominantly (UNEP, 2004) which has resulted in leaving out social dimension of regeneration projects (Çiftçi et. al., 2010). Local authorities do not participate the dwellers to the process due to the rental acquisition – because these neighborhoods are seen as major investment areas in terms of their characteristics and potentials; their expectation, ideas and requirements, and their resistances are ignored (Altınors Cırak, 2010). The legislative arrangements such as Law No. 5366 Usage of Timeworn Historical and Cultural Property with Restoration and Protection and Law No. 5226 Preservation of Cultural and Natural Assets seems to favor for historical sites with heritage and archeological values, however, these laws have generated new capital investments on these sites which results in transformation and gentrification – dislocation of culturally-bounded low income native groups (Altınors Cırak, 2010). Even if recent initiatives try out involving public participation approach, very few practices can achieve to protect existing social structure.

2.2. SOCIAL SUSTAINABILITY

2.2.1. Definition of Social Sustainability

The term of sustainability has been on the agenda more than three decades; since World Commission of Environment and Development (WCED) published a “Brundtland Report (Our Common Future)” in 1987. The report has described the term sustainability as *“a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs”*

(WCED, 1987, p.1). Sustainable development offers protection and continuity of environmental resources while promoting economic development and upgrading social structure in the cities. Although three dimensions of the sustainable development - environment, economy and society - has equal significance in the concept; through the time, social aspect was regarded under the shadow of environmental and economic aspects. That is, social development is supposed as outcome of environmental protection and economic development – not a singular dimension (Assefa & Frostel, 2007, cited in Colantonio & Dixon, 2011; OECD, 2001). Deficiencies in description of social value in the sustainability concept has reached a critical stage in contemporary world since sustainable urban development attempts are collapsed due to ignoring human effect. Therefore, the perception which “social sustainability” has an important place in sustainable (urban) development has emerged within administrative encouragement – especially in urban regeneration agenda (Figure 2.1) (Colantonio & Dixon, 2011) – in association with Rio Earth Summit in 1992 and Local Agenda 21 declaration which is not able to be successful unless it embraces socio-cultural and economic value (Yung & Chan, 2012). Therefore, urban regeneration initiates incorporate social sustainability as a segment of physical implementations.

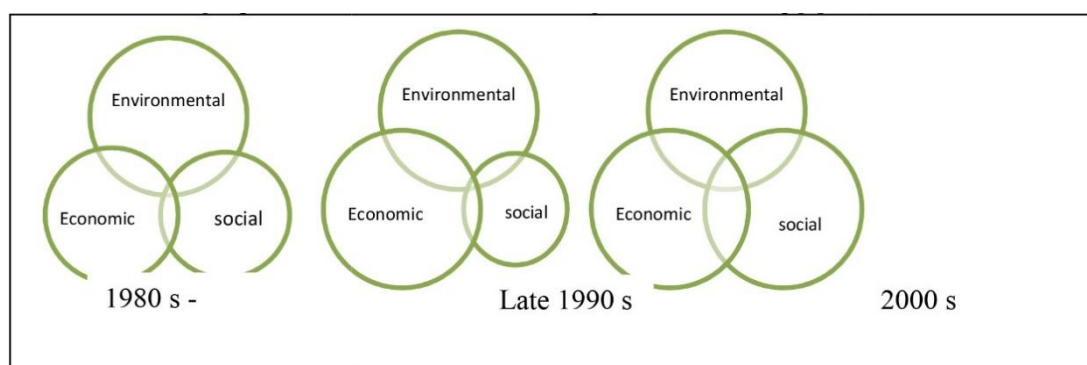


Figure 2.1. Evolution of social aspect in sustainable development (Colantonio & Lane, 2007; cited from Kefayati & Moztarzadeh, 2015)

Social sustainability has been tried to define most appropriately in literature, however, there are still imperfections and non-elaborated layers of the argument as a separated ground (Colantonio & Dixon, 2011).

According to Colantonio and Dixon (2009, p.17), there are efforts to define social sustainability in the literature as:

- a. *“A strong definition of social sustainability must rest on the basic values of equity and democracy, the latter meant as the effective appropriation of all human rights – political, civil, economic, social and cultural – by all people”* (Sachs, 1999, p.27).
- b. *“... is a quality of societies. It signifies the nature-society relationships, mediated by work, as well as relationships within the society. Social sustainability is given, if work within a society and the related institutional arrangements satisfy an extended set of human needs [and] are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time and the normative claims of social justice, human dignity and participation are fulfilled”* (Littig and Grießler, 2005, p.72).
- c. *“[Sustainability] aims to determine the minimal social requirements for long-term development (sometimes called critical social capital) and to identify the challenges to the very functioning of society in the long run”* (Biart, 2002, p.6).
- d. *“Development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population”* (Polese and Stren, 2000, pp. 15-16).

These definitions are incomplete in terms of lack of spatial implementations (such in Biart, 2002), only work and needs focused understanding (such in Littig and Grießler, 2005) and determining as socio-historical process (Colantonio & Dixon, 2009). Therefore, Colantonio & Dixon (2009), contribute these discussions via more

extensive definition which is: *“At a more operational level, social sustainability stems from actions in key thematic areas, encompassing the social realm of individuals and societies, which ranges from capacity building and skills development to environmental and spatial inequalities. In this sense, social sustainability blends traditional social policy areas and principles, such as equity and health, with emerging issues concerning participation, needs, social capital, the economy, the environment, and more recently, with the notions of happiness, well-being and quality of life”* (Colantonio & Dixon, 2009, p.18). This definition involves all aspects of social sustainability in the sense of spatial, economic and environmental dynamic; principles and measurements of it (equity, health, participation, social capital, happiness, life quality etc.); human ecology and institutional process.

In addition to defining attempts, there are also different approaches on social sustainability and its main focuses. Chiu (2003, cited in Colantonio & Dixon, 2009 and 2011) explains these approaches and focuses under three main scopes: The first approach tells that social sustainability equals to environmental sustainability; which means activity pattern of society is related with social limits and development restrictions indicated by specific social relations, customs, structure and value (Chiu, 2003, cited in Colantonio & Dixon, 2009). The second approach tells that social sustainability in environment-oriented concept. That is, movements of societies can continue of restricted by environmental limits. The last approach advocates that social sustainability is people-oriented concept; it pays attention to human-being, his/her requirements and equal distribution of the resources, meanwhile preventing social exclusions and destructive conflict in urban area (Chiu, 2003, cited in Colantonio & Dixon, 2009). In recent discussions, the last approach predominates among other debates; and social sustainability notion has been experienced paradigm shift with regards to its measurements and its descriptive terms. Formerly, social standards were determined by tangible values with basic needs, housing, education, employment and poverty reduction etc. Yet, recently, social sustainability is determined via more intangible values such as identity, sense of place and culture, social mixing, health and

safety, well-being, happiness and quality of life etc. (Colantonio & Dixon, 2011). Previous implementations for society enhancement was highly related with environment-oriented, unlike equal dealing with environment protection and social improvement (OECD, 2001).

Table 2.1. Traditional and Emerging Social Sustainability Key Themes (Colantonio & Dixon, 2009, p.19; Colantonio & Dixon, 2011, p.25)

Traditional and Emerging Social Sustainability Key Themes	
Traditional	Emerging
• Basic needs, including housing and environmental health • Education and skills • Employment • Equity • Human rights and gender • Poverty • Social justice	• Demographic change (ageing, migration and mobility) • Social mixing and cohesion • Identity, sense of place and culture • Empowerment, participation and access • Health and safety • Social capital • Well-being, Happiness, Quality of Life

Colantonio & Dixon (2011) in “Urban Regeneration and Social Sustainability” identify the paradigm shift from traditional perspective to emerging perspective, and how it has changed from tangible values to intangible ones (Table 2.1). The tangible values should already be supplied in all regeneration context, but the intangible values should be provided in community-specific aspect; so that each regeneration initiatives are separated from each other to protect and advance the unique identity of a place.

Table 2.2. Characteristics of Traditional Social Indicators and Social Sustainability (Colantonio & Dixon, 2009, p.29; Colantonio & Dixon, 2011, p.50)

Characteristics of Traditional Social Indicators and Social Sustainability Indicators	
Traditional Social Indicators	(Emerging) Social Sustainability Indicators
• Static • Predominantly Quantitative • Product • Descriptive • Mono-dimensional • Target-oriented • Top-down selection	• Intergenerational and incorporating uncertainty • Hybrid • Process • Strategic • Multi-dimensional • Principles and objective driven • Deliberative and reiterative selection

Secondly, they also explain the indicators of each approach comparatively (Table 2.2). The significant indicators of traditional approach are being static, mono-dimensional, target-oriented and top-down selectiveness which treat to community enhancement as an end-state and a final product, rather than process design, relational benefits and responsive to external factors. Additionally, top-down selection which could not interiorize the authenticity of space keeps the practices superficial. However, emerging approach draws attention on transition of generations in the course of time; that is, sustainable societies are represented process of change in place and it is impossible to constrain the process in a defined period of time; therefore, social sustainability also deals with uncertainty of future variations. Throughout this process, it should integrate with dimensions on human interactions such as quality of physical environment, economic relations and institutional structure of the site with regard to this approach. Besides, social sustainability is a strategic decision-making process which establishes ground for deliberative participatory manner.

2.2.2. Principles of Social Sustainability

To procure community in a sustainable manner, certain principles should be overcome. According to ODPM Conclusions of Ministerial Informal on Sustainable Communities in Europe (2005), there are eight key characteristics should be provided for sustainable communities (Figure 2.2). These characters are (ODPM, 2005, p.7):

- ✓ **“Active, inclusive and safe** - *Fair, tolerant and cohesive with a strong local culture and other shared community activities: identity, belonging, tolerance and respect of difference cultures, friendly and cooperative communities, opportunities for cultural and leisure, not anti-social/crime behavior and good quality of life and social inclusion.*
- ✓ **Well run** - *With effective and inclusive participation, representation and leadership: representative, accountable governance systems, strategic, visionary, active and effective participation and engagement by individuals and organizations, partnerships, strong voluntary sector, sense of civic values, responsibility and pride.*
- ✓ **Environmentally sensitive** - *providing places for people to live that are considerate of the environment: resources usage efficiently, minimize climate change, energy efficiency and the use of renewables, minimizing pollution and waste on land, in water and in the air, sustainable production and consumption protect and improve bio-diversity.*
- ✓ **Well designed and built** - *featuring quality built and natural environment: appropriate size, scale, density, design and layout, including mixed-use development, high quality, flexible and adaptable buildings, accessibility by public transport, walking and cycling, user-friendly public and green spaces, health and education.*
- ✓ **Well connected** - *with good transport services and communication linking people to jobs, schools, health and other services: transport and parking facilities, effective telecommunications and internet access and access to regional, national and international communications networks.*

- ✓ **Thriving** - with a flourishing, diverse and innovative local economy: a wide range of good quality jobs and training opportunities, suitable land to support economic prosperity and change, economically viable and attractive town centers.
- ✓ **Well served** - with public, private, community and voluntary services that are appropriate to people's needs and accessible to all: well-performing local schools, further education institutions, high quality local health care and social services for families and children, good range of services (e.g. retail, fresh food, commercial, utilities, information and advice), service providers who think and act long-term and beyond their own immediate interest boundaries.
- ✓ **Fair for everyone** - including those in other communities, now and in the future: recognize individuals' rights and responsibilities, respect the rights and aspirations of others, regard for the needs of future generations in current decisions and actions."

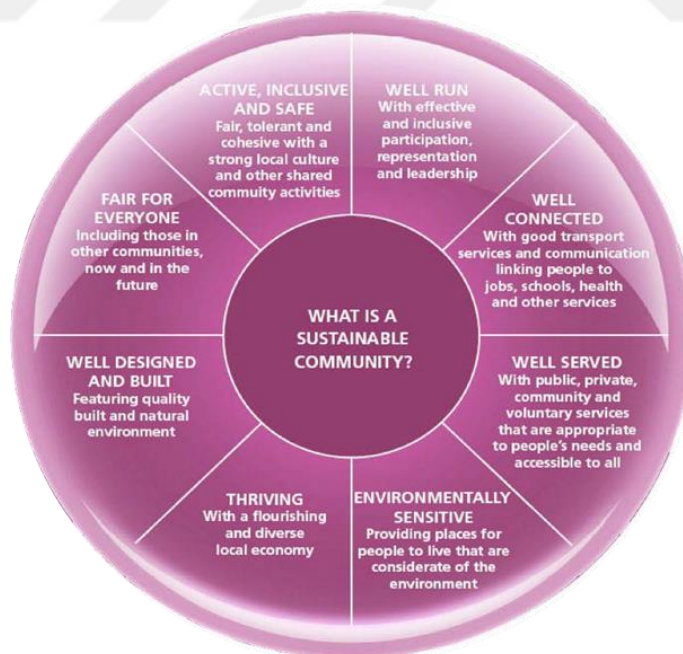


Figure 2.2. 8 Key Characteristics of Sustainable Community (ODPM, 2005)

These characteristics are common and should be supplied for each renewal and regeneration projects even if each field has distinctive context; that is, each character should be nativized.

2.3. SOCIAL SUSTAINABILITY IN URBAN REGENERATION CONTEXT

In the course of events, neighborhoods, quarters, or in general term, urban spaces face social problems – such as segregation, urban crime, facility deficiency, gentrification – related with the alteration of the world. Urban regeneration is seen one of the major actions to solve these problems and to enhance existing environment today.

Even so historical quarters are the essence of cities, depletion of tangible structures brings impair on intangible values, and destruction of continuity with the past (Boussaa, 2017). Therefore, urban regeneration has become crucial approach on conserving historical sites in terms of concerning the existence of positive aspects of cultural heritage and preventing gentrification (Boussaa, 2017). However, some problems can arise with the combination of old and new (Descamps, 2014 cited in Ertan & Eğercioğlu, 2016). This equilibrium may not be created sufficiently while trying to meet the continuity of history and the need for change at the same time; this either causes loss of identity due to too much change or abandonment due to failure of change. Additionally, optimum point between conserving and revitalization historic areas is ambiguous term which requires clarification, and as important as provision of community development and conservation of heritage sites with suitable policy concept (Akkar Ercan, 2010; Ryberg-Webster & Kinahan, 2014). The social sustainability in historical areas is a continuous process which its development needed to be monitored and not an end-product (Akkar Ercan, 2010). Another problematic issue regenerating historic districts is that economic concern and profit-oriented interventions to the structures may become prominent to regard social benefits injuriously (Yung & Chan, 2013). Radical changes in historical quarters which do not pay attention gradual development causes devastation of vulnerable intangible values and gentrification again (Boussaa, 2017).

Previous experiences in urban regeneration concept adopted top-down approach which mainly depended on physical and economic improvement in dilapidated areas (Colantonio & Dixon, 2011) resulted in increasing the inequality issues in the community with regards to cost, living standards and sustainability (Bailey, et al., 2004 & Robinson & Shaw, 1991 cited in Heath et. al., 2017). In addition, in historical areas needed to revitalize, conserving the heritage and renovation attempts synchronously bring contradictive problems (Yung & Chan, 2013); therefore, these problems generally result in context-independent implementations and vanish the originality. According to Boussaa (2017), in historical quarters, urban regeneration initiatives occur as copying the traditional details on the facades of the buildings with intend to conserve heritage by architects and urban designers; however, absence of understanding about social pattern and its meaning to community creates artificial history zone, sense of non-belonging and loss of space perception to them. Therefore, **due to failures in regeneration attempts in historical sites and scholars who realize these failures were resulted from lack of social dimension**, in urban regeneration practices, social phase of sustainability: “regeneration through sustainable regeneration” (Colantonio & Dixon, 2009) has become significant factor in successful regeneration. Perception of “community” is defined as focal point for sustainable development in urban areas (Celikyay et. al., 2010; Chan & Lee, 2007; Colantonio & Dixon, 2011; Ertan & Eğercioğlu, 2016).

Heritage structures are values needed to be transferred through upcoming generations and to be made a part of the whole city for sustainable urban development (Celikyay et. al., 2010). However, each social orientation is different from each other in historical quarters. Therefore, type of incorporating social phase and its competency are context-driven (Colantonio & Dixon, 2009); in practice, it is necessary to internalize the existing pattern before the action. Additionally, “community cohesion” and “participation” are the components to enable individual well-being in local area, sense of social support, community and personal self-esteem, self-efficiency, community-building, strengthening activities and successful regeneration with identified

community pattern (Heath et. al., 2017) together with involvement of volunteers and other sectors (Colantonio & Dixon, 2009), adoption of social interaction and gathering places via physical pattern and its improvement (Boussaa, 2017). According to Dempsey et.al. (2012; Darchen & Ladouceur, 2013, p.3), to enable social sustainability in urban regeneration practices, key components are:

- ✓ *“Interaction with social networks or other residents*
- ✓ *Participation to activities of collective community*
- ✓ *Sense of pride of place*
- ✓ *Residential stability (vs. turnover)*
- ✓ *Security (lack of disorder and crime)”.*

Besides key components description of Dempsey et.al. (2012), Colantonio & Dixon (2009, pp. 79-80) have also determined some key factors to deliver social sustainability in urban regeneration:

- ✓ *“Single task ad-hoc agencies and public private partnerships (PPPs)*
- ✓ *A well-resourced and integrated approach*
- ✓ *Regeneration agency offices in the areas – to guarantee a forum for discussion and transparency, helping reduce mistrust towards city authorities, which often characterizes these areas.*
- ✓ *Image and branding – to attract new inward-investments in social, economic and green infrastructure*
- ✓ *Municipal authorities to have plans in place – to minimize the involuntary displacement effect on local communities in terms of housing and local economic activities and services”*

In the case of these circumstances are supplied in urban regeneration cases -especially in historical sites, two scenarios which contains positive benefits and negative consequences may occur.

Positive scenarios are defined as (Colantonio & Dixon, 2009, p.20):

- ✓ *Social capital (Di Cento, 2007)*
- ✓ *The reduction of social problems and increased engagement and participation of residents (Hemphill et.al., 2006)*
- ✓ *Improved image of the local community (Pratt, 2009)*
- ✓ *Reduction of crime and illegal activities (Raco, 2003)*

Negative scenarios are defined as (Colantonio & Dixon, 2009, p.20):

- ✓ *Gentrification and displacement (Scarpaci, 2000)*
- ✓ *The exacerbation of social exclusion of particular groups within community (Gosling, 2005)*
- ✓ *The generation of low skill retails jobs for local residents (Law, 2002).*

As defined below, in literature, the principles which (or should be) enable social sustainability in urban regeneration practices, “participation, locality and sharing tasks within stakeholders” are common and indisputably accurate. However, it is also precise that the other main element for social sustainability is physical interventions related to urban planning and design processes and the success of these interventions with the above-mentioned principles in historical quarters. The success of physical policies ensures a successful urban regeneration process in social sustainability terms. For this reason, due to the mentioned strategies remain unfulfilled and deficiency in intervention tool; mentioned negative scenarios are emerged. Therefore, when interrelationship of urban regeneration and social sustainability notions are investigated, the problem of inadequate strategies and principles be adopted in the context of historical quarters in providing social sustainability in regeneration projects is arise.

2.4. CONCLUDING REMARKS OF THE CHAPTER

This chapter provides the audiences the problem statement. On the way to recognition of problematic issues in verification of not obtaining social sustainability in regenerating historical quarters, background of the notions, their approaches from their emergence until the recent discussions – especially significant paradigm shifts in

social sustainability and the way of affecting the urban regeneration practices - and their attributions are embraced. The outcomes of this chapter are understanding the reasons of social sustainability deficiency in urban regeneration and which issues are shown up due to its absence. This chapter by revealing the problem, helps building research question, hypothesis and finding the most appropriate tool for solving the defined problem of the study for following chapters.



CHAPTER 3

ADAPTIVE REUSE AS A TOOL IN URBAN REGENERATION

“The measure of intelligence is the ability to change”

Albert Einstein

In the previous chapter, the first stage of theoretical framework which includes main definition of urban regeneration, social sustainability, their interrelations and defined problem of the study are given. As mentioned in previous chapter, urban regeneration is wide-ranging implication, which confronts a problem of continuity of social liveness, to regain dilapidated quarters in Turkey and all around the world. Even if urban regeneration concept is clarified in detail by most of the scholars, its principles has remained only policy framework which gives only general guidelines. However, to achieve accurate regeneration processes and sustainable communities, more distinct and controllable guidelines and strategy tools should be determined. For this reason, as a solution, “adaptive reuse” appears as a tool in these implications for physical improvement, but more substantial manner, societal upgrading; that is, it is a contemporary input for social sustainability which is a hot topic for the last couple decades (Elsorady, 2014). Therefore, this chapter makes the audiences understand the description of adaptive reuse, why the buildings should be reused adaptively, what are the decision-making mechanisms to select appropriate function for the structures and what the adaptive reuse policies for the society are. In the literature, adaptive reuse and strategic key points are mainly based on building scale; however, its implications and sphere of influence are more extensive in recent urban regeneration cases. Therefore, it is needed to clarify common and varied adaptive reuse implications according to different scales which consists of scale of building (particularly monumental ones), street and neighborhood. These implementation scales are

investigated with their physical, social, economic and environmental aspects and outcomes of these interventions are evaluated to prepare a base for the next chapter in terms of which policies derive positive outcomes and which ones brings negative outcomes in regeneration practices to establish the assessment tool.

3.1. ADAPTIVE REUSE

3.1.1. Background Information on Adaptive Reuse

The defined urban changes and their effects has mentioned in previous pages; and as a result of them, existing physical environment is no longer available to meet the needs of these changes and urban regeneration “as a general term” is a way to recuperate the current urban land to new spatial dynamics. Adaptive reuse, is a strategy for urban regeneration, which allows re-inclusion of existing urban fabric - particularly in historic areas. In other words, adaptive reuse is “*a process of reusing an old site or building for a purpose other than which it was built or designed for and its approach towards conservation practice*” (Cantacuzino, 1989 cited in Lewis, 2016, p.7). That is, adaptive reuse integrates the value and authenticity of the old structures/sites with the new functions which allow contemporary activities; so perception of space in social terms is created by collective value of old and new (DEH, 2004 cited in Lewis, 2016; Yung & Chan, 2013). Besides, with the increasing interest in adaptive reuse as a concept especially in historical districts recently, new definitions are at the urban planning’s agenda. The recent definitions are determined by them as below:

Table 3.1. Definitions of Adaptive Reuse Derived from Literature

Recent Adaptive Reuse Definitions	Defined by
<i>“New use / recycling of the buildings / a method of protecting historical buildings from demolition / rehabilitation”</i>	Commonwealth of Australia, 2004, p.2
<i>“Adaptive reuse is broadly defined as “any building work and intervention to change its capacity, function or performance to adjust, reuse or upgrade a building to suit new conditions or requirements”</i>	Douglas, 2006 cited in Yung. & Chan, 2012, p.353

a. <i>“Adaptive reuse can be defined as the task of adjusting functionally obsolete buildings for new program requirements through building conversion”</i> b. <i>“Adaptive reuse in architecture denotes the process of building conversion so as to accommodate new functional requirements”</i>	Eyüce & Eyüce, 2010, p.419
<i>“Adaptive reuse is a process that adapts historical buildings to new uses while retaining their historical features and is an act of finding a new use for a building.....historical buildings help define the character of our communities by providing a tangible (cultural values, lifestyles and economic ranks) link between the past”</i>	Tanaç Zeren, 2015, p.16
<i>“Adaptive reuse as an integral tool of Urban Regeneration and Sustainability Policies”</i>	Mokhtar & Korumaz, 2017, p. 118
a. <i>“Adaptive reuse is a necessary continuous process that is able to update buildings to survive societal changes that affect their form, role and meaning, because built environment has been designed and built according to a time-specific idea/need, but the lifespan of a building is no longer than the purpose for which it has been built”</i> b. <i>“Adaptive reuse intended as a continuous process of using and reusing of existing structures, environment and buildings is the preservation strategy that allows heritage to play an active role”</i>	Murialdo, 2017, p.209 (a) and p.215 (b)

Through the period of time, structures, streets, urban fabric, landmarks and public spaces may become ineffective items or parts in cities; so, they may need new functional setting for different purposes (Aydın & Yıldız, 2010; Commonwealth of Australia, 2004) to regain the influential mobility within the city. In addition to this ground, according to Plevoets & Cleempoel (2016), the need for sustainable development, economic climate which needs less costly architecture and ever-increasing importance of architectural heritage are the motivation for adaptive reuse in traditional sites. Besides, even if built environment required intervention due to excessive depreciation caused by aging, it needs upgrading predominantly in consequence of social obsolescence, functional technology change, physics and

financial difficulties (Gregory, 2004 cited in Tanaç Zeren, 2015). Obsolescence of existing spaces is more surmountable issue in comparison with functional deterioration and economic recession – because they are actual reasons of adaptive reuse -; likewise, renewal and rehabilitation of physical environment is not able to sort challenges out by oneself (Eyüce & Eyüce, 2010). Through these evolutions in cities, some of the urban functions may not perform as it should be, and they relocate in cities; therefore, they become derelict spaces need to be retrieved to the city. According to Kuban (2000 cited in Tanaç Zeren, 2015, p.16), there are some reasons of obsolescence of urban districts, and they are:

- ✓ *“The original occupants may move to more modern facilities,*
- ✓ *The original building may be too expensive to moderate,*
- ✓ *Owners cannot allocate funds necessary for maintenance.”*

In order to hinder the reasons and effects of obsolescence, if initial function loses its validity and it is no longer appropriate within the framework of the building in question, potential property value is maximized by adaptive reuse (Commonwealth of Australia, 2004; Lewis, 2016). Besides, according to Tanaç Zeren (2015, p.17), there are reasons to save old buildings – especially prevailing in historical sites- which are:

- ✓ *“Rational thinking*
- ✓ *The sense of emotional dogma*
- ✓ *The sense of belonging and identity*
- ✓ *The sense of irreplaceable old buildings*
- ✓ *Interest of preserving meaningful architectural qualities”*

Adaptive reuse becomes significant for historical quarters due to enabling vital relationship between old and new without bringing together uncontroversially (Yung & Chan, 2013) via reusing heritage buildings to keep the “memory” and contributing social and environmental sustainability (Mokhtar & Korumaz, 2017). Heritage structures are the major factors of urban identity together with its “3 inter-related” components: ***“physical feature or appearance, observable activities and meanings***

and symbols” (Relph, 1976 cited in Boussaa, 2017). Therefore, reusing historical places which embody meanings and symbols continues cultural heritage, uniqueness, local characteristics and history’s existence by means of protecting and interpreting them (Mısırlısoy & Gunce, 2016; Nagarsheth, n.d.; Yung & Chan, 2013). Besides, to maintain the continuity of the society, built environment has to serve in a most appropriate way; and according to Pearce et.al. (2004 cited in Aydın & Okuyucu, 2009, pp. 36-37) there are three criteria to maintain quality of built environment:

- i. *“Adoption of user requirements and requests*
- ii. *Avoiding negative environment and its effects*
- iii. *Minimizing material and energy consumption”*

Considering these criteria, adaptive reuse is the best way to minimize over-consumption for any kind of building construction via in deference to public data and spiriting away of physical existing issues. Adding actual function layer on conventional tissue provides reawakening authentic architectural context of the structures (MacDonald; 2009 cited in Fisher-Gewitzman, 2016) and prevention from desolated image and destruction (Douglas, 2006).

Douglas (2006, p.112), has also clarified the reasons building conservation as:

- i. **“Cultural:** retaining a valued part of the built environment because of its architectural or historic significance.
- ii. **Educational:** using the building as a learning resource.
- iii. **Heritage tourism:** attracting visitors to an area.
- iv. **Historic variety:** maintaining an urban area’s character.
- v. **Economic:** conservation can create new jobs; it is more labor intensive than new build; and money spent on conservation schemes generally stays more local.
- vi. **Legal:** complying with local and national planning policies and legislation.
- vii. **Technical:** preserving the structure and fabric to minimize unnecessary repairs in future”

Reusing the buildings and revitalizing the local environment benefit historical value and prevent them from depreciation in new dynamics, and according to ODPM Report (2004, p.3), historical structures “...*should not be retained as artefacts, relics of bygone age. New uses should be allowed in the buildings and sensitive adaptations facilitated, when the original use of historic building is no longer relevant or viable.*” In addition to socio-cultural opportunities of adaptive reuse, reusing buildings with their authenticity benefits on reducing physical, environmental and financial waste (Said et.al. 2013).

In the light of necessities of adaptive reuse concept, it has great significance how to put into practice via strategies and design. According to Eyüce & Eyüce (2010, p.421), there are five principles while adaptive reuse practices – especially set a course for physical implementations:

- ✓ “*It should be made in the light of potentials offered and constraints imposed by an existing architectural entity (historical importance),*
- ✓ *Case – specific approach*
- ✓ *Context – depended*
- ✓ *Space configuration concern*
- ✓ *Tectonic aspects cared”*

Besides, finding out type and reason of obsolescence is fundamental in terms of enabling framework to deliver a solution (Eyüce & Eyüce, 2010). In addition to obsolescence types and reasons, getting familiar previous functions’ tangible and intangible values provides understanding of transformation from the past to today’s statement and issues to be overcome (Murialdo, 2017). According to Loures & Panagopoulos (2007 cited in Lewis, 2016, p.2), principles of adaptive reuse are also determined by their spatial aspects:

- ✓ “*To perform the functions well for which they are redesigned*
- ✓ *To be long lasting and adaptable to new uses*
- ✓ *To respond well to their surroundings and enhance their context*

- ✓ *To have a visual coherence and create “delight” for users and passers-by*
- ✓ *To be sustainable – non-polluting, energy efficient, easily accessible, and have minimal environmental impact”*

In addition, it is a difficult problem that the inheritance valued structures are to be joined to the city again, applied functional change also affects the form of the building. Respecting the authenticity of the building and making the appropriate decision for its contemporary use is a measure of success in adaptive reuse in long-run (Akkar Ercan, 2010; Aydın & Yıldız, 2010; Elsorady, 2013; Mısırlısoy & Gunce, 2016; Yung & Chan, 2012). Although both scholars’ principles are valid for adaptive reuse context, principles defined by Tanaç Zeren (2015, p.18) are more comprehensive in terms of social and physical perspective:

- ✓ *“Transform the environment of the building, and turn the building and its environment into a lively space*
- ✓ *Respect and retain the spatial organization and the building envelope of the existing structures (the extension – addition should be in balance with the existing structure)*
- ✓ *Preserving both tangible and intangible values of the existing building*
- ✓ *Make the structure livable in the meaning of sustainability*
- ✓ *Not ruin the originality of the structure, adapt to nowadays use with interventions,*
- ✓ *The adapted function’s spatial organization should be in balance with the existing structures’ spatial organization”*

In historical or dilapidated sites, it is not possible to act with the same approaches or implementations. Redevelopment, renewal, reconstruction, clearance, restoration or adaptation via reuse of the sites are the options for regaining the sites if the necessary strategies and requirements are supported; therefore, making a decision about if adaptive reuse is chosen as a solution for the area is a tricky situation for historical areas. Tanaç Zeren (2015, p.18) defined criteria to determine adaptive reuse is valid:

1. *“Societal value of given site, which is the importance of the use of a site to the community or visitors’ use,*
2. *The potential for the reuse of a particular site, the physical damage sustained to the site and its support of future use, the character of the existing site in terms of the proposed use,*
3. *The historical importance of the site, in terms of both physicality of the street-scrape and the area, as well as the site in the community’s understanding of the past,*
4. *The natural ecological conditions of the site, whether the site is suitable climatically or can support the proposed environmental work needed in the site”*

After reaching decision on adaptive reuse is the most accurate solution for the historical site, designating degree and scale of adaptability of the site is a crucial stage. Murialdo (2017) divides reusability degree into two for subject areas: partly structural and partly cultural which consists of form and structure, historical and contextual meaning, and sustainability opportunity. That is, only structural phases are not adequate, culture is an important layer as much as structure. However, cultural phase of reusability can give rise to opportunities and constraints for reuse (Murialdo, 2017).

As much as implementation period of adaptive reuse practices, the achievement and performance of the actions should be tested to get feedback and future evaluations and revisions. In order to get feedback, these questions should be asked:

1. *“Does adaptive reuse attempt transform the environment of the building?*
2. *Does adaptive function’s spatial organization fit the existing structures’ spatial organization?*
3. *Does adaptive function of the building eligible of preserving both the tangible and intangible value of the existing building?*
4. *Does the adaptive function make the structure livable in the meaning of sustainability?*

5. *Do the interventions that make the structure adapt to nowadays use ruin the originality of the structure?*
6. *Do the adapted function uses modify the envelope of the building?*
7. *The degrees of intervention”* (Tanaç Zeren, 2015, p.18).

3.1.1.1. The reasons of reusing the buildings

In the literature, the term of adaptive reuse mainly based upon applications on building scale and refunctioning them via paying special attention to its architectural compounds. In building scale, reuse means utilizing existing architectural layout and its facades as innovative as possible and adaptability means not to lose its physical compounds while reusing process. In addition, current discussions emphasize that adaptive reuse of buildings are the re-evaluation of building life while highlighting its value (Douglas, 2006; Bullen, 2007; cited in Aydın & Okuyucu, 2009; Lowe, 2004; Kohler and Hassler, 2002; Douglas, 2002; Cooper, 2001; cited in Haidar & Talib, 2013), creative re-interpretation and increase in physical impact area – not only in building scale but also for other scales (Douglas, 2006; Fisher-Gewitzman, 2016).

The reason of abandonment of the buildings, even if many of them available for use according to their lifetime (Gregg & Crosbie, 2001 cited in Douglas, 2006), is mainly change in social organization and its modern necessities; for instance, change in perception about family size – decreasing household number and increasing individuality and single lifestyle – (Douglas, 2006) and need in individual units or single family housing may be given as an example how social structure can change physical environment. In Turkey, the most distinct example of family size effect on building components and elements is courtyard houses for extended families – which are very common in the eastern regions of Turkey. Through the time, due to dispersion of extended family and migration to the western cities, these residential buildings have become vacant even if the structural life has not expired yet.

All these dynamics mentioned above generate the reasons of adaptive reuse as a strategy in Turkey and Altinoluk (1998, p.19) has determined two reasons for reuse of the building:

- i. *“Loss of original functions of buildings*
- ii. *Aging of buildings’ functions”*

According to him, in time, the structure can lose its function completely or even though the function maintains its continuity, because of progresses in related fields give rise to troubles in existing functions; additionally, the change of the function within the physical space, the disappearance of the function or the emergence of a new function needs to rearrange the space (Altinoluk, 1998).

3.1.1.2. Factors in selecting appropriate function for the building

The moment when a building is announced as adaptively reusable, the second issue about the process is determination a function which attaches to the building; especially, reaching a compromise between existing structural data – consists of site conditions, structural systems, programmatic requirements and architect’s personal vision – and upcoming implementations (Brooker & Stone, 2004 cited in Fisher-Gewitzman, 2016). More clearly, Markus et.al. (1972 cited in Douglas, 2006) explains that through the conversion process, it is important to supply the demanded key physical requirements with society’s requests. Altinoluk (1998, p.22) identifies three criteria for selecting appropriate function and according to him, in order to re-function, spatial formation of the building should be identified, and these forms vary as:

- i. *“The structure may consist of a single volume.*
- ii. *The structure may consist of repetitive volumes.*
- iii. *The structure may show a complex plan scheme”*

The function of a structure is directly related to who the users of that structure are and what their needs (Douglas, 2006). However, the structure allows this refunctioning to a certain extent: The fact that the structure consists of a single volume – such as a church (or an industrial entity) – transforms it into a school, residential or

accommodation facility that needs small volumes may results in damaging the authenticity and identity of the building (Altınoluk, 1998); in the same way, the transformation of a structure consisting of multiple repetitive units into a large museum area or concert hall causes the disappearance of the components that make the structure unique. That is, standards (unit sizes, number of units etc.), operational setup (internal mobility, individuality, publicity etc.) and social and economic aspects required by the function plays an important role in rearrangements of structural concept and context (Altınoluk, 1998). In addition to these spatial inputs, Aydın and Okuyucu (2009) identifies choosing the available function for an entity is fundamentally based on adapting the requirements of the function to the physical space appropriately in terms of usability, user livability and function sustainability; its location with new function; the contribution of the building with its new function to local space and its texture; and the contribution of the function to the community in terms of meeting the needs.

3.1.1.3. Principles and strategies for adaptive reuse

In adaptive reuse practices, there are fundamental principles regarded to fulfill the specifications of refunctioning. Therefore, ODASA Design Guidelines (2014, pp. 3-4) has listed these principles of adaptive reuse practice as:

- *“Memory and Place*
- *Planning Controls*
- *Environmental Sustainability*
- *Social Sustainability*
- *Efficiency*
- *Authenticity”*

According to ODASA Design Guidelines (2014), adaptive reuse in building scale or in wider scales should not be thought as architectural or urban entities which have specific physical features such as material, craftsmanship or aesthetic characteristics; they have “*set of cultural and personal memories*” constituted through the history

related to a belonging sense of environment, so in addition to architectural rehabilitation and revitalization by refunctioning in respect to adaptive reuse, appropriate intervention should/does protect and enhance the identity, the character and the memory of the place for dwellers. Secondly, planning controls enables conservation and registration of heritage structures or spaces via legally bounded documents together with contribution to the environment where it locates; therefore, any kind of alterations in registered zones are audited by authorities, and landuse decisions and zoning made in larger scales enable control of refunctioning to retail, industry, center or housing in adaptive reuse practice (ODASA, 2014). As principles, adaptive reuse should establish a ground for environmentally sustainable and socially sustainable atmosphere due to profit future energy and its related expenditures; and not losing social values – *pride, memory, participation* – which community has and integrating these values with design (ODASA, 2014). Thirdly, adaptive reuse process should assess the existing knowledge carefully in order to comprehend complexity of structure with its meaning and produce innovative intervention ideas to avoid possible issues in adapting process, with less touching on existing authentic value and more cost efficiency (ODASA, 2014). Lastly, adaptively reused structures carry authenticity, if they could not be reevaluated, history disappears and constructing new one lasts through years; besides, sufficient reuse enables stronger authenticity, culture, memory, character and economic value with accurate functioning (ODASA, 2014).

Even if main principles of adaptive reuse in building scale are stabilized, each building and each adaptability differ from each other; that is, some requirements are case-specific, and they need case-dependent responses (Douglas, 2006). The main point of adaptive reuse is that it has to be sure on providing coherent space regulations which respect to originality of tangible and intangible values and procure contemporary desires.

According to Douglas (2006, pp. 113-114), there are nine key points which should be paid attention in building conversion period:

- ✓ *“Meticulous recording*
- ✓ *Minimum intervention*
- ✓ *Minimal loss of fabric*
- ✓ *Reversibility*
- ✓ *Compatibility of use*
- ✓ *Explicitness of alteration*
- ✓ *Honesty and appropriateness of repair or restoration*
- ✓ *Sustainability”*

The first point is meticulous recording which clarifies observation and analysis period – with collecting documents, detailed drawing, identifying distinctive features (material, pattern, façade, convergence of components, architectural details etc.) and photographing – comes before the action (Douglas, 2006). As a second point, intervention on the building should be kept at minimum: as the scale of physical touching increases, the scale of originality decreases. In most of the cases, the aim of minimum implementation is adopted due to conserve the mentioned distinctive features of the structure; however, the new scope generally requires optimum change on these features, which might cause challenge on settling into existing building envelope; therefore, in the condition when existing one cannot deliver adaptability of the entity, building envelope could be modified or some requisite additions on interior or exterior or both layout could be determined in penetrable way (Tanaç Zeren, 2015). According to Douglas (2006), additions on the layouts can be delivered in two ways:

- i. *“Providing a lateral or vertical extension to the building,*
- ii. *Inserting mezzanine floor space”* (Douglas, 2006, p. 106).

These additions do not have to manifest themselves together for each conversion; the concept, context and the new utilization, depending on what it requires, these practices may occur individually or integrated. These practices should be reversible so that when alteration is subtracted from original layer, it is important to be sure that the originality of the structure remains just as before the intervention: for good measure

to be sure its reversibility, the vital alterations should be explicit and legible easily. This legibility is understood clearly when repair, restoration and functional transformation process is made honest and appropriately. Besides, in adaptive reuse cases might need new legislations and redevelopment permissions due to these physical processes (Fisher-Gewitzman, 2016). The reason of these regulations is that this practice is kind of land improvement. At every touch made physically in an attempt to community redevelopment and adaptability, should also improve environment in terms of profitability, flexibility, energy efficiency and eco-friendly materials (Douglas, 2002 cited in Haidar & Talib, 2013).

According to Yaldız (2013, pp. 85-89), in reuse of buildings adaptively, there are environmental, spatial, technical, usage and movement-based essentialities which should be supplied in most efficient way; and she expresses them as:

- ✓ *“Environmental Essentialities: Supplied function within structure’s indoor and outdoor composition and its position in the region should be answer deficiency in the environment where it locates in optimum level; and immediate environment requirements (car parking, green space, economic climate etc.) in relation to structure should be met reciprocatively.*
- ✓ *Spatial Essentialities: Building which is subject to transform to new function has to fulfill function-depended spaces, dimensional criteria and relationship between form and spaces in order to ensure performing the new function.*
- ✓ *Usage and Movement Based Essentialities: Building should fulfill needs of orientation, societal, cultural and symbolic use; and it should emphasize its monumental significance including symbolic and perceptual value.*
- ✓ *Technical Essentialities: In order to constitute desired system of physical environmental specifications to the structure under the condition of limited interventions (Yaldız, 2003), heating, ventilation, lighting etc. should be provided through the needs of adapted function without detriment to the original pattern”*

Together with these essentialities, Caterina et.al. (2004 cited in Yıldız, 2013) mentions that to prevent risky circumstances and to attain qualitative results in reuse process of the building, intervention limits should be determined in accordance with new user, its features and authenticity of the old structure. For instance, in some circumstances in which the extension in external part of the structure might be needed; however, if excessive alterations are implemented on facades, it may create unfavorable image which damages the originality harmony (Douglas, 2006).

According to Douglas (2006, p.98), building conversion for reuse actualizes in three ways:

- i. *“Adaptation to same use,*
- ii. *Adaptation to alternative reuse and*
- iii. *Adaptation to mixed use”*

The adaptation to same use of the building comprises integral changes in the building; the entity might be divided sub-units with additional walls and ground; but at the same time, sub-units of the structure might be merged included roof and basement space for the contemporary version of the same use (Douglas, 2006). Adaptation to alternative usage of the building is, however, more open to alterations along with additions and extensions – more general structural – due to incoming function and space installation (Douglas, 2006). Adaptation to mixed use clarifies reusing the structure as not only single defined function but defined two or more function on different parts of the building on the purpose of function richness and economic capacity: e.g. workspaces offices, museums, art workshop, gallery spaces and general shops in ground floors, while flats, hotels, restaurants and bars in upper floor (Douglas, 2006).

3.1.2. Benefits of Adaptive Reuse

3.1.2.1. Physical Benefits of Adaptive Reuse

Adaptive reuse is a challenge in terms of revaluating the structures or the sites rather than demolishing and rebuilding on the same plot and urban block. For this reason, it

triggers improvement of innovative solutions and creative design ideas for architects and urban designers meanwhile enabling the buildings' survival with their heritage significance, landscape, identity and local community amenities, especially in historical quarters (Commonwealth of Australia, 2004). Assuring building survival must not mean only conservation or restoration with a little touch likewise museumification of the structure; that is, if refunctioning efforts could not be supplied on architecture or radical transformation in the space configuration (Eyüce & Eyüce, 2010), aging process and depreciation gathers speed physically (Murialdo, 2017). As physical benefits and successes of adaptive reuse in historical sites comparing with the other interventions identified by Commonwealth of Australia (2004, p.3) as:

- *Discouraging the “facadism” – that is, gutting the building and retaining its façade,*
- *Requiring new work to be recognizable as contemporary, rather than poor imitation of the original historic style of the building, and*
- *Seeking a new use for the building that is compatible with its original use.*

Even if adaptable implementations have advantages more than other interventions, it should not be forgotten that these practices also affect future life and future adaptations of the society temporarily (Murialdo, 2017).

3.1.2.2. Social Benefits of Adaptive Reuse

Assigning a new use on old buildings in historic centers makes available to continuity of cultural heritage within sense of place, character and collective memory in the long view, mixed use and rituals whilst upgrading the community quality (Commonwealth of Australia, 2004; Eyüce & Eyüce, 2010; Lewis, 2016; Tanaç Zeren, 2015). This discipline is one of the most important physical applications in terms of achieving social sustainability by creating innovative solutions and presenting the beliefs and values and presenting today's needs (Murialdo, 2017). These practices are homogeneous in terms of meeting the needs of urban people all over the city, and it is a binding and collecting parameter in terms of strengthening the all kinds of relations.

3.1.2.3. Economic Benefits of Adaptive Reuse

Adaptive reuse of structures in specific site provides embodies energy saving and energy cost which can be caused by demolition – reconstruction in the same area or by new development of urban land (Mokhtar & Korumaz, 2017). Reuse the skeleton of buildings and property provides financial savings, less effort and quicker returns to site such as more investment and voluntariness (Tanaç Zeren, 2015). However, excessive investment interferences in historical quarters may result in heritage related cost (Commonwealth of Australia, 2004) and inordinate rent values – and even gentrification.

3.1.2.4. Environmental Benefits of Adaptive Reuse

Adaptive reuse is driven forward by reason of environmental advantages as much as its social benefits because it enables reuse of structures and avoiding demolition and its wastes (Mokhtar & Korumaz, 2017) and reconstruction (Yung & Chan, 2012). Besides, revaluation of existing buildings prevents urban sprawl and waste of land in earth; that is, saving from global greenhouse gas emissions 40% based on new buildings with their components and embodied energy– “the energy used in the production of raw materials to be used in the construction” at least 95 % (Apserou, 2013) – in connection with construction material and its technical instruments, transportation, natural resources and other facilities is achieved (Apserou, 2013; Commonwealth of Australia, 2004; Mokhtar & Korumaz, 2017; Tanaç Zeren, 2015; Yung & Chan, 2012). This kind of resource efficiency has remarkable place in environmentally sustainable cities.

Adaptively reused historical buildings and especially landmarks were generally constructed with traditional qualified and durable materials (e.g. reinforced concrete), and preservation of original nature prolongs life-span of the fabric (Tanaç Zeren, 2015; Yung & Chan, 2012). In order to achieve socially sustainable communities via adaptive reuse, environmental advantages are not enough for this objective; economically, physically, administratively and socially – all necessary criteria should be supplied together (Yung & Chan, 2012).

3.2. IMPLEMENTATION SCALES OF ADAPTIVE REUSE IN URBAN REGENERATION PROJECTS

Adaptive reuse becomes a tool for historical quarters over the last years due to its benefits mentioned above. According to researching on adaptive reuse case in literature, it is commonly implemented in building scale, streets scale and neighborhood scale. Most of the time, adaptive reuse of the building connotes monumental structures which have heritage/historical value. Besides, specific to this study, adaptive reuse of the street connotes structures and public space which they surround and enables interaction of the community; and as a neighborhood scale, it connotes historical residential areas where local community lives in valuable urban pattern and architecturally distinctive dwellings. This section provides examples from Turkey and from the world in three scales in order to observe strategies on scale and context basis and their outcomes.

3.2.1. Adaptive Reuse in Building Scale

The first example reused building adaptively is selected as a Millet Hamamı which is monumental entity and from Turkey to understand the conversion of monumental structures in the case area in terms of Turkish context. The second example is Tate Modern Museum in London, United Kingdom a famous adaptive reuse example mentioned in the literature. It provides how the function which is no longer available to use in contemporary life can turn into a facility center for the public.

3.2.1.1. Adaptive Reuse Project of Millet Hamamı, Afyonkarahisar, Turkey

Millet Hamamı (hot bath in Turkish) is located in Afyonkarahisar, in the historical center of the city and the southwestern part of the Afyon Castle a preservation area with its traditional pattern bearing the features of 17th Century Ottoman Empire (Aydın & Okuyucu, 2009). In time, Millet Hamamı lost its original public hot bath function and worn away because of dysfunctionality; therefore, Central Government of Afyonkarahisar to regain physically and functionally has assigned new function as “Culture and Neighborhood House” to satisfy the needs of local residents socially and

culturally; and restored properly for new usage until 2005 – the date when it was started to use with new function (Aydın & Okuyucu, 2009). The physical change of Millet Hamamı can be seen in Figure 3.1.



Figure 3.1. Before and After the Restoration of Millet Hamamı in Conversion to New Function (ÇEKÜL Vakfı Website, 2005)



Figure 3.2. Before and After of Enclosing Space of Millet Hamamı (T.C. Afyonkarahisar İl Özel İdaresi, 2019)

Millet Hamamı has been adaptively reused for community center, which is beneficial for the local community. Each unit in the structure and architectural components are refunctioned according to new use's features; therefore, this adaptation has comprised spatial implementations and social upgrading by its advantageous functions choice for the community. Besides, improving open/green space in enclosing area (Figure 3.2) also has enabled environmental convenience for individuals. It also provides cultural significance derived from the history it has had since the Ottoman Period and its unique identity. The contemporary use by adding current needs on infrastructure is clear, but disjointedness on uses and units has caused some issues. Climatic and

interior space characteristics of the hot bath could not correspond to new uses and has brought discomforts to the users.

In the project process, the interventions are seen in Table 3.2 in detail and according to these interventions, outcomes are explained below (synthesized from Aydın & Okuyucu, 2009). The outcomes which have effects on social sustainability in positive terms will be used for creating ground for assessment tool for building scale evaluations together with Tate Modern case.



Table 3.2. Interventions, Their Classifications and Outcomes of Adaptive Reuse of Millet Hamamı
Synthesized from Aydın & Okuyucu, 2009

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	Identifying and providing spatial requirements: administration unit, collective uses and areas, education units and service units; and each unit placed in Hamam according to its sizes.	With new functions enable to keep in mind that original works are not forgotten; preserving the existence of culture and maintaining it with new function
	Selecting the function according to the properties and size of the space	Flexibility of unit usage
	Providing technical requirements such as restoration, ventilation, heating, lighting qualities, equipment within restoration	- Incongruity between some units and usages - Get rid of the ruin view visually
	Taking into consideration spatial features have an important place in function selection: location, accessibility, being a landmark in the area	- Bring the environment dynamism with being landmark - Environmental and visual integrity - Feeling happy by users
SOCIAL	Function selection is made for social utility and meeting the community's requirement	- Gain ability of acquiring economic benefits by users - To know the new function by the dwellers and contribute to the presentation of the city
	Providing cultural, self-improvement, health, foreign language, art courses and seminars to increase the awareness on specific issues	enabling participants to knowledge, skills and self-improvement
ECONOMIC	Local government efforts to save historic buildings	Continuity of refunctioned usage
	Staff and economic support during the process	
ENVIRONMENTAL		
	Landscaping the environment	- Get rid of the ruin view visually - Suitable gathering area for society to socialize - Healthy environment for locals

3.2.1.2. Adaptive Reuse of Tate Modern Museum, London, UK

The second and one of the most famous adaptive reuse examples is Tate Modern Museum which is located in London, United Kingdom. Tate Modern is national museum of modern art in London and it was primarily constructed as Power Station in Bankside according to Sir Giles Gilbert Scott's design in between 1947 – 1963 and it was used as its original aim until the 1982 (Paz, 2006) (Figure 3.3).

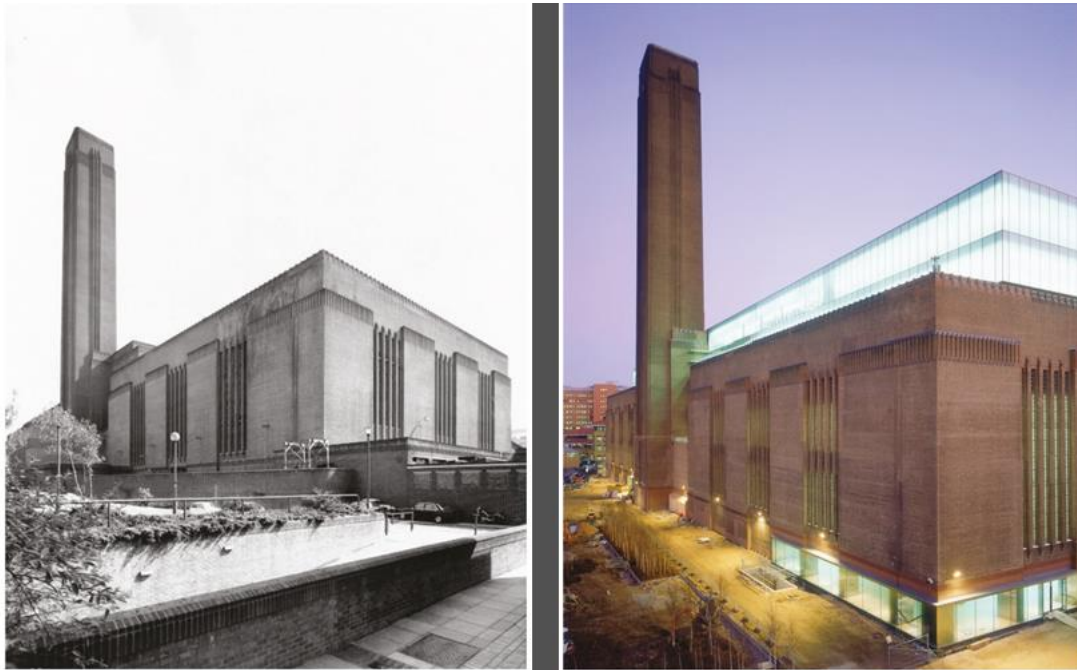


Figure 3.3. Tate Modern in 1960s as Power Station (left) and as a Modern Art Gallery in 2016 (right) (Wollenzier, 2016)

With its tremendous scale and architectural characteristics included excessive amount of brick material utilization (4.2 million bricks) on external façade, it is a monumental structure and landmark in London (Kamari, 2011). Even if after the time it became useless since 1982 and developers' persistency on destruction of original building and reconstruction for new uses until 1994; it was protected by locals because of its architectural value and via competition for transforming to Tate Modern; so, the original remain was regained (Paz, 2006). The result of the competition which

announced in 1995 and applied from 1995 to 2000 the date has opened as a modern art gallery is the project of Herzog & de Meuron Architect Firm (Paz, 2006).



Figure 3.4. Before (left) and after (right) adaptively reuse of Tate Modern Interior Space (Waknell, 2016)

During the process, redundant equipment (included heavy machines etc.) necessary to power station but not for an art gallery was removed (Paz, 2006) (Figure 3.4) to obtain adequate space for human mobility and interaction modern art gallery should have. According to Bullen (n.d.), it is a well-known adaptive reuse practice due to “...*history and modernity, function and aesthetics seamlessly meld.*” The interventions and outcomes of the interventions prove the reason of why it is successful adaptive reuse in Table 3.3:

Table 3.3. Interventions, Their Classifications and Outcomes of Adaptive Reuse of Tate Modern Museum Synthesized from Archi – ninja, n.d.; Bullen, n.d.; Jones, 2013; Kamari, 2011 and Paz, 2006.

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	• Cleaning and air conditioning existing galleries.	• “Light beam” has enabled addition to specific view for London skyline – continuation of sense of landmark
	• Renovating and restoration of building’s all framing.	• Apparent additions on monumental structure provides differentiation between old and new.
	• Using additional structural material such as steel, concrete, wooden floors etc.	• Not to lose its heritage value which enables structure’s “power and energy” in refashioning process.
	• Attaching “light beam” which is 2-storey glass structure added on the roof and provides cafe, London view across the river and natural light for the upper galleries and ideal environment for viewing art.	• Retaining “original industrial character” • Becoming “cultural icon” and enhancing “urban character”
	• Using the original plan’s objectives – especially internal part of the building – as much as possible.	• Due to emphasis on conserving the structure highly dependent on its original form and successful inner space control, it was able to be transformed and upgraded time to time with new extensions.
SOCIAL	• Using the spatially large “Turbine Hall” with its original physical features as exhibition gallery for massive art works, remarkable two entrance – exit points and temporary exhibitions with the contributions of natural light derived from light beam and windows usage and also artificial light.	• Multiple ways to reaching other functions • Public interaction in huge Turbine Hall in ground floor in terms of gathering place for people or only transition zone.
	• Accessibility due to being landmark then and now.	• Evoking the idea of regenerating the surrounding neighborhood.
	• Using the structure as national modern art gallery. • Serving as both for temporary exhibitions and for permanent collections of the gallery.	• Excessive tourist visits interested in modern art – the most visited modern art museum in the world. • Attracting every kind of art-lover.
ECONOMIC	• Upgrading the economy compatible with tradition.	• Almost 5 million visitors each year. • Well-known in international scale.
ENVIRONMENTAL	• Located in riverfront and evaluating the space between structure and the river as a Tate Community Garden and green spaces open to public.	• Gardening provides to “mediate between museum and surrounding urban fabric and access from all 4 directions” • By virtue of being landmark of the site, together with the gardening, not only the structure, but surrounding natural environment has become gathering and interaction space for both locals and tourists.

Taking into account all of these interventions and outcomes derived from them demonstrates that there is no dichotomy between old and new; on the contrary, integration of old structure and new additions too perfect not to realize space extension in one-third of Tate's original space and also “*remarkable, powerful and dramatic combination of old and new architecture*” (Jones, 2013; Paz, 2006) (Figure 3.5).



Figure 3.5. Tate Modern, 2016 (Davidson, n.d.; cited from Furness, 2015)

Even if it was seemed successfully completed in 2000, the conversion process for new use was not accomplished until 2016 – the date Switch House by subtracting three oil tanks and 10-storey twisty tower situated in southern part of the building has opened and increasing the exhibition space with smaller units and meeting units for discussions (Furness, 2015; Jones, 2013) (Figure 3.6). This further intervention does not cause any tangible or intangible damage for the structure; but enhances its traditional value with modern activities.



Figure 3.6. Additional 10-Storey Volume Attached Southern Part of the Building (Tate, 2019)

Tate Modern has a function could be named as “Cultural Center” surrounded highly active in terms of dense tourist and locals mobility resulted from locating in the middle of riverfront, business, residential and leisure districts (Kamari, 2011). Therefore, Tate Modern is a frequent destination owing to landmark feature and its surrounding landscape design as seen Figure 3.7 and 3.8. Besides, according to Bullen (n.d.), Tate Modern with its new use may reshape also close neighborhood via creating new paths, public spaces, connections between buildings and people for more accessible, cultured

and beautiful city in the future. This opinion seems not impossible considering current results of the interventions in adaptive reuse process on structure.



Figure 3.7. Recreational Areas Encloses the Tate Modern (Source: Google Earth Pro, 2019)



Figure 3.8. Green public spaces northward (left) (Visit Bankside, 2019) and southward (Frearson, 2016) parts of the Tate Modern

3.2.2. Adaptive Reuse in Street Scale

According to Global Designing Cities Initiative (2019), *“A street is the basic unit of urban space.... consisting of many surfaces and structures. They stretch from one property line to another, including the building edges, land uses, and setbacks that define each side. They offer space for movement and access and facilitate a variety of uses and activities. Streets are dynamic spaces that adapt over time to support environmental sustainability, public health, economic activity, and cultural significance.”* Therefore, in the process of regeneration in historical sites, reusing buildings adaptively is not adequate by itself; because historical value is not constituted from preservation and reactivating the buildings, but also public spaces surrounding the structures and provides community interaction should also be reactivated to maintain a sense of common space for locals. Additionally, according to Savvides (2015), external components of the structure such as stoops, porches, stairs, gates, patios and decks are also elements of interaction between building and public space. Considering all these points, adaptive reuse cannot be restricted to building scale; refunctioning buildings certainly triggers rehabilitation or improvement of adjacent public space: In general, **streets** are subject to adaptive reuse with enclosing structures. As case studies, two mixed use streets: Main Street of Abbeyleigh in Dublin and Market Street in Toronto, Canada (after adaptive reuse processes) are selected.

3.2.2.1. Main Street of Abbeyleigh, Dublin, Ireland

Abbeyleigh is a town located in Dublin, Ireland since its origin goes back to 12th Century; that is, it is a historical town which has historical value and announced as “Heritage Town” in general in 2010 and as “Service Town” (includes commercial, residential, service and amenity facilities) according to “2012-18 Laois County Development Plan” in order to provide service initially its local community and rural hinterlands it depends on (Shaping the Future, n.d.). The town is consisting of a linear urban form: especially “Main Street” which has fundamental structures related to local shops, community uses and residents (Figure 3.9).

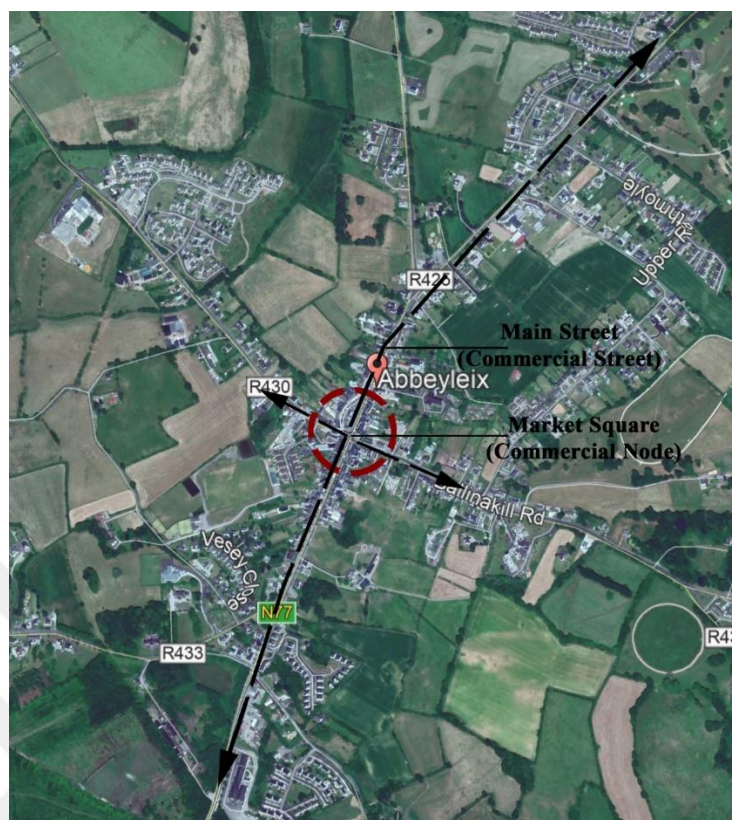


Figure 3.9. Current layout of Abbeyleigh and the Location of Main Street (Source: Google Earth Pro, 2019)

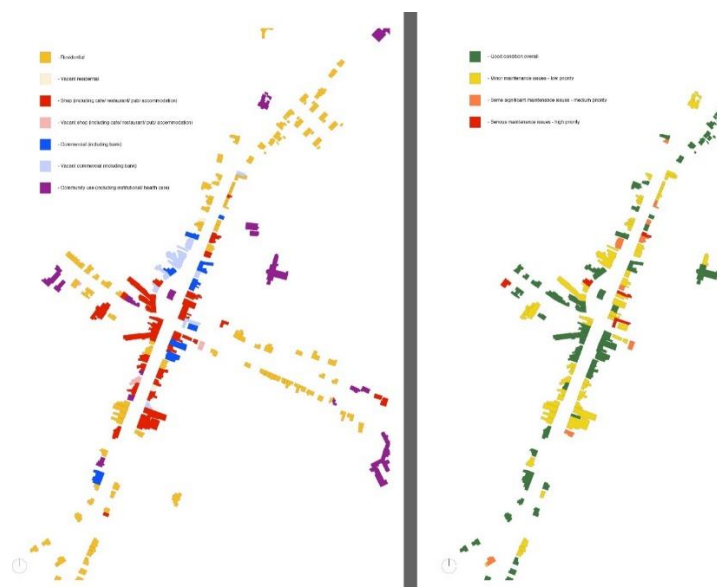


Figure 3.10. Landuse of Abbeyleigh Main Street (left) and Building Maintenance before the Project (Loci Urban Design, Planning and Architecture, 2011)

According to Figure 3.10, Main Street of Abbeyleix (left) accommodates local shops (red), community facilities (purple), commercial uses (dark blue) and residential buildings (yellow); meanwhile it includes the idle structures of these uses represented by lighter colors than steady ones. This image also represents (right) maintenance conditions of the structures through green to red: green buildings are in the best condition – and red buildings are under the high risk of stability.

After Abbeyleix became as “Service Town”, its reuse of structures and dependent public space came into prominence as an issue; such as problems – on depopulation, vitality, viability, traffic congestion due to heavy good vehicles and limited car parking, limited pedestrian paths, lower preference for local retails than central areas – needed to be solved to enable local people an attractive space (Shaping the Future; n.d.; Loci Urban Design, Planning and Architecture, 2011).

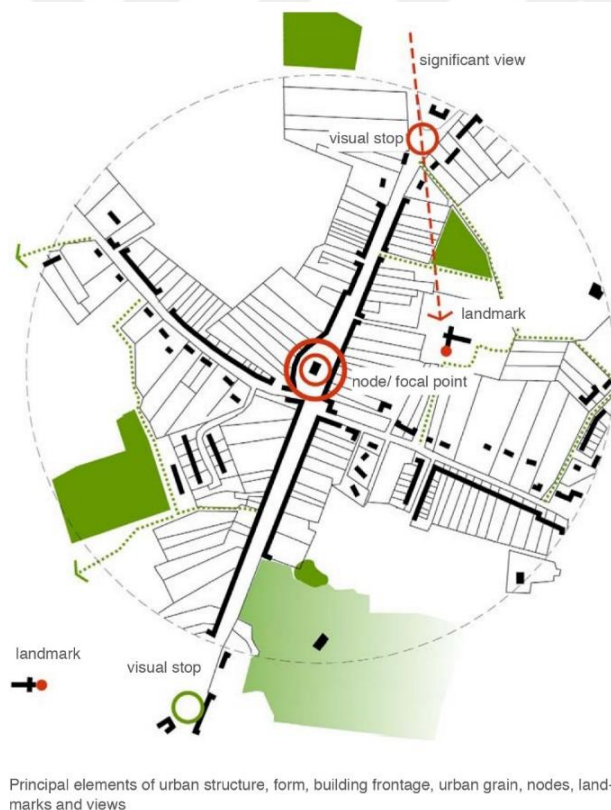


Figure 3.11. Urban form of Abbeyleix and Street Structure (Loci Urban Design, Planning and Architecture, 2011)

Even if there is an issue on depopulation, Abbeyleix has remarkable amount of local population and this population has constituted forums and committees to enhance business, community and public realm; so that reuse of the structures adaptively prepared with participatory approach including Laois County Forum, Abbeyleix Business and Community Development Forum, Department of Arts, Heritage and Gaeltacht, and architect companies (Shaping the Future, n.d.). The process of preparation of collective “Abbeyleix Sustainable Communities Plan” which includes physical, social, economic and environmental strategies was triggered initially by adaptive reuse of Italianate Market House to Public Library – which is monumental – and its surrounded landscape (Shaping the Future, n.d.) (Figure 3.11).

The interventions and outcomes of the interventions in street scale adaptive reuse practice specific to historical Main Street of Abbeyleix are shown in Table 3.4:

Table 3.4. Interventions, Their Classifications and Outcomes of Adaptive Reuse of Main Street of Abbeyleix, Synthesized from Loci Urban Design, Planning and Architecture (2011) and Shaping the Future (n.d.).

TYPE OF INTERVE	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	Implement “adaptive reuse” as a strategy in existing buildings for new context-dependent uses and plots according to streetscape color scheme in addition to rehabilitation.	Conservation of urban image and heritage value through the street within its historical characteristics.
	Keeping existing plot subdivisions and making interventions according to these subdivisions.	For further developments, maintaining existing plot and structure pattern.
	Registration of the structures in highest conservation standard and restoring “crescent” area of the Market Square.	Accessibility to appropriate spatial uses where not only the local community can meet but also for the needs of outsiders.
	To keep axes dynamic space, provision of convenient landuse and aggregation of retail and service areas in central point of the area with its connections.	Rescuing valuable structures thanks to adaptive reuse.
	Emphasizing public spaces and their connections together with widening pedestrian axes and implying traffic calming principles for safety and locality measures; besides provision of pedestrian crossings especially adaptively reused Market Square to increase pedestrian mobility.	Preservation and improvement of architectural heritage and urban identity.
	In order to reduce excessive traffic flow and gain local street feature, traffic and car parking management delivery.	Creation of powerful Market Square as a node along the street.
	Improvement of landscape, walkways and soft spaces both northern “bookend” and southern “gateway”	Tourist attraction due to its unique physical environment.
		Preservation and improvement of not only quality of structures, but also streets – that is, public spaces; therefore, revitalizing Main Street of Abbeyleix which is center of the town.
		Mobility and safety space for pedestrians and their interactions.
		Enhancement of accessibility for services.
SOCIAL	Adopting and plan establishment according to Sustainable Community Principles of ODPM (2005) mentioned in pp. 38-39.	Rehabilitation of entities and public spaces stimulate further initiatives and improvements in terms of spatial, economic and environmental actions.
	Participatory Approach including community workshops, interviews, cognitive maps, focused group discussions on sustainable community, determination of positive and negative aspects of existing area in analyzing phase.	Provision of mobility, public space and the interaction for local society from north to south with landscape and healthy environment.
	Adoption of both “bottom-up” and “top-down” approach and distribution of the duties within stakeholders and continue through the process.	Delivering sustainable community (or social sustainability) which includes strong sense of place and public realm through the site due to adaptation of ODPM’s principles.
	Determination of endangered buildings and registration as protected structures with legislation.	Protecting the value of the city in terms of its spatial and social inputs for further generations under legislative bases, so that preventing illegal decisions and actions.
		Enabling further cooperation between stakeholders for further initiatives.
		Provision of inspiration for the community sense of unity required by sustainable society.
		Having the feedback mechanism and investigating the outcomes for further actions.

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
ECONOMIC	• Strategies mainly based on enhancing local economy and attracting visitors in central axes. • Supporting local economy with Abbeyleix's rural zones. • Enhancing economy variable local initiatives, marketing and enabling local employment. • Local food production, local branding and marketing. • Initiatives for local events and festivals based on local production and sale. • Service opportunities for tourists.	• Stimulate local production-based and commercial linear urban axis • Enhancement of natural environment due to its feature of production input. • Enhancement local employment. • Triggering tourist attraction via local outputs. • Constant mobility and vitality via ensuring continuity of local activities. • Integration of local – national economy objectives.
ENVIRONMENTAL	• Adopting sustainable environment principles: <i>energy saving, waste management, sustainability of water use, reducing car – increasing public transportation tendency, green infrastructure and favorable public space</i> • Own the values of mature trees and green spaces with natural heritage and planning policies.	• Protection of natural heritage with <i>Rolling Hills, Forest Area and low-lying agriculture</i> • Improving and enlarging green spaces in both inner-city parks and rural hinterlands via protecting unique species, biodiversity and fertile areas. • Preservation and improvement of open spaces.

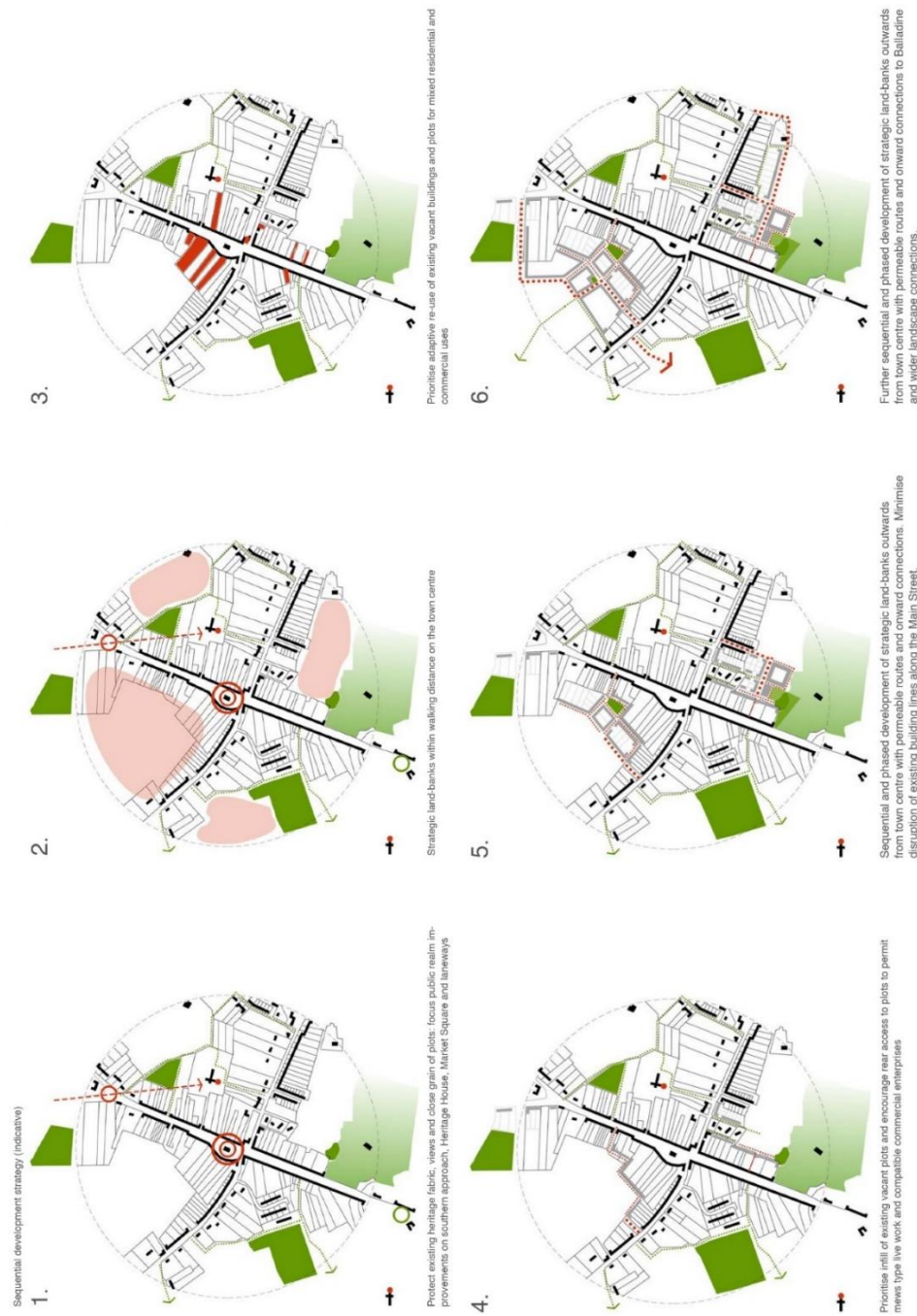


Figure 3.12. Project Process of Abbeyleix Main Street (Loci Urban Design, Planning and Architecture, 2011)

Defined interventions in Table 3.4 have integration between the buildings and public space they cover; and practices complete each other. The project process is composed

of six stages (Figure 3.12): First stage is determination and preservation of heritage zone and its formal setting including plot, façade and framework; and physical improvement of its covered space – Market Square, roadway and footpath (Loci Urban Design, Planning and Architecture, 2011). The process continued with determination of “*land-banks*”, their distance to the center, reuse of the existing structures adaptively for new functions depending on town center features: commercial, service and residential uses, and adaptation vacant plots for new function pattern via infill development (Loci Urban Design, Planning and Architecture, 2011). After these interventions, the project aimed gradual development through the land-banks and Balladine together with appropriate routes which did not interrupt the Main Street (center) and green/open system integrated with existing landscape both inner and outer part of the town (Loci Urban Design, Planning and Architecture, 2011). Therefore, it is understood that the project ended in street scale, but in terms of its effect on the town in general and prudential perspective of adaptive reuse actions in street scale has not ended; it had a progressive impact which triggers further implementation as an extension of the initial project. Another significant point is that the stakeholders have started to the project via internalizing the sustainable development objectives and community features; and they reflect these intensions on physical space with adaptive reuse strategy and empowering tangible and intangible values.

The lesson derived from this case is that adaptive reuse in street scale is not consisting of only structures located in the street; but it constitutes public space they covered in which social life originates. Additionally, reuse of street – especially in historical commercial centers – has impact on enclosing districts for regeneration and association with adjacent areas for upper scale evolutions and advances.

3.2.2.2. Market Street, Toronto, Canada

Market Street is a short street, which comprises three heritage structures with specific architectural value and history, located in Toronto, Canada (Taylor & Smyth, 2019). For a long time, it was an idle space waited for a demolishment and reconstruction of modern glass buildings; however, a private developer and the City of Toronto’s Public

Realm Section preferred to initiate conservation of the buildings and revitalize the street to protect historical value of the site (Alter, 2014; Taylor & Smyth, 2019). The heritage building – 10-12 Market Street initially constructed as hotel in 1880s, and later, before it became dilapidated, used as Old Fish Market Restaurant (Taylor & Smyth, 2019). The Market Street located in between commercial area from the west and the market from the east; and it is regenerated via adaptive reuse practice (Taylor & Smyth, 2019) in order to constitute mixed used and flexible public spaces (Dtah, 2019) (Figure 3.13).



Figure 3.13. Adaptively reused Market Street in summer period (Dtah, 2019)

The interventions and the outcomes of these intervention in Market Street are shown in Table 3.5:

Table 3.5. Interventions, Their Classifications and Outcomes of Adaptive Reuse of Market Street,
Synthesized from Dtah, 2019; Taylor & Smyth Architects, 2019 and Reid, 2015

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	• Flexible usage of the street dependent on season: in summer, as a front yard of the restaurants and sidewalk; in winter (4 months), as a car-parking lane.	• Discontinuance of pedestrian mobility and vehicle dominant space during the winter – pausing social mobility
	• Segregation of pedestrian and vehicle parts via paving according to AODA guidelines and barrier curbs.	• Allowing appropriate space for the pedestrians through the street with safe barriers and pavements.
	• To complete the block, design of 2-storey retail structure with glass doors at the southern lot which was previously used as service garage.	• Together with additional building, encouragement of pedestrian transitions all times of the day
SOCIAL	• Multiple experts on street and landscape design involvement.	• Converting the street attractive, safe, animated and sustainable spaces.
	• Collaborative design process and development of new standards and policies.	
ECONOMIC	• Retail activities including restaurants and shops.	• Continuation of boutique economic activities with support of historical attraction zone.
ENVIRONMENTAL	• Well integration of vehicle road, sidewalk and concealed drainage	• Healthy and pleasant streetscape due to integration of drainage system and street adjustments in addition to sequential trees.

In addition to these actions, developers of the Market Street also have thought close the north block of the Market Street to enable continuous pedestrian mobility in the future (Taylor & Smyth Architects, 2019); therefore, it may be provided socially more vibrant spine in Toronto.

Although all interventions and additions in the scope of adaptive reuse practice and revitalization of the heritage valued street, community sustainability has remained restricted due to being inactive in winter period and occupation of the vehicles rather than local society. It is not possible socially sustainable life if the public space and the physical structure cannot be functioned.



Figure 3.14. Adaptively reused Market Street in winter period (Reid, 2015)

As seen in Figure 3.14, dynamic life and interaction in summer time (Figure 3.13) cannot be observed in winter. Limited pedestrian preference on using the street occurs in comparison with summer period, and car parking is dominant in historically valued axis. There should be further initiatives to keep dynamic the Market Street in winter.

3.2.3. Adaptive Reuse in Neighborhood Scale

Neighborhood in urban planning field can be defined by Mumford (1954, p. 260 cited in Park & Rogers, 2015, p. 19) as “an *“important organ of urban life,” in which*

people are bound together, interlinked, and live interdependently like all living organisms” or more recently “a particular form of social reproduction where human activities, including daily life, social interaction, and political and economic commitment, take place (Martin 2003, cited in Park and Rogers, 2015, p.19). Therefore, neighborhood unit is a core which all social relations are dominant and needed to be conserved and upgraded for sustainable communities. Besides, adaptive reuse practices are not delivered only in building scale or street scale; they may also be utilized in historical neighborhoods – mainly residential purpose – where traditional architecture which reflects its construction period, its physical attributes and its experiences. Therefore, not only retail or service structures and public realm in historical / heritage-valued cores, but also residential zones could be adaptively reused within modernized supply of needs or defined differentiated functions again in the contemporary context. The first case investigated in this section is Şanlıurfa which is located in the southeast region of Turkey and it is also an adjacent province of Gaziantep. Şanlıurfa is examined due to its similarities with Gaziantep on geography, ethnicity, historical processes and cultural values. Therefore, this completed adaptive reuse practice can be evaluated with its favorable and adverse outcomes. Later on, Al-Abhar Historical Neighborhood in Yemen is investigated as an example of a different context.

3.2.3.1. Şanlıurfa Historical Quarter, Şanlıurfa, Turkey

Şanlıurfa is a Turkish city which is located in the South East Anatolian Region of Turkey. The city is known as Holy City in which three prophets of monotheistic religion were born and lived, being a multi-cultural society including Anatolia and Arabian countries. It is an attractive city for tourists due to its cultural diversity; additionally, it has a value of one of the oldest places of civilization in virtue of its geographic location of trade route and its land fertility used by these religious societies (Yıldırım & Turan, 2012). Considering these attributes, civil architecture and social structure in the historical neighborhood of Şanlıurfa was shaped according to Northern Mesopotamian architecture and ornament techniques with limestone, which is available in the city itself, according to the rules of Islamic requirements, its conservative lifestyle and

kinship relations (Kenthaber K lt r Kurulu, 2019; Y ldırım & Turan, 2012). In addition to them, the traditional structures have high walls and the streets are too narrow, so that architecture has aimed cooler spaces in Şanlıurfa (Figure 3.15) where temperature is more than 45  C in summer (   B Yapı İ leri M d rl   , 2019). Interior spaces of specific architecture of Şanlıurfa are composed of private courtyards and recesses within ornament details and 18th century construction techniques; therefore, it has authentic building and space composition in the region (Y ldırım & Turan, 2012).



Figure 3.15. Traditional Şanlıurfa Residence (left) and Streets (right), Source: Google Images, Accessed in March 2019.

As other historical structures, public spaces and quarters, Şanlıurfa traditional neighborhood was also abandoned because primitive functions in the site could not meet the needs of community, alterations in family pattern and way of lives. Therefore, most of the original society moved to areas where modern services are available, meanwhile traditional neighborhood was occupied low-income and migrant groups that caused reducing land value and dilapidation of the structures (Y ldırım & Turan, 2012). As a result of these course of events, in 1992, government project named as “Conservation and Revitalization of Şanlıurfa Historical City Centre” was announced and actualized by Surkav (Development Trust of Şanlıurfa Culture, Art, Research and Education): It comprised demolition of irrelevant structures to original pattern, conservation and restoration of mosques, khans, the castle, traditional residences and as natural assets Ayn Zeliha and Hali’ r Rahman Lakes, redesign of subway and car-parking to reach reused areas, and adaptively reuse of traditional

houses belongs to local owners in order to refunction as accommodation, restaurants and cultural spots for leisure tourism (Yıldırım & Turan, 2012). In historical neighborhood which is subject to reuse of the structures adaptively has composed of commercial refunctioning (Çardaklı Köşkü → Local Restaurant, traditional house → Cevahir Guest House, Gülizar Guest House belongs to Kılıçlar Family → Local Restaurant and Pınarbaşı Mansion belongs to Kürkçüzade Halil Efendi House → Local Restaurant) initiated by private developer and community center refunctioning (Traditional housing → Surkav Cultural Center and Akçarlar and Tenekeciler Houses → Harran University Cultural Center) initiated by government involvement, Harran University and development trusts; rest of the neighborhood has served as dwellings for the society (Figure 3.16) (Yıldırım & Turan, 2012).

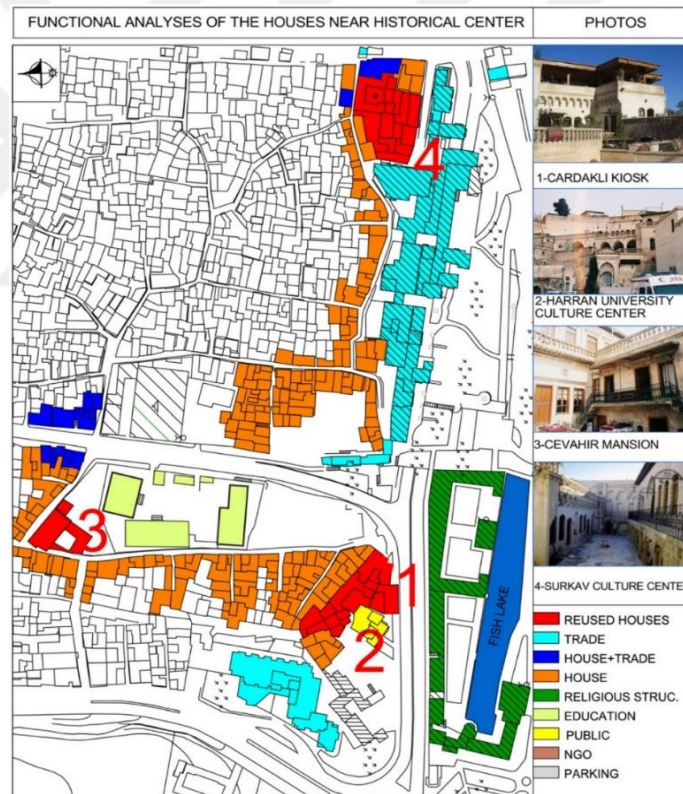


Figure 3.16. Landuse of Historical Neighborhood Adjacent to Historical Center of Şanlıurfa
(Prepared by Yıldırım & Turan, 2012).

Through this project, the interventions and the outcomes of these interventions has listed below in Table 3.6, physically, socially, economically and environmentally:

Table 3.6. Interventions, Their Classifications and Outcomes of Adaptive Reuse Strategy of Şanlıurfa Historical Neighborhood, Synthesized from Yıldırım & Turan, 2012

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	Merging the buildings in upper level and closing open spaces such as recesses to have appropriate space for new use.	Accommodation and catering service requirements and technical infrastructures were integrated on traditional pattern, however massive equipment and operational service mechanism has caused much more deterioration of original buildings
	As requirements of new uses, structural changes have been occurred: attaching or removing walls and windows, adding new floors etc.	Additional supplements caused degeneration of ventilation system which authentic pattern had by itself originally
	Adaptively reuse achieved in two way: compatible reuse to accommodation and catering by private developers and most appropriate reuse to cultural centers by government initiatives.	Over accessibility has impaired authenticity of the site.
	For accommodation service: additional bathrooms, cooking, resting, air-conditioning, lighting, management spaces were supplied.	Government involvement processes have delivered much more improvement on heritage and architectural value via minimum intervention to original and secure environment.
	For cultural centers: Handicraft courses, education, exhibition space for handicrafts, meeting rooms – additional structural burdens, but with more portable and removable components.	Physical conformity of the structure for community centers.
	Rehabilitation of the streets which allowed to vehicle usage	Distinctness between developers and the emergence of results both positively and negatively on structures and public spaces damaged the unity and integrity of the practice; the adaptive reuse strategy did not provide the required effect.
SOCIAL	Adaptively reused restaurants and community centers have been used for musical activities.	Musical activities in reused structures has provided for community gathering places and socializing space.
	Community and cultural centers have been developed by only government initiatives via adaptive reuse for meeting needs of society and planning process for cultural centers was prepared by participatory approach with stakeholders.	Only a couple of community center development could be achieved by government initiative and restricted insufficient in comparison with commercial functions.
ECONOMIC	The number of visitors and cultural tourism fanciers are too high and to keep that kind of dynamism, reuse was concentrated on resting places and retailing.	- Excessive amount of visitors and new functions satisfied the visitors have imposed burden to original architecture and its compounds. - Perception of sustainability only in terms of economic continuity, but not in other perspectives.
ENVIRONMENTAL	Reuse of historical buildings to revaluation of existing entities in purpose of environmental sustainability.	Prevention of waste of material, energy and time.

Apart from earlier examples and scales, this practice included not only commercial streets and monumental structures: it comprised residential buildings which reflect history of the space and specific life style of the community. However, general perception on regenerating historical neighborhoods via tourism has caused failures structures' and communities' continuity in the site. Even if local government paid attention to local inputs in adaptive reuse of cultural centers; it could not be efficient. Today, there are still attempts on regenerating historical zones of Şanlıurfa, but the effects and achievements will be analyzed in near future.

3.2.3.2. Al - Abhar Historical Neighborhood, Sana'a, Yemen

The city of Sana'a is a capital city of Yemen located in western part of the country. Yemen located in southern part of Saudi Arabia, and as geographical condition, the historical perspective, climatic features and sense of settlement (as a conservative society) was almost similar with southern – south-eastern part of Turkey, but even if it contains these similarities, it has its own authentic structural, social, economic and environmental characteristics which differentiates from other historical quarters (Figure 3.17).

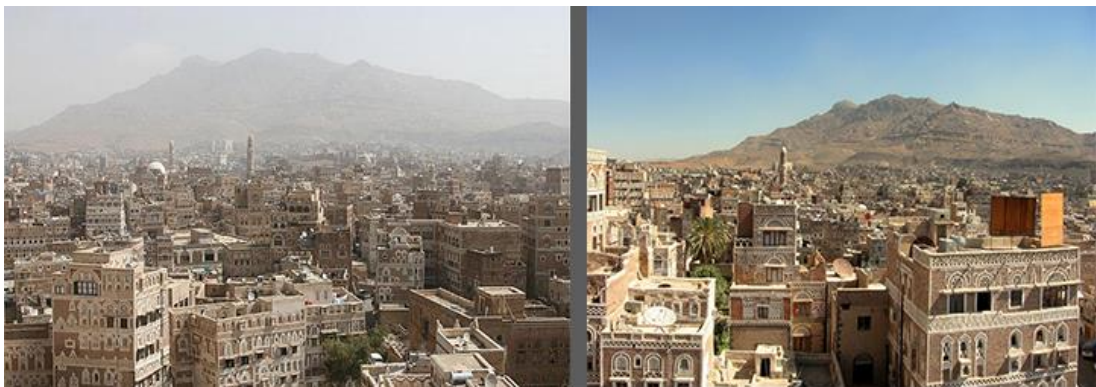


Figure 3.17. Historical Neighborhood of Sana'a City (Source: Google Images, Accessed in March 2019)

The old city Sana'a has organic pattern with its traditional buildings as such most of the historical neighborhoods in eastern geography; however, it has a specific vertical building development called as “**tower houses**” which has 5 floors in average and

whose ground floors designed for animals and storage purpose initially (Haidar & Talib, 2013) (Figure 3.18).



Figure 3.18. Tower Houses (by Retlaw Snellac) and Traditional Streets (by Martin Reijerse) in Sana'a, Yemen (Source: Pinterest, Accessed in March 2019)

The old city has original characteristics involving strong social bonding in terms of their beliefs, cultural events and physical environment needed to protect; therefore, the site was announced as “UNESCO Heritage Site” which brought international conservation criteria, supervision and allowed to establishment of “GOPHCY” (General Organization for the Preservation of the Old Sana’a) in 1984 which later on extended for all historical quarters in Yemen (Haidar & Talib, 2013). In addition to these conservation concerns of the old city, economic crisis entailed the private owners and local government to reevaluate the buildings for income source. Spatial improvements such as safe environment, water resources, agriculture, health, education, culture and religion needed by local dwellers are provided via adaptive

reuse of the buildings as a whole or partially (Figure 3.19) (Haidar & Talib, 2013). Adaptive reuse initiatives were commenced via cooperation of local government and international organizations including UNESCO and UNDP, and one of their objectives in addition to spatial improvements was promoting traditional art and craft movements while enhancing community's life; however, there were issues on reuse such as private ownership dominance resulted in unsuitable adaptation and superficial modernization and service provision (UNESCO, 2008 cited in Haidar & Talib, 2013).

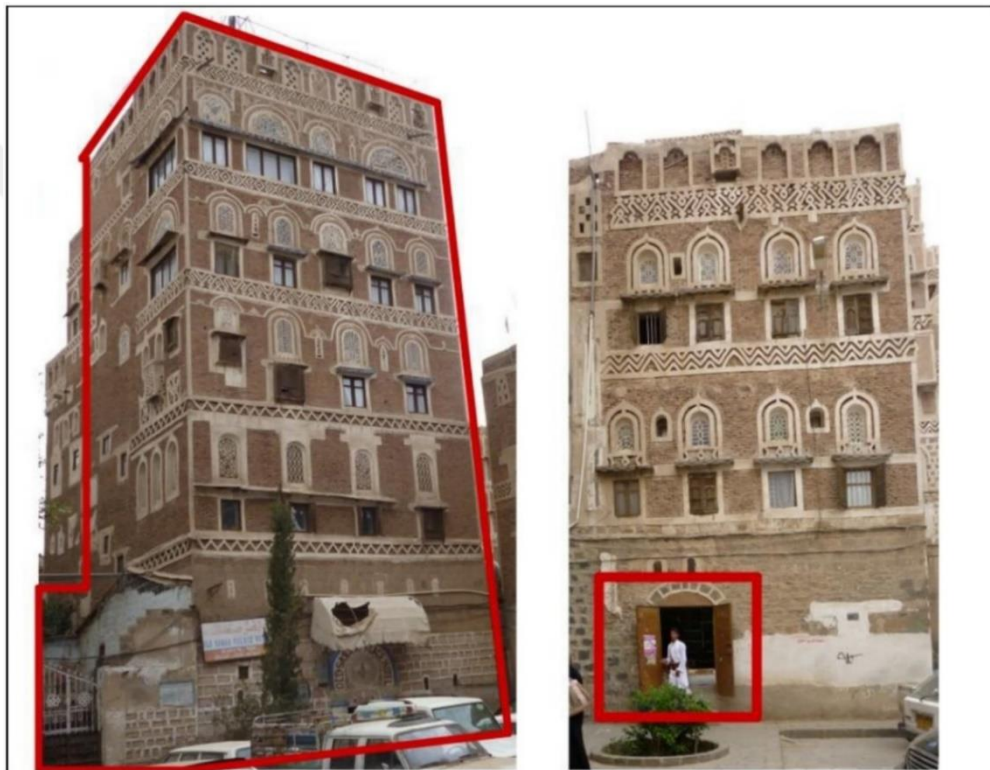


Figure 3.19. Adaptive Reuse Implementations Fully (left) and Partially (Haidar & Talib, 2013).

Sana'a consists of 61 traditional quarters which called as Hara and Al-Abhar is one of these quarters south part of Sana'a comprising dominantly residential **tower houses** which their sizes vary according to status; **the mosque** as Holy location centered on the neighborhood hosts education, worship, cultural ceremonies such as wedding or death and viands supply for travelers; **water fountain** which is correlated with central mosque and open spaces and has traditional ornaments and dome; **open spaces** which

feature playing area for children, gathering place for dwellers and tourists, hosts for social and cultural activities important to Yemeni Society – especially together with mosque; **hot bath** (called Hamam) which is cultural space for Islamic lifestyle; and **fruit and vegetable gardens** where local women community produce and socialize (Figure 3.20) (Haidar & Talib, 2013).

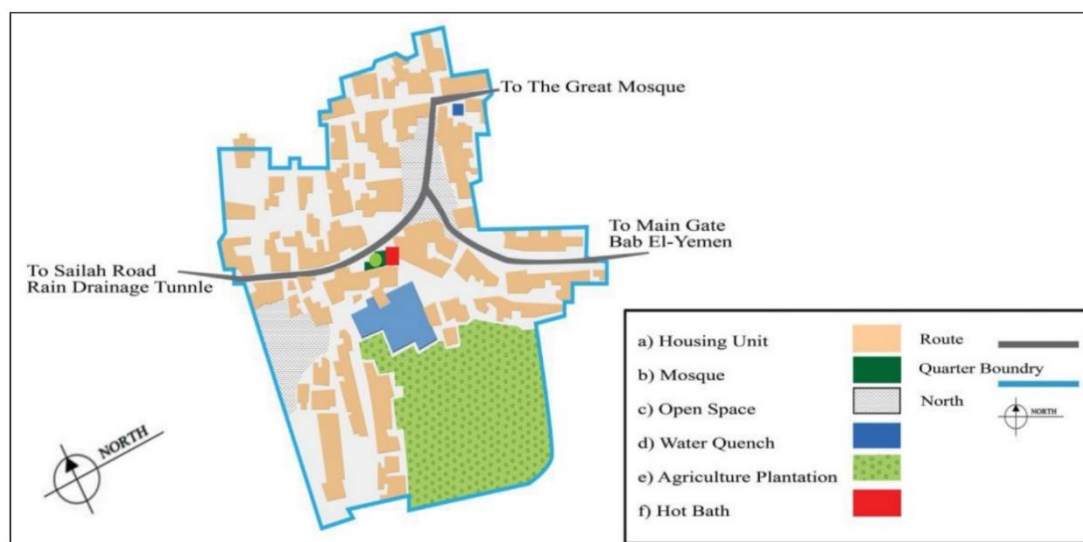


Figure 3.20. Landuse of Al – Abhar Neighborhood and Peculiar Structures to Yemeni Society (Haidar & Talib, 2013).

All these structures are specific to Yemeni society and their Islamic rituals. Even if these structures seem used by the dwellers of the quarter, it was also open to other residents living in other quarters in Sana'a; therefore, together with inter-quarter relations, intra-quarter relations and authentic rituals in publicly open buildings which reflects the culture and architectural values established strong social bonding and interactions (Haidar & Talib, 2013). Adaptive reuse implementation to protect traditional urban and architectural pattern and the outcomes of the practice can be seen in Table 3.7:

Table 3.7. Interventions, Their Classifications and Outcomes of Adaptive Reuse Strategy of Al - Abhar Historical Neighborhood, Synthesized from Haidar & Talib, 2013

TYPE OF INTERVENTIONS	INTERVENTIONS	OUTCOMES OF THE INTERVENTIONS
PHYSICAL	Adaptive reuse of residential tower houses in two ways: partially or fully: Fully refunctioning to cultural center, education (school), hotel and charity organization by government, experts and international organizations.	While government concern was society improvement and conserving significant heritage buildings via adaptive reuse; private owners of the buildings focused on economic benefits of reuse, so function choice end intervention degree less controlled extensively on main street.
	Partially refunctioning to retail services such as grocery, wedding services, hairdresser, storage etc. at ground level which faces main street by private owners of the structures.	More than one same function occurred due to uncontrolled refunctioning by private owners.
	Organizing car parking spaces in open areas for gathering places of local community.	Increase in pedestrian and traveler access.
		New functions benefit the local dwellers in immediate circle.
		Increase in outsiders, vehicle access and terminating local society's interaction in street level and open spaces as a children playground.
SOCIAL	Refunctioning the structures with traditional art and culture.	Increase in vehicular traffic to service new retail uses.
	Refunctioning the structures with traditional art and culture.	Destroying privacy and operations of other public functions even if they are not adaptively reused.
ECONOMIC		Destroying privacy of conservative society, traditional activities, events and gathering.
		Enhancement of traditional handicrafts and their shops.
ENVIRONMENTAL		Tourist mobility in street level.
		Income provision from traditional art popularity and being tourism attraction point.
		Due to lack of supervision, water shortage.
	New water supply system by government initiative.	Discontinuation of agricultural production and waste of land.
	Hot bath service has continued; it uses gasoline for heating.	Cutting off socialization objective of fruit and vegetable gardens for women.
		Water supply from mosque tank.
		Using gasoline has harmful effect on environment and sustainable development.

As seen in Table 3.7, adaptive reuse practice implemented physically successful, yet unrestrained actions by private owners of the structures occasioned the death of social life and sense of belonging because of eradication of physical spaces people gather, socialize and knit up via increasing visitors and vehicles. The public spaces which traditional events actualize are no longer efficient (Haidar & Talib, 2013). Lack of knowledge on heritage conservation, sustainability of community and economic concerns disregarded and convenient refunctioning in adaptive reuse in social sustainability aspect has failed.

3.3. ADAPTIVE REUSE AS A TOOL FOR SOCIAL SUSTAINABILITY IN URBAN REGENERATION

In Chapter 2, social sustainability and change in social aspect of the sustainable development are clarified in terms of their deficiency in historical quarters. Adaptive reuse is designated as a tool for enabling social sustainability, since the principles which provide social sustainability coincides the adaptive reuse strategies and positive social outcomes. Historical environments have an atmosphere which intensifies the sense of unity and influences social relations affirmatively; therefore, most of the time, they are registered by governments to protect this atmosphere (Altan & Karaderi Özsoy, 2017). However, as mentioned before, only conserving by legal regulations do not enable community's maintenance and in parallel with this, sustainability of physical space. That means, actually, the continuity of historical spaces highly depends on policies which are socially satisfied. Ijla & Broström (2015 cited in Altan & Karaderi Özsoy, 2017) clarified advantages of reuse of historical heritage in social terms as:

- *“Reuse of structure comprises not only regeneration of the surrounding neighborhood, but also establishment of connection access previous periods.*
- *It provides neighborhoods which has sense of space; rather than demolishing structures in problematic area.*

- *Physical revival which reuse creates influences surrounding structures positively and triggers improvement of them.*
- *Preservation of historical structures is always needed due to the fact that it can develop within its creation impact of the strong streets and districts in the city.*
- *Reuse of the structures enables tangible connections with the past, and they might be source of income for the major part of the society.*
- *Different individuals and communities might evaluate their heritage structures as a holder and proud of the memory.”*

As mentioned in these advantages, the one important point is achieved: reuse of the structures adaptively has an impression on the surrounding environment; therefore, even if adaptive reuse is implemented at building scale, its effect extends through spatially. This extension enables larger common identity improvement and sense of ownership in regenerated environment, so local community feels they belong to the area where they are accustomed to with their rituals. This can be realized exact opposite: the adaptive reuse tool might be directly defined at neighborhood scale, and dependently through its building scale. It is also possible that in larger historical quarters, all these scales actualized dependently and in an integrated manner. Adaptive reuse in street and neighborhood scales ensures coherent and harmonious environment between related structures in terms of visual, historical and authentic urban image. In the view of these conditions, adaptive reuse would not be thought as specific to one structure; when its impact taken into consideration, reused structures and areas is a tool for the maintenance of the community. As a result of these outputs, the idea of adaptive reuse as a tool for social sustainability achievement in historical quarters is asserted.

Aydın & Okuyucu (2009, p.37) constitute measurements under two titles while evaluating adaptive reuse as a contributor to social sustainability in the process of interpreting adaptive reuse of Millet Hamamı: (i) *social, cultural and communal components* which investigates influence scope of structure via adaptive reuse and (ii)

structural and adaptation to refunctioning components which investigates achievement on physical space – adaptation coherence in refunctioning period. They explain these components in provision on socio-cultural sustainability in Table 3.8.

Table 3.8. Measurements on evaluating social and cultural sustainability in reused structures (Aydın & Okuyucu, 2009, p.37)

SOCIAL AND CULTURAL SUSTAINABILITY	
 	
Social, Cultural and Communal Components	Structural and Adaptation to Refunctioning Components
➤ Not forgetting the original function ➤ Making the new function is known ➤ Compliance with the environment ➤ Draw attention in urban pattern ➤ Being a symbol ➤ Contribute to the promotion of the city ➤ Being a reference point ➤ Meeting the need of the city ➤ Getting rid of ruin view, preventing visual pollution ➤ Social, cultural and economic benefits to users	➤ Visual integrity with the environment ➤ Ease of access to the structure ➤ Construct of spatial relations ➤ Responding to action requirements ➤ Competence for actions: ✓ <i>The aesthetic appearance, size, height and flexibility of use</i> of the spaces ✓ <i>Lighting, ventilation, sound distribution, equipment comfort and space temperature</i> requirements for comfort conditions

These measurements comprise criteria for maintaining the society with implementations at building scale. However, first measurement related with the community gives a chance for further practices at larger scales. Therefore, even if defined first components seems eligible for only structures, intrinsically, they are eligible for further reuses in regeneration contexts. According to social sustainability concept introduced in Chapter 2, Dempsey et.al. (2012), Darchen & Ladouceur (2013) and Colantonio & Dixon (2009) have identified criteria to ensure social sustainability in the regeneration context (Table 3.9).

Table 3.9. Social Sustainability Criterias in Regeneration Context Derived from Chapter 2 (pp.43-44)

SOCIAL SUSTAINABILITY CRITERIAS	
According to Dempsey et. al. 2012; Darchen & Ladouceur, 2013 ✓ <i>“Interaction with social networks or other residents</i> ✓ <i>Participation to activities of collective community</i> ✓ <i>Sense of pride of place</i> ✓ <i>Residential stability (vs. turnover)</i> ✓ <i>Security (lack of disorder and crime).”</i>	According to Colantonio & Dixon, 2009 ✓ <i>“Single task ad-hoc agencies and public private partnerships (PPPs)</i> ✓ <i>A well-resourced and integrated approach</i> ✓ <i>Regeneration agency offices in the areas – to guarantee a forum for discussion and transparency, helping reduce mistrust towards city authorities, which often characterizes these areas.</i> ✓ <i>Image and branding – to attract new inward-investments in social, economic and green infrastructure</i> ✓ <i>Municipal authorities to have plans in place – to minimize the involuntary displacement effect on local communities in terms of housing and local economic activities and services.”</i>

In addition to these criterias, to provide social and cultural sustainability in reused structures, the criteria Aydın & Okuyucu (2013) identified also enables continuity of the societies due to this practice as a sub-strategy of urban regeneration basis. Therefore, in the light of these criteria, the integrative principles assemblage for social sustainability delivery (Table 3.10) has constituted to be examined for all scales’ assessment and specifically in the case investigation of the study.

Table 3.10. The Integrative Principles for Social Sustainability Delivery (Synthesized from Colantonio & Dixon, 2009; Dempsey et.al. 2012; Darchen & Ladouceur, 2013)

PRINCIPLES FOR SOCIAL SUSTAINABILITY DELIVERY	➤ Physical construction of the structures, their relations and integration with each other for secure environment and embracement by dwellers. ➤ Partnership Approach with public, private institutions and local community cooperation. ➤ Local organizations recognized by and involvement of local authorities to inform and discuss the regeneration process. ➤ Awareness on refunctioning of culturally-valued structures by users and developers. ➤ Policy establishment on preventing displacement or gentrification of dwellers involuntarily. ➤ Contribution on community's updated social, cultural, environmental needs. ➤ Being a remarkable no matter what scale the practice occurs in the region. ➤ Supplying the requirements of the contemporary function with its infrastructural components and visual coherence in the environment. ➤ Being a catalyst for increase in city's recognition.
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This principle assemblage is common for all scales, so this theorized perspective will be integrated with criterias in each scale to establish holistic and appropriate instruments for social sustainability to evaluate case study.

3.4. ASSESMENT TOOL FOR SOCIAL SUSTAINABILITY DERIVED FROM CASE STUDIES

In previous section, the outcomes of the interventions are delivered for each sample cases. Even if most of the outcomes are positive in terms of provision of social sustainability on their impact area, some of the outcomes are negative due to unregulated or deficient actions in adaptive reuse process. While constituting the assessment tool for each scale, adverse outcomes are also taken into consideration for taking lessons from them as much as positive ones. Each category -spatial, social, economic and environmental - in assessment tool have equal significance to enable sustainable community; in case one of them is missing, adaptive reuse practice could

not perform efficiently as it should be. Even if the criterias differentiates from each other, some of them is still similar and some of the criterias in neighborhood scale embrace criterias from building and street scale. For this reason, making sharp distinction within scales is impossible. The assessment tools in each scale which are integrated with principles for social sustainability delivery in Table 3.10 are demonstrated below in Table 3.11, Table 3.12 and Table 3.13.



Table 3.11. Adaptive Reuse in Building Scale Assessment Tool

ASSESSMENT SCALE	ASSESSMENT CRITERIA/TOOL
	Spatial: • Preserving the original work as much as possible and culture existence with new functions. • Recovering desolation image. • Enabling environmental and visual integrity. • Flexibility of unit usage convenient to further transformations and upgrading. • Visible old and new distinctness with apparent additions. • Evoking the idea of surrounding environment regeneration. • Accessibility from other functions. Social: • Conservation of architectural heritage value and urban identity. • Existence as a landmark, gathering place and socializing space for community with its all components. • Being elating space for community. • Enabling community, knowledge, skills and self-improvement platform. • Well-known by society, in national or international scale. • Keeping the environment dynamic via attracting the community or the visitors. • Additional authentic value for urban image.
	BUILDING SCALE Economic: • Continuity of refunctioned structure economically. • Gaining ability of acquiring economic benefits by users. • Contribution to representation of the city via awareness of the new function. Environmental: • Healthy environment for the locals. • Landscaping the surrounding to contribute green system of urban environment. • Getting rid of manmade ruin of the structure and its pollutants.

Table 3.12. Adaptive Reuse in Street Scale Assessment Tool

ASSESSMENT SCALE	ASSESSMENT CRITERIA/TOOL
STREET SCALE	Spatial: • Restoration or rehabilitation of valuable structures via adaptive reuse. • Rehabilitation of entities which stimulates further improvement and initiatives. • For further developments, maintaining existing plot and structure pattern. • Preservation and improvement quality of public spaces (revitalizing the streets with pavements, barriers for pedestrian safety). • Street (public space) design for pedestrian movement encouragement. • Creation of powerful public space and accessibility to fundamental functions. • Enhancement of accessibility for services.
	Social: • Conservation of urban image, identity and architectural heritage value through the street within its historical character. • Delivering sustainable community which includes sense of place and public realm. • Pedestrian interaction. • Sense of unity in the community. • Attractive, safe, constant mobility for local activities and sustainable space for pedestrians. • Registration of socio-spatial values under legislative basis to prevent illegal decisions and actions. • Having feedback mechanism for actions and investigating the outcomes of further actions. • Enabling further cooperation between stakeholders for further initiatives.
	Economic: • Continuation of boutique economic activities with local production support in historical attraction zone. • Enhancement of local employment for future generations. • Integration of local – national economic goals. • Tourist attraction due to unique historical environment.
	Environmental: • Healthy and pleasant streetscape due to technical arrangements (i.e. drainage system) and street adjustments. • Landscaping the public space and (if there is) protection of unique biodiversity and fertile lands. • Preservation and advancement of open spaces.

Table 3.13. Adaptive Reuse in Neighborhood Scale Assessment Tool

ASSESSMENT SCALE	ASSESSMENT CRITERIA/TOOL
NEIGHBORHOOD SCALE	Spatial: • Refunctioning for local dwellers' benefits. • Physical conformity of the structures (community centers, residences etc.) • Keeping the authentic urban pattern as much as possible (i.e. street widths, climatic features, pollution prevention characters) • Due to potential enormous number of visitors to the site, not visitor-based, but local society-based refunctioning. • Optimum level of physical additions or alterations to the structure should be done, so not excessive technical equipment delivering. • Limitation on refunctioning for specific uses (retail, accommodation etc.) which triggers massive service system. • Preventing over-accessibility via vehicles or on foot with consistent street design. • Validity of spatial requirements delivered in building and street scale. Social: • Conservation of urban image, identity and architectural heritage value through the street within its historical character. • Keeping the traditional activities local society has. • Protection and improvement of gathering places for socializing. • Community center development for neighborhood. • Informing the community on interventions and their essentials. • Strategies on not destroying local community's privacy and their common rituals. • Unity and integrity of developers, so that incompatible interventions cannot emerge - preventing individual practices. Economic: • Appropriate level of tourist visits and related income. • Enhancement of traditional handicrafts and shops and economic sustainability in the neighborhood. Environmental: • Infrastructure (water, electricity etc.) delivery and supervision according to principles of sustainable development and environment protection. • Prevention of waste of material and time during refunctioning period. • Continuity of (if there is) agricultural production and protection.

3.5. CONCLUSIVE REMARKS OF THE CHAPTER

This chapter provides adaptive reuse concept in holistic perspective – reasons, factors, principles, benefits – and categorization of various scales of adaptive reuse defined by the author according to deductions from sample case studies are explained. Fundamentally, they have common starting point and performance expectations on local society improvement and heritage/historical value conservation with new uses at the end; however, their policies and outcomes related to addressing scales, expectations from adaptive reuse practice evolve. These sample cases are selected in terms of their scales which give reference to evaluate Gaziantep Historical Quarter and its three significant scales: building scale for Gaziantep Castle, street scale for Culture Route and neighborhood scale for Bey and Kepenek Neighborhoods evaluations. These cases' backgrounds; spatial, social, economic and environmental policies; and results of these policies are investigated. In building scale, monumental entities which has intangible value and historically significance for the societies are investigated; so that they enable accurate ground for assessment tool to evaluate monumental Gaziantep Castle in building scale. Besides, street scale samples have heritage value in historical context and are related with local production and local economy enhancement so that they become guidelines for evaluation process of reuse of Culture Route in Gaziantep Historical Quarter. Both cases are selected from abroad, not from Turkey, because in most of the Turkish cases, either regeneration is not realized via adaptive reuse or does not pay attention sustainability in social aspect. Additionally, Şanlıurfa and Al-Abhar are two neighborhoods which are located in similar contexts with Gaziantep; therefore, outcomes derived from these practices enable more decisive assessment tool for Bey and Kepenek Neighborhoods. Later on, as a common point of urban regeneration and adaptive reuse practice which principles should be satisfied for social sustainability and the reasons of why adaptive reuse is a strategy for enabling social sustainability in urban regeneration initiatives are provided. By evaluating sample studies of adaptive reuse in different scales and associating with integrative principles assemblage for social sustainability delivery by literature, an assessment tool is established. The assessment tool is conducted

according to their implementation scales and their varied impacts, so that analyzing and comparison (of two neighborhoods) of the historical quarter's parts. In following chapter, the local inputs of Gaziantep Historical Quarter are investigated, later on, the adaptive reuse practices in different scales are explained and tested via assessment tool on whether or not adaptive reuse initiatives enable social sustainability in historical quarter regeneration process.



CHAPTER 4

CASE STUDY: ENABLING SOCIAL SUSTAINABILITY IN HISTORICAL SITES VIA ADAPTIVE REUSE IN GAZIANTEP HISTORICAL QUARTER

*“There is a great need for the introduction of new values in our society,
where bigger is not necessarily better, where slower can be faster,
and where less can be more.”*

Gaylord Nelson

In previous chapter, adaptive reuse principles as a tool for delivering social sustainability are given in different scales according to investigated cases and their positive outcomes in provision of social sustainability in urban regeneration practices proceeded in historical zones in addition to literature. In this chapter, in the direction of assessment tools constituted in previous chapter, urban regeneration practice via adaptive reuse in Gaziantep Historical Quarter is clearly explained to investigate how sustainable community is obtained or not.

In this chapter, first, the reason of why Gaziantep Historical Quarter is chosen for examining, and secondly, to create general idea of the case area, its historical background is explained to inform its traditional and authentic value in terms of spatially and socially. Later on, Conservation Master Plan which directly comprises adaptive reuse practices is explained and interpreted. Then, the historical quarter is investigated according to three scales with the results of implementations and current interventions which are still processing together with the evaluations of professionals and users – reaction of the society – involved in the process in addition to site observations delivered by the author. This section prepares ground for final evaluations of the area via understanding adaptive reuse practices in the site.

4.1. SITE SELECTION

As mentioned in Chapter 1, there are three reasons for site choice in this research. First, in the regeneration initiatives, under the Conservation Master Plan (2010, by Ege Plan) of the Gaziantep Historical Quarter, actors of the projects have paid regard to balance in between conservation and usage of the structures. That is, the plan provisions clarify the best way to protect the traditional pattern is that functioning the structures in addition to restoration, rehabilitation, renovation and reconstruction practices – which is actually means that adaptive reuse is implemented as a strategy to improve the quality of space, environment, economy and the local society. Second, Gaziantep Historical Quarter can be examined in three scales, rather than only evaluation of structure-based, but as a building scale with monumental structure (Gaziantep Castle), as a street scale with Culture Route (and its follow-up Şehitler Street) and neighborhood scale with Bey and Kepenek Neighborhoods. These three structures and locations are adjacent, integrated and the parts of the whole in the quarter; therefore, they have strong interrelationships which cannot be separated. It is a rare example which all of the scales are present in one historical quarter. Even if, these three scales are inseparable in Gaziantep Case, this practice is valuable ground in terms of composition of general principles for all scales separately. Third, although the restoration of the Gaziantep Kalesi and Culture Route Project has ended, further initiatives on Kepenek Neighborhood as an extension of Culture Route are still processing by contrast with Bey Neighborhood; therefore, it allows the comparison of two different neighborhoods together with their identical context similarities, differences and repetitive mistakes and suggestions for progressing part of the regeneration.

4.2. LOCATION AND HISTORY OF THE SITE

4.2.1. Location of the Site

The city of Gaziantep is located South-East Anatolian Region in Turkey (Figure 4.1).



Figure 4.1. Location of Gaziantep in Turkey (Source: Wikipedia.org, 2019)

It is a neighbor of Şanlıurfa from the east, Hatay and Osmaniye from the west, Kahramanmaraş and Adıyaman from the north and Kilis and Syria from the south. It is the biggest city in South-East Anatolian Region with 6745 km² surface area, and it provides industrial circulation in national and international level (Egeplan, 2010). Besides, by virtue of containing commercial functions, it is a commercial center of the region (Egeplan, 2010). Gaziantep has nine districts: Şahinbey, Şhitkamil, Nizip, İslahiye, Nurdağı, Araban, Oğuzeli, Yavuzeli and Karkamış (Gaziantep İlçeleri, 2018) and three of them are in the central districts: Şhitkamil, Oğuzeli and Şahinbey in which most of the historical context and the case area is stayed on. The old traditional center of Gaziantep locates in the center of the city (Figure 4.2).

The case area which consists of historical center starts from Gaziantep Castle, and continues with traditional inns, hot baths and bazaars through southeast and two traditional neighborhoods one of which is located at the end of the traditional commercial street at the south called as Kepenek Neighborhood and the other one is located in west part of the traditional commercial street which connects via secondary axes called as Bey Neighborhood (Figure 4.3).



Figure 4.2. Gaziantep Macroform and the Location of Traditional Center (Source: Google Earth Pro, 2019)

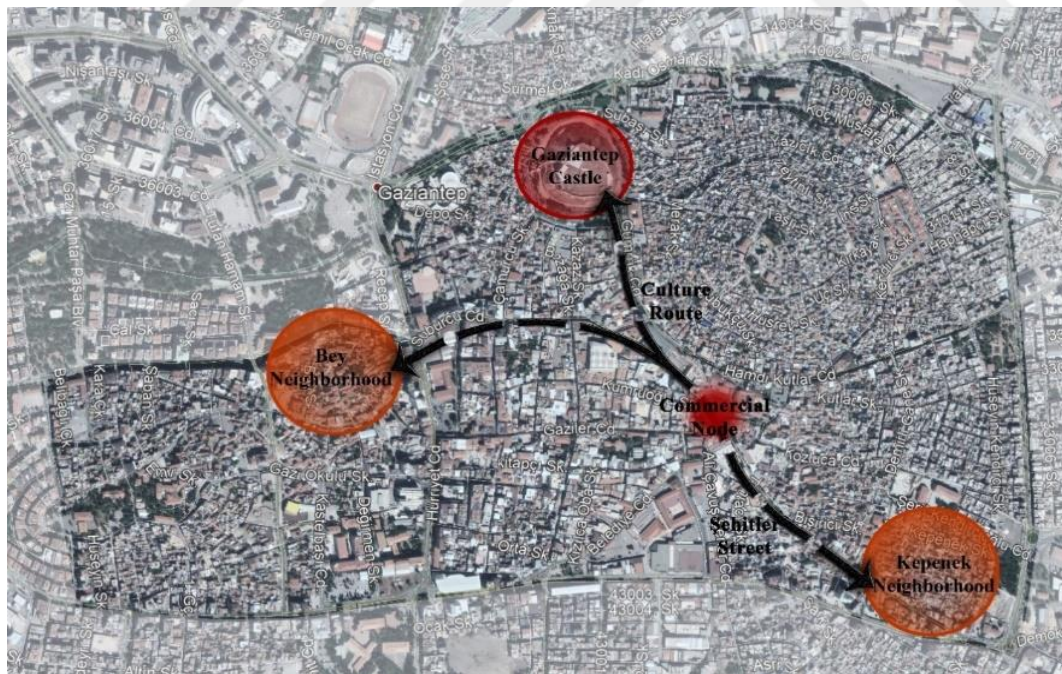


Figure 4.3. Case Area: Gaziantep Historical Quarter, Its Organic Pattern and Key Sites Subject to Study (Source: Google Earth Pro, 2019)

4.2.2. History of the Site

The history of Gaziantep goes back to Paleolithic Age (around 600.000 B.C.) and the origins of the settlement go back to 4.000 B.C. on Gaziantep Castle on the hill and its surroundings due to possible attacks to the city (Egeplan, 2011; KUDEB, 2011). Therefore, the castle is one of the oldest structures in the city. Further settlements continued through the castle and generally settlements (or neighborhoods) composed around the religious structures organically by ethnically, religiously or relatively similar societies. The castle and its surrounding are originated in this time interval; but origins of Bey and Kepenek Neighborhoods date back to 16th and 17th centuries (KUDEB, 2011).

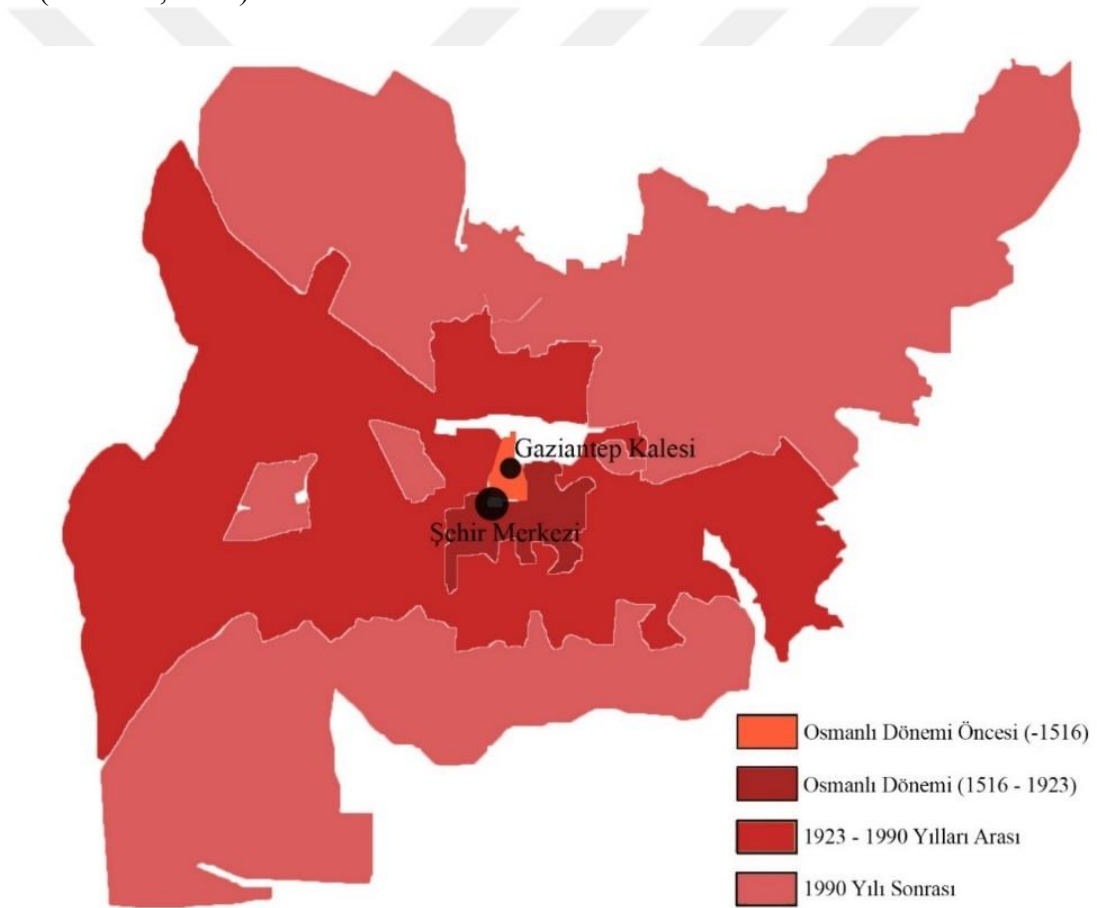


Figure 4.4. Spatial Development of Gaziantep (Sönmez, 2018)

Due to wide range of empires and governance it witnessed, its settlement history is deep-rooted. Especially, after 19th century, the period it hosted Ottoman Empire, the city developed in social, economic, commercial and traditional craft manner which their activities physically exist in historical zone of the city (KUDEB, 2011). In the Ottoman Period, commercial pattern has developed along main routes around Gaziantep Castle, traditional manufacturing shops which produced and sold similar goods has appeared; and as a result of this kind of central development and Ottoman Culture, a lot of authentic mosques, mescits, madrasas, inns and hot baths which most of them still exist today (Egeplan, 2010; KUDEB, 2011) were constructed. Traditional center of Gaziantep hosted Armenian, Circassia, Jewish and Arabic cultures before Turkish Republic and society, but before Turkish Independence War, predominantly Armenian society was located in historical neighborhoods – especially in Bey Neighborhood – and they have created authentic settlement typology and spatial pattern (KUDEB, 2011) which are required to be conserved today.

This site, because of the historical period which it has been through, featured archaeological (such as Gaziantep Castle) and historical characteristics of these cultures in terms of spatial aspects including organic pattern, housing typologies, street order, functional structures, and social aspects including neighbor relations, conservative lifestyle, unique production type and traditions.

4.3. ASSESSMENT OF URBAN REGENERATION PROJECT IN GAZIANTEP HISTORICAL QUARTER

According to historical values mentioned earlier, in this section, the regeneration initiatives in historical core of Gaziantep is explained. According to Yenice & Karadayı Yenice (2018), the first plan of Gaziantep belongs to Hermann Jansen in 1938; later on 1955 Master Plan and 1973 Gaziantep Master Plan: Industrial City were prepared (Figure 4.5).

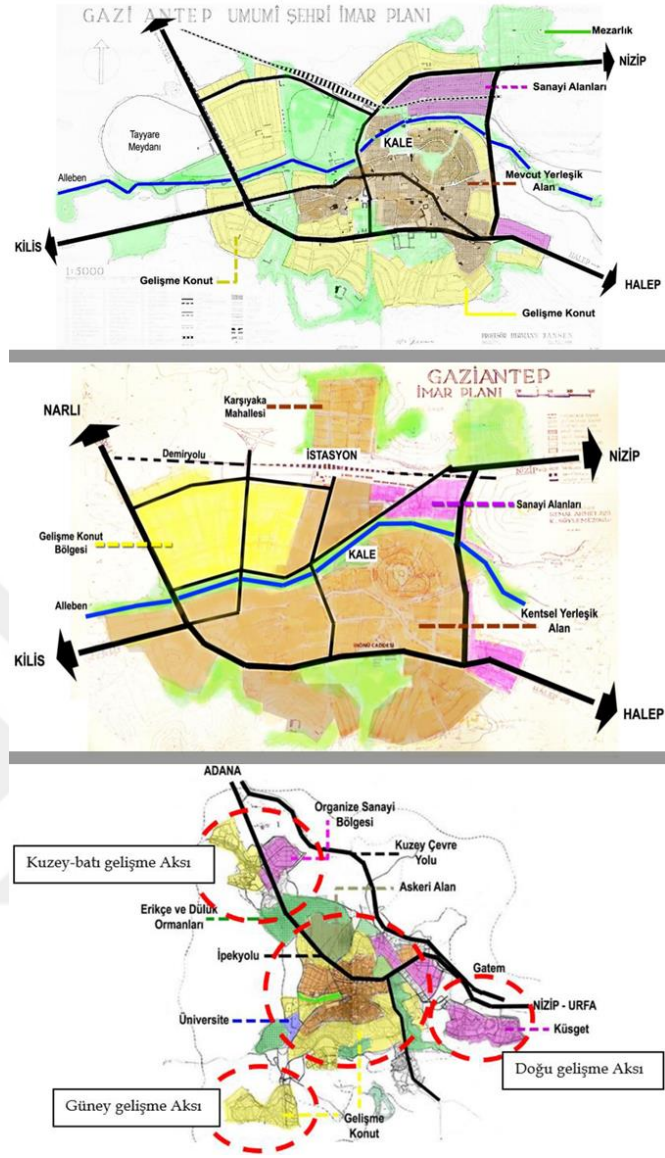


Figure 4.5. Planning Initiatives of Gaziantep: Jansen-1938 (top), Aru-Söylemezoğlu -1955 (middle) and Can-1973 (down), Yenice & Karadayı Yenice (2018)

These plans approached the traditional center as “Old City”; and, there were no initiatives for the site to conserve or regain the city again (Belge, 2012) – especially in terms of architecture, authentic pattern and social morals. The first comprehensive registration decision on the immovable cultural assets of the traditional city center was taken in 1972 by the High Council of Immoveable Historical Assets and Monuments (GEEAYK – Gayrimenkul Eski Eserler ve Anıtlar Yüksek Kurulu). The date of

determining the boundary as a conservation site is 1979 and the first conservation plan was approved by the same council, in the same dates (Egeplan, 2010). The second and still-in-use Conservation Master Plan for the boundary of Gaziantep Conservation Site was approved by Adana Council of Cultural and Natural Heritage in 1997 (Egeplan, 2010). The plan, which is still in operation is described in the following section with its revision and evaluations.

4.3.1. Conservation Master Plan

As mentioned before, Conservation Master Plan was approved in 1997. The plan comprises two zones: traditional commercial zone (%78 of the site) including Hamdi Kurtlar Street, Şehitler Street, Gaziler Street, Hacı Veli Cami Street, Belediye Street, Şihcan Street, Çamurcu Street, Hasırcı Street, Karanfil Street, Atatürk Boulevard and Tufan Hamam Street; and residential zone which includes Bey Neighborhood (Egeplan, 2010) (Figure 4.6).

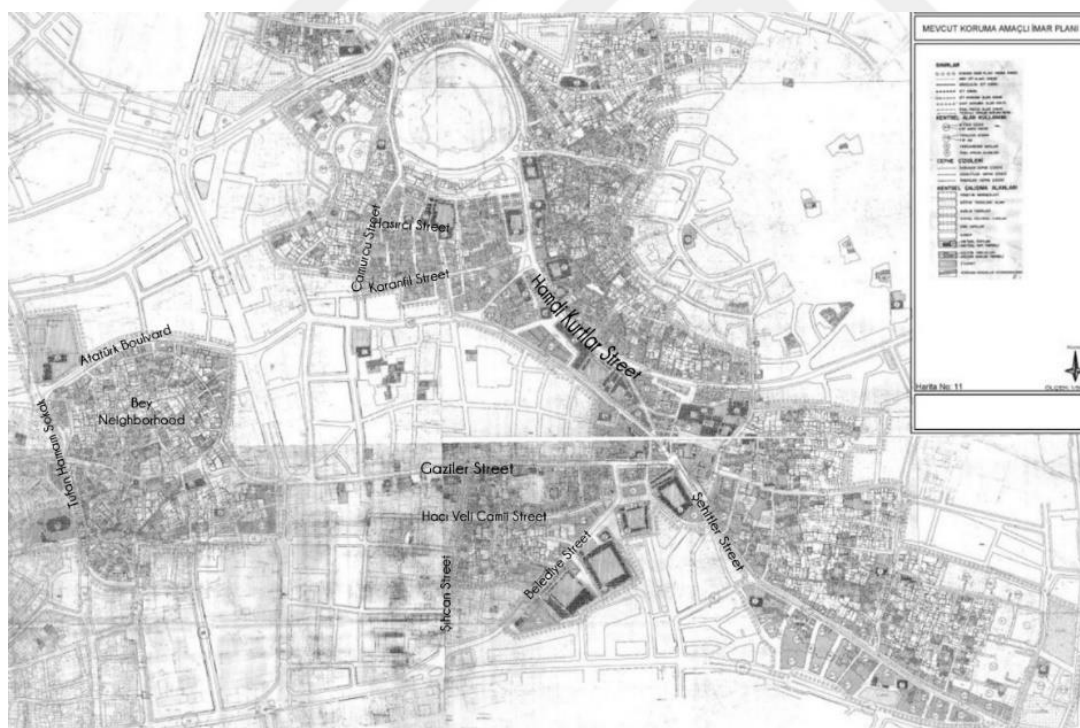


Figure 4.6. Conservation Master Plan approved in 1997 (Source: Şahinbey Municipality, 2019)

Today, these areas are under the governance of Şahinbey Municipality and Şehitkamil Municipality. Only a few structures around Gaziantep Castle belong to Şehitkamil Municipality, whilst the rest of the area belongs to Şahinbey Municipality. According to Conservation Master Plan Revision Report prepared by Egeplan (2010), 1997 Plan has included inelaborate arrangements on traditional pattern which were widening roads and decisions on maximizing construction site. Through this period, there were two kinds of practices: the first one is the implementations depending on the plan, the preference of the people and the priority of the institutions; The second one is direct arrangements implemented by Gaziantep Metropolitan Municipality which were decisions contradict with the plan but more concerning for the authentic pattern, providing improvements in conservation practices (Egeplan, 2010). According to an interview with the Conservation Master Plan Developer, Necati Uyar, in 2019, it is mentioned that during the revision plan preparation, these conservative arrangements by the metropolitan municipality have begun, and been implemented according to the revised plan (Figure 4.7).



Figure 4.7. Conservation Master Revised Plan (Source: Şahinbey Municipality, 2019)

As a result of the initial plan (1997) and its implementations, the emergence of the destruction of the area, the failure on meeting current comfort expectations, the difficulty in providing technical infrastructure services, lack of social infrastructure and deficiency of participatory approach provoked the most of traditional site users abandonment and settlement of low-income outsiders (Egeplan, 2010). For all these reasons have triggered the revision of the Conservation Master Plan, in aims of conservation sustainability on not only registered but also on whole authentic building compositions, the pattern has been put into process via re-functioning of the structures and public spaces in the site, suitable living conditions and protecting originality of pattern with public support and supervised projects (Egeplan, 2010) (Figure 4.8).



Figure 4.8. Current Land Use of Historical Quarter (Source: Şahinbey Municipality, 2019)

Through this period, several institutions have involved in this process: Gaziantep Metropolitan Municipality, Şahinbey Municipality, Şehitkamil Municipality, Conservation Regional Council and The Bureau of Conservation, Implementation and

Monitoring (KUDEB) which was established under The Directorate of Public Works and Urban Planning depended to Gaziantep Metropolitan Municipality in 2006; additionally, as a financial manner, the funds allocated by Gaziantep Metropolitan Municipality and district municipalities, grant from the European Union projects, contributions from Historical Cities Association, Ministry of Culture and Tourism, General Directorate of Foundations (on their own property) and property taxes, 10% participation shares and different economic resources ensured conservation initiatives (Conservation Master Plan Report, 2010).

Depending on the interview in 2019 with the Urban Planner, Dr. Arzu Sert, of Conservation Regional Council who is responsible for Gaziantep Historical Quarter, there are a lot of parcels transferred to the municipalities, foundations, state treasury, Special Provincial Administration and public institutions in especially commercial zone which is called as “Region of Inns” (or Culture Route) of the conservation site in this process, so that each monumental structure had to be renovated and rehabilitated for public welfare and protecting the unique identity of the quarter.

The project developer has gathered the objectives of the plan under four main headings in Conservation Master Plan Report (2010). These objectives and the reasons of these objectives are given below:

Physical Objectives:

- The registered civil architecture elements in private ownership constitute the majority of the area and they were sold by the owners, via making divisions and additions to structures; therefore, to preserve the traditional structures’ uniqueness and settlement typology, removing these additions is required for visual and physical integrity and preserving the cadastral pattern.
- In order to preserve the courtyards and their authenticity, which is one of the most important features of traditional architecture; it is necessary to remove the additions from the courtyards and reconstruct courtyard walls in parallel with the traditional texture.

- In order to meet the current needs, the structural elements such as roof, framing walls, structural materials such as roof, body walls, etc. should be repaired with original materials; kitchen, bathroom, toilet, heating etc. should be added to meet current needs.
- The preservation of street forms and widths due to protection of the traditional urban fabric and it is mandatory for climatic reasons; however, it is necessary to make arrangements which are compatible with the original texture in order to meet the service and infrastructural needs.
- Dilution of excessive signboards caused by too much commercial units and setting certain standards for them to prevent visual pollution (Figure 4.9).



Figure 4.9. Conservation Master Plan Detailed Guidelines for Renovations and Street Rehabilitations (Source: Gaziantep'te Tarihe Yolculuk: K lt r Yolu Projesi, 2008)

- Dense building formation due to intense commercial activities in the pattern exists, so without disturbing the unique structural pattern; squares, parks and openings formation needed in the pattern.
- In addition to the original settlements of the city; protection of cave and underground assets inside and outside of existing lots and houses is required.
- Under technical infrastructure works, taking the electric and telephone lines under the ground, the use of cobblestone and wood materials to be compatible with the traditional texture of street floors and furniture should be supplied.
- The future housing will have a courtyard suitable for the original texture and the reconstruction of traditional structures, which are currently only traces will

construct according to the original plan and also with support of concrete, steel, wood materials usage for their durability (Figure 4.10).

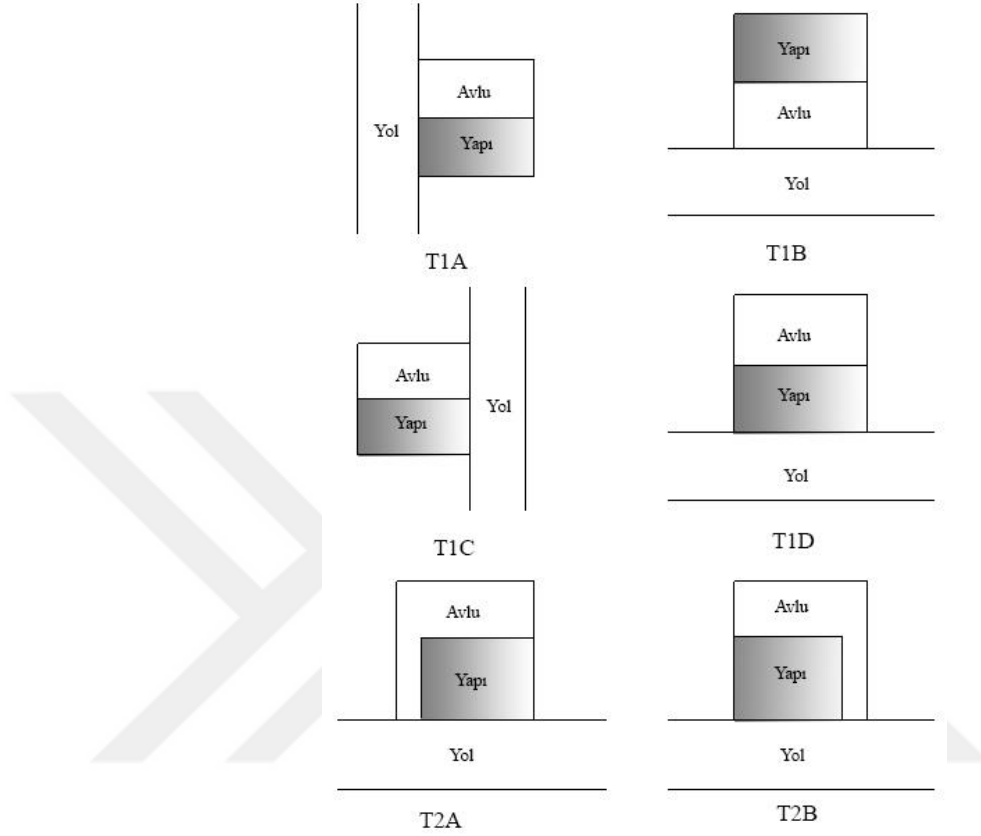


Figure 4.10. Standards for Further Developments in Historical Quarter Compatible with Original Structures (Source: Egeplan, 2010)

- Restoration or reconstruction of the deficiencies in the interior parts, but also exteriors with the building materials, façades, gabarite, location, garden distances, construction rates and heights, extensions, bay windows and size are made according to plan standards.
- Road arrangements, open and multi-story car parks and pedestrianization of some critical routes such as Gaziler Street and Mütercim Asım Street, which will reduce the pressure on the transportation axis caused by the previous decisions on the main axis are supplied.

Socio-Economic Objectives:

- The elaboration uses and erosion of the use of large courtyards and massive structures such as inns, hot baths, bedesten and mosque, which provide identification and orientation in the area, through the time, necessitated the assignment of contemporary functions. For this reason, it is aimed to provide functions such as commercial or museum / exhibition areas, especially to increase social and cultural facilities to inns.
- Transformation of functional changes are not for only in magnificent structures, but also in accordance with the architectural features of the undesired buildings that are not used as dwellings → introvert structure and small courtyards to dwelling and wide courtyards to cafe or boutique hotel.
- Decisions and surveillance on the utilization changes of registered structures belong to Conservation Master Plan and Conservation Regional Council.
- Designing the area as a permanent habitable area and transforming into a preferred area with the required infrastructure and quality development.

Economic Objectives:

- Transferring to the local community and the structures with the appropriate functions which will add value to the field and the continuity of conservation will be supplied by the commercial functions derived from touristic activities.
- To ensure the structural continuity of the building, if it cannot be continued as a residence, make sure it can with another function.

Administrative Objectives:

- Establishing a management plan in order to ensure the control of conservation practices in the area and to establish KUDEB, legally dependent on the Metropolitan Municipality, in addition to provide field and process management.

According the objectives mentioned above, some key results can be attained from the plan decisions and throughout the plan report below:

1. In general terms, decisions on the protection of the cadastral plan, as it is, indicate that the originality of the texture will be permanent.
2. In order to protect all the original elements, a plan has been prepared to control each input in detail. The differentiation of the technical requirements of the roofs according to the housing typology (attached or detached order), the decision of the material in the plan notes and explanation of how to add the materials indicate that the plan is very comprehensive.
3. In addition, in order to preserve the pattern uniqueness, the standards have been ensured on subdivisions and amalgamations of lots and the interventions offered by district municipalities and KUDEB, with the approval of the plan developer and the Conservation Regional Council have been aimed preventing many illegal and random interventions.
4. The most important aspect of the plan and its implementation is adopting the idea that ensuring conservation is only possible by functioning entities in accordance with the conservation criterias; and it has terms on sustainability of conservation in all respects (physical, social, economic and environmental) via refunctioning. ***Therefore, it can be clearly stated that this plan and interventions are a sample of “adaptive reuse” considering the practices.***
5. The plan aims at the continuity of traditional handicrafts with the decision on the development of tourism such as copper-making and pearl embroidery, which are now disappearing.
6. While the realization of the targeted project is provided on sub-scales by means of tendering, the fact that field management plan makes it difficult to get feedback from the process.
7. The limited functional change supports space control and provides a mixed-use, integrated living space and supports not only commercial and social facilities, but also residential areas. The function change decisions proposed

by the Conservation Master Plan on only in certain structures and the obligation of the obtaining validity approval for these functional changes from Conservation Regional Council have led to the limitation of the function changes in the field and the necessity of making the alterations in refunctioning actions according to the original pattern.

8. While preserving the authenticity of the structures during the planning process, it also aimed to develop parks, openings and squares in the areas permitted by the cadastral plan, and to develop places of gathering and socialization for the citizens living in the pattern.
9. New road arrangements and open / story car parks have been aimed to reduce vehicle entry and encourage pedestrian use and safety in this high-density building area. The two pedestrianization projects are a step forward that the center can be fully pedestrianized in the future.
10. While adapting the functions of the buildings to the current needs, the plan, which aims not only to meet the commercial needs but also the social and cultural requirements, also meets the mental needs of the local people with this attitude.
11. Projects and renewal works related to the regeneration of historical sites in Gaziantep are still processing. All interventions in this process still maintain their commitment to the Conservation Master Plan.

4.4. INVESTIGATION OF THE CASE AREA BY THREE ASSESSMENT SCALES

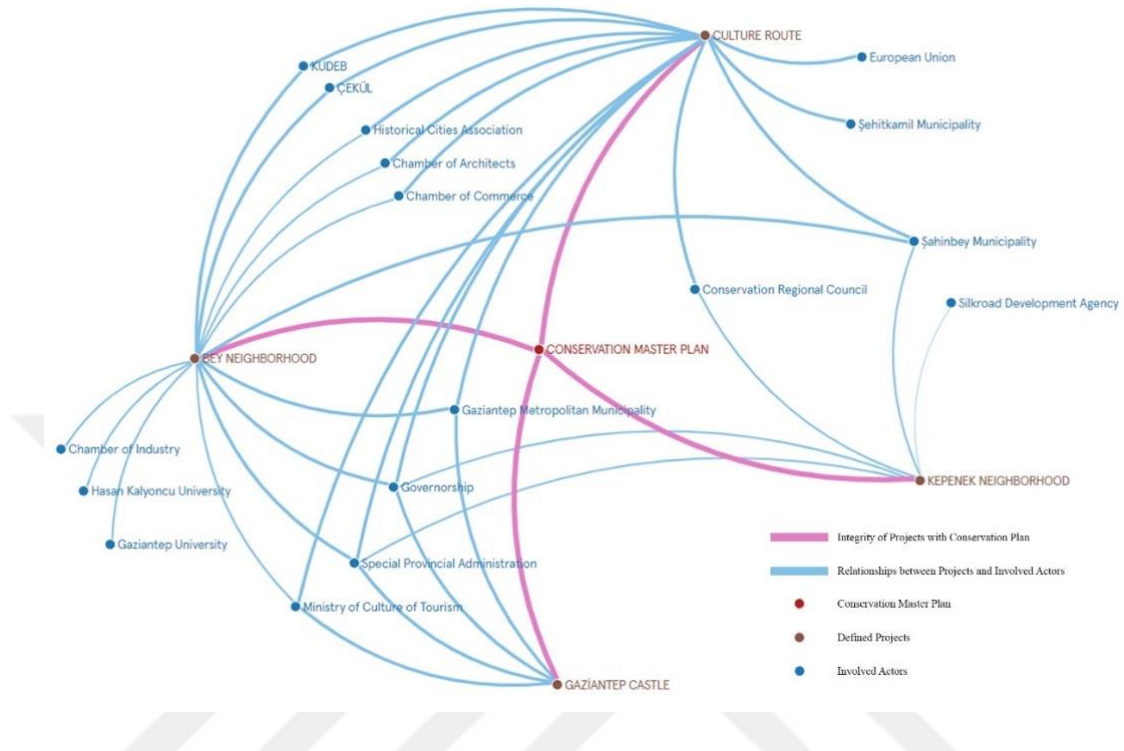


Figure 4.11. Relationships between Conservation Master Plan and Defined Projects and Actor Involvement for Each Project

4.4.1. Adaptive Reuse in Building Scale: Monumental Gaziantep Castle

The Castle of Gaziantep is a major landmark of historical site of Gaziantep and it is accepted as the beginning point of the major axis of the old city (Figure 4.12). It is surrounded by traditional handicraft activities and it provides guidance for reaching the old city by citizens arrived from other districts and outsiders come for touristic activities. Gaziantep Castle which has visual and historical significance since its remains express the first settlements dates back to 4000 B.C. is under the 1st degree archeological site, and 3rd degree archeological site at the upper part; and together with open space it has through its surroundings, with width and height of the castle, it has silhouette which can be seen from extensive visibility distance (Egeplan, 2010; Şahinbey Municipality, 2019).



Figure 4.12. The Location of Gaziantep Castle (Source: Google Earth Pro, 2019)

Since 1989, the excavation and restoration works carried out at intervals with the appropriations allocated by the Ministry of Culture and Tourism and Special Provincial Administration of Gaziantep; and they determined registered the surroundings of the castle, the conservation wall was built, the exits was reformed and paved, the fortification walls were repaired and elevated, the main gates were constructed in accordance with the original structure and the other entrances were closed with iron bars and were liberated from the dangerous condition (Gaziantep İl Kültür ve Turizm Müdürlüğü, n.d.) (Figure 4.13 and 4.14).



Figure 4.13. Gaziantep Castle before the Renovation (left) and During the Process (right) (Source: Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 2019)



Figure 4.14. Renovated Gaziantep Castle Today (the Gate and the Passage of the Castle) (Photos taken by the author, 2019)

Together with the excavations carried out in the early 2000s, there are many new architectural structures and remains belonging to the Ottoman and Byzantine Period (Gaziantep İl Kültür ve Turizm Müdürlüğü, n.d.); an inner section of the castle has been turned into a museum with the decision of the Governorship, Gaziantep Metropolitan Municipality and the Special Provincial Administration and with the decisions of the Archaeological Site Principles and Conservation Regional Council (Egeplan, 2010). The castle has been visited by locals and the tourists according to its historical value; “the Museum of Panorama”, which describes the Gaziantep defense during the Independence War of Turkish Republic, was opened to exhibitions in 2008 along with sculpture, relief bust, portrait, sketch, map and information boards along with the literature review of the recent past (Gaziantep Büyükşehir Belediyesi, n.d.). That is, together with this museum, the castle is conserved and adaptively reused via contemporary function (Figure 4.15).



Figure 4.15. Adaptive Reuse of Gaziantep Castle with Independence War Museum Function in Interior Corridor (Photos taken by the author, 2019)

As a result of the deformations experienced by the Gaziantep Castle through the time and the demolition of one of the transition towers in 2012, in 2016, extensive consolidation and restoration processes were started in Gaziantep Castle (Şahinbey Municipality, 2019; Milliyet, 2016).

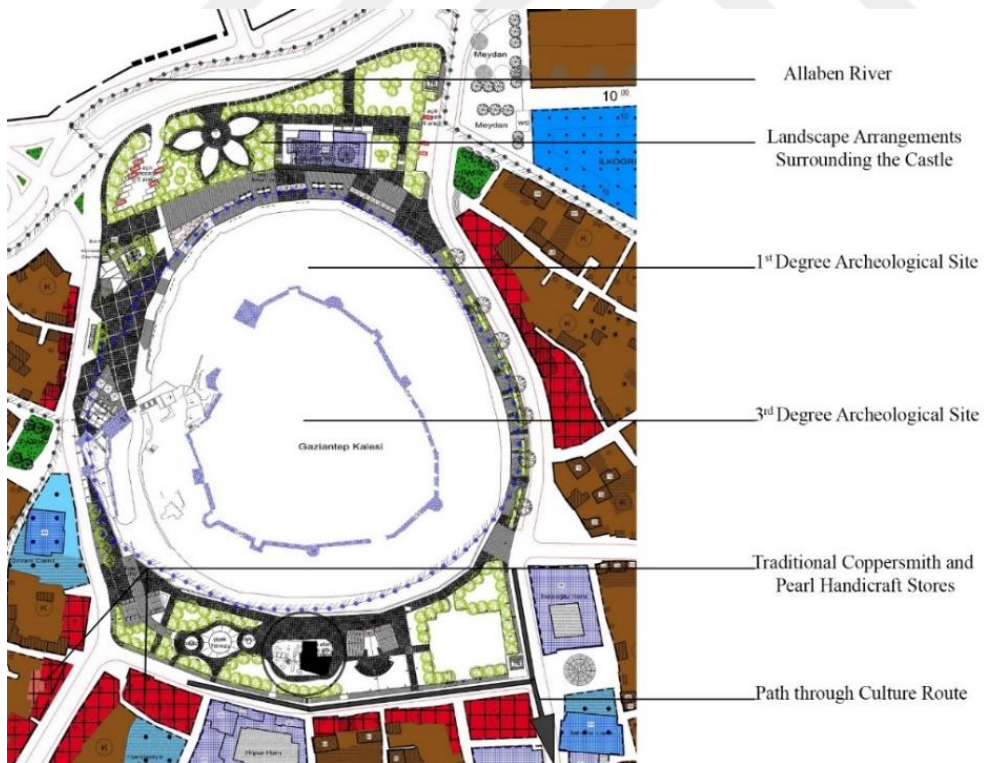


Figure 4.16. Gaziantep Castle in Conservation Master Plan (Source: Şahinbey Municipality, 2019).

The area around the castle (Egeplan, 2010), which was designed via landscape project, was aimed to be revealed by excavation works of the ditches which were built in 2016 (Milliyet, 2016) (Figure 4.16 and 4.17).



Figure 4.17. Landscape Project Implementation of the Castle (Source: Kutay İnşaat, 2019)

The castle is the starting point of the Cultural Road Project and it partially converted into a museum in 2008. The museum proceeds as a corridor in the interior of Gaziantep Castle. In addition to these, apart from the interior museum, the wood and iron materials added to the remains at the top of the fortress, in order to give both the protection of these remains and enjoying urban silhouette with walkable additional materials by taking advantage of being one of the highest hills of Gaziantep while visiting the area (Figure 4.18).

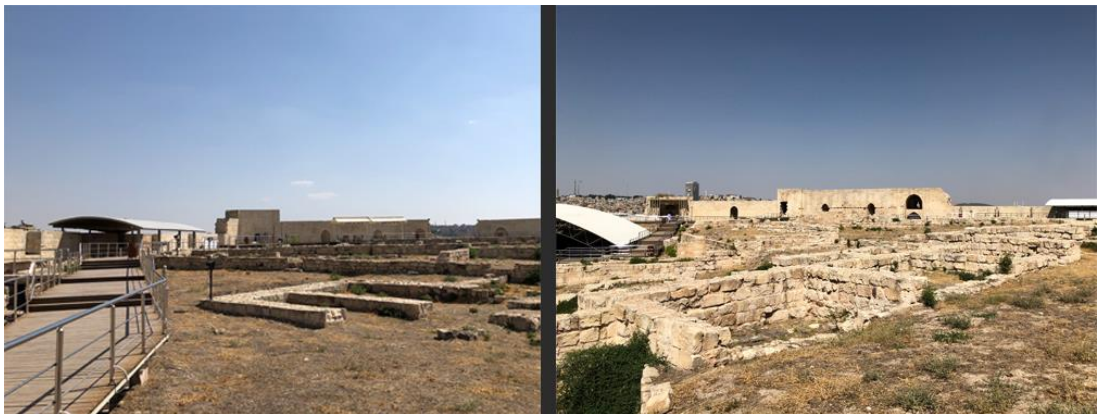


Figure 4.18. The Archeological Site at top of the Castle within Contemporary Wood and Iron Additions (Photos taken by the author, 2019)

As it is mentioned above, the castle and its surroundings are more unfavorable in terms of intervention compared to other areas of the center due to the fact that it is a 1st degree archaeological site, so the most appropriate functional transformation is a museum to prevent a large area to remain uninhabitable and inert. This is because 1st degree archeological sites are preserved areas apart from scientific studies for conservation. It prevents major changes on the castle and only minor conservation initiatives are allowed. In addition to this, as a result of the interview with the Plan Project Directorate of Şahinbey Municipality, Muhammet Ali Şahin, (2019) (will be mentioned as Şahinbey Municipality rest of the study), which is the castle located in, The Museum of Panorama - a project involved mostly by architects. That means, it is a structurally compendious intervention; only the particular walls were cleaned and certain reliefs were added. Site observations also support the fact that the interventions are made visible, contrary materials are not used and the original work is preserved in a way to maintain its cultural continuity. Restoration and re-functionalization of the castle, as well as the ruins of the castle resembled, a unique value added to the image of the city has been provided (Figure 4.19).

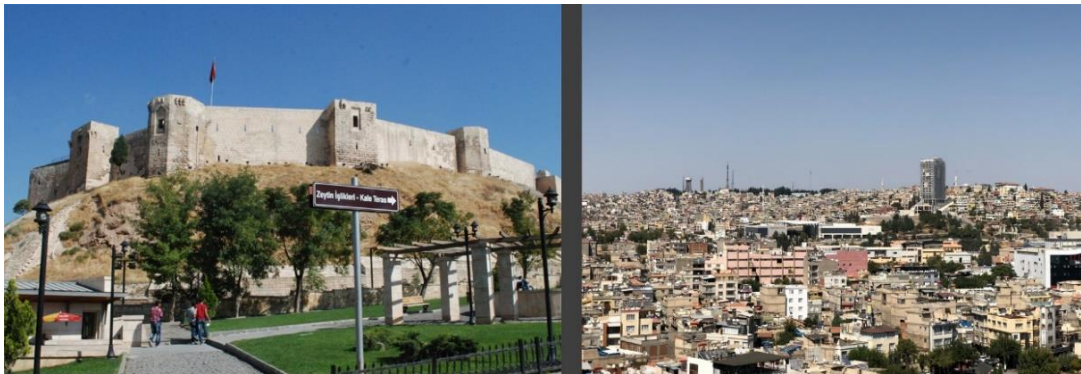


Figure 4.19. Gaziantep Castle as an Important Image (left) and City Silhouette from top of the Castle (right) (Photos taken by the author, 2019)

Due to the Culture Route Project, the buildings with commercial activities including traditional coppersmiths and pearl handicrafts continued as a linear axis on the street scale. This work, which is carried out by stimulating the regeneration process of the

surrounding of the castle, also leads to environmental and visual integrity in the area (Figure 4.20).



Figure 4.20. Traditional Commercial Stores at south part of the Castle (left) and Religious Structures (right) Enabling Visual Integrity (Photos taken by the author, 2019)

Together with the conservation of the architectural heritage and the open space design, and the arrangements with the greening and landscaping elements; the castle contribute to the promotion of the city (Figure 4.21). This perspective is also supported by both Şahinbey Municipality (2019) and the traditional retail owner of Zeugma Bakırcılık, Erkan Yol and Öz Sedef Bakırcılık, Ahmet Bıyık (2019) across the castle. The municipality emphasizes that the people living in there use the recreational area around the castle for gathering and socialization, and that the value of the castle and its surroundings is known by the citizens more than the administrations (Şahinbey Municipality, 2019).

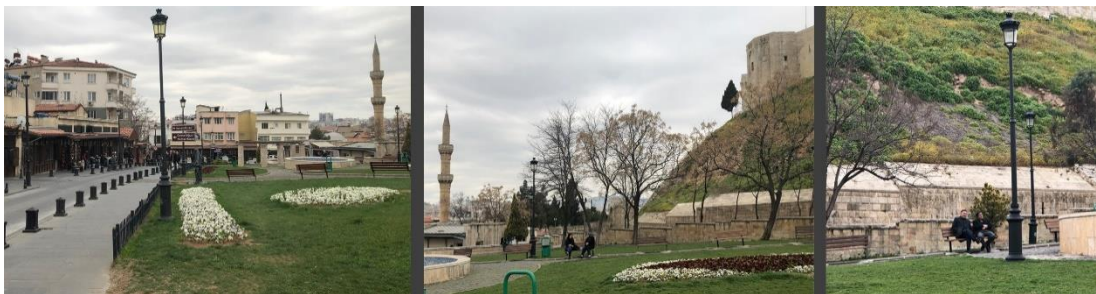


Figure 4.21. Surrounding Green-Open Space as Gathering Point by the Locals (Photos taken by the author, 2019)

At the same time, however, Şahinbey Municipality (2019) adds that the region is used by locals, but not by other citizens. Field observations also support that the recreational area is used only by children and elderly people living there, and that a high-quality environment is created for them.

The accessibility and triangulation of the castle in the city is quite high in the historic city where it locates, according to Şahinbey Municipality (2019), individuals, except tourists who visit Gaziantep and the Culture Route, reach the city center or the castle only if they have work in the Bakırcılar and Almacı Bazaars which are included in commercial node. However, even if they arrive with their vehicles, they use the Suburcu and Karagöz Streets (located in the southwest part of the castle) to reach the city center; and use the multi-story and underground car parks in the area (Figure 4.22). Therefore, even if the castle has direct access to other settlements and urban functions, its accessibility is limited.



Figure 4.22. Suburcu Street (left) and Karagöz Street (right) as Preferred Routes to Reach the Commercial Node (Bakırcılar and Almacı Bazaars) (Photos taken by the author, 2019)

Although the castle has a feature of increasing the cultural level of people thanks to the museum where it is converted into a reuse, it does not have any social benefit due to the fact that not enabling the local people to have knowledge, skills and self-improvement opportunities. In addition, it cannot provide an economic benefit because it cannot give the citizens the ability and accumulation to be obtained

economically. Because it is immense and has a very long history, the cost of restoration and renovation in the castle is very high and it is not possible to meet these costs with museum revenues which are not qualified as Şahinbey Municipality (2019) agrees. Therefore, all maintenance and repair work is carried out by the metropolitan municipality.

Lastly, according to the Şahinbey Municipality, Urban Planner Muhammet Ali Şahin (2019), because of the introduction of Gaziantep as a “Gastronomic City”, even if there are unique features to the city including the castle which is not given the importance by the tourists who visits for the traditional food, in recent years. The retail shop owners dealing with coppersmiths across the fortress have declared that although the castle and its surroundings have been very active in the touristic sense until the last two years, the vitality has not been the same recently.

4.4.2. Adaptive Reuse at Street Scale: Culture Route Project

Culture Route Project is performed as a project related to the Conservation Master Plan which comprised commercial spine of the historical center. In 2003, Foundation for the Protection and Promotion of the Environment and Cultural Heritage (ÇEKÜL – Çevre ve Kültür Değerlerini Koruma ve Tanıtma Vakfı) took Gaziantep Historical Center in the list of Self-Preserving Cities (Belge, 2012).

After this announcement of ÇEKÜL, together with Gaziantep Metropolitan Municipality associated for the “Culture Route” Project which its first stage ended in 2008 (Figure 4.23). In this first period, they were only initiators of the project foundation and its implementation; especially ÇEKÜL is official consulting organization of the project (Belge, 2012). After the successful implementations of rehabilitation of Bakırcılar Bazaar and façade renovations along the route, other participators wanted to involve in this project. These participators are Special Provincial Administration (İl Özel İdaresi), Governorship (Valilik), and Chamber of Commerce, Chamber of Industry, Chamber of Architects, Şehitkamil Municipality, Şahinbey Municipality and local residents.



Figure 4.23. Culture Route Project (Source: Mimarizm Mimarlık ve Tasarım Platformu, 2008)

With these new participators, following stages had started in Culture Route, and then Mass Housing Administration (TOKİ), Ministry of Culture and Tourism, non-governmental organizations (NGOs) started to get involved and KUDEB in 2006, as mentioned in Conservation Master Plan explanations, was established for this project. As participators, according to an interview with KUDEB Inspection Department Manager, urban planner Ökkeş Kavak, (2019) (will be mentioned as “KUDEB” rest of the study), Gaziantep University and Hasan Kalyoncu University also contributed to the project. According to him, in this project, which had many a participants,

support was provided by the metropolitan municipality, the district municipalities' and the governorship's "cultural funds", in addition to the UN. After this immense participation, "Collaborative Platform" (Ortak Akıl Platformu) has been formed to work integrated, to act collaboratively and to inform local residents and to get involved in each stage of the regeneration process (Belge, 2012; ÇEKÜL, n.d.; and ÇEKÜL, 2010). Especially, in this process, the metropolitan municipality had shared all the prepared urban plans to the citizens to provide civil participation in the process (Kültür Yolu Dereboyu'ndan Başlıyor, 2012).

The regeneration started around Gaziantep Castle and it covers through the southern of part (Kültür Yolu, n.d.). The northern part of the Gaziantep Castle which includes Naib Hot Bath (Naib Hamamı), Boutique Hotel and Historical Coffee House (Tarihi Kır Kahvesi) was renovated before this project (Figure 4.24, 4.25 and 4.26), which are located in Şehitkamil District via financing of European Union and GAP Administration (Şahinbey Municipality, 2019).



Figure 4.24. Renovation of Historical Coffee House (Source: Kutay İnşaat, 2019 and right bottom photo taken by the author, 2019)



Figure 4.25. Renovation of Naib Hot Bath (Source: Kutay İnşaat, 2019)



Figure 4.26. Renovation of Boutique Hotel (Source: Kutay İnşaat, 2019)

These projects started with Rehabilitation of Bakırcılar Bazaar and Rehabilitation of Buğday Bazaar, Almacı Bazaar and Eski Saray Street in main historic core (ÇEKÜL, n.d.). Rehabilitation of Bakırcılar Bazaar comprises **rehabilitation of facades in eight streets and the building block rehabilitation which bazaar is located, renovation of street coverings and pavements, street furniture implementation and infrastructure renovation.** There are guidelines for these implementations in

order to provide a ‘visual’ continuity in the physical pattern. As a first stage, it has included Keçehane Street, Hamdi Kurtlar Street, Gümrük Street, Uzun Bazaar, Bakırcılar Bazaar, Almacı Bazaar, Şire Inn (Şire Han) and Boyacı Mosque primarily (Figure 4.27). Including these streets and structures, totally, nine mosques, four baths, eighteen inns, forty registered entities and traditional structures were renovated and restored (ÇEKÜL, n.d.).

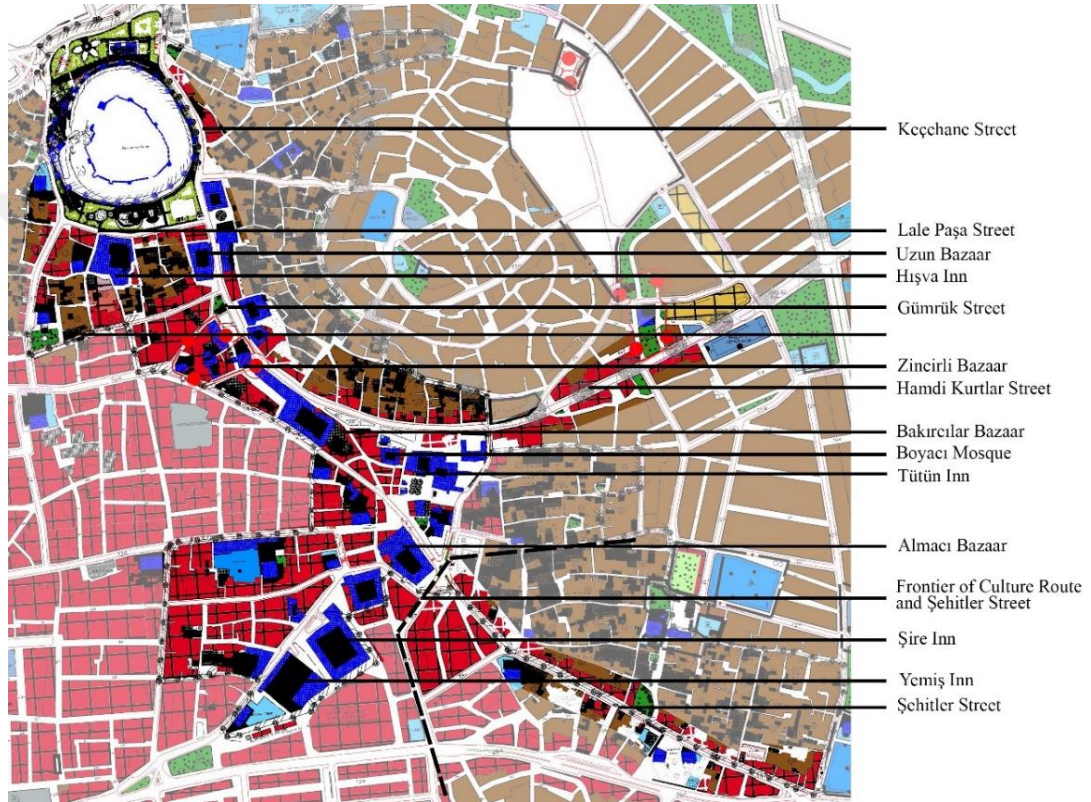


Figure 4.27. Culture Route in Street Scale Completed Implementations on Current Plan (Source: Şahinbey Municipality, 2019)

This project triggered new conservation, renovation and restoration attempts. According to the site observation conducted in March 2019, the inns used for commercial activities, except religious places for worship (i.e. mosques) along the Culture Route, were re-functionalized for today's cafes, restaurants or retail services (Figure 4.28).



Figure 4.28. Historical Gümrük Inn as an Example of Adaptive Reuse to Contemporary Retail and Service Sector (Photos taken by the author, 2019)

Especially, as a center of the gastronomic tourism that was announced by UNESCO in the context of the Creative Cities Network as stated by Şahinbey Municipality (2019), the restaurants where local tastes were served and the local markets which products such as pistachios, spices etc. is observed dominantly. **Therefore, it is certain that restoration and reconstruction works are adapted spatially according to the contemporary function of the historical city center and the needs of the society/city.** Besides, to exhibit authentic value and lifestyle of the society, some structures converted as museum; such as to demonstrate hot bath culture, old bath is now reused as a “Hamam Müzesi” (Hot Bath Museum) or to show food culture, private property owner endowed her residence for “Emine Gögüş Mutfak Müzesi” (Emine Gögüş Kitchen Museum) (Figure 4.29). There are a lot of reuse examples in central line on museums which indicate traditional life of Gaziantep.

In order to preserve the authenticity of the site as well as to provide future developments, the parcel and structure pattern are maintained both at the planning and implementation stage (in accordance with the plan). There are two main reasons for this: first, the majority of the buildings are registered, and second, they are intervened by the metropolitan municipality (Figure 4.30). Both registered and expropriated structures’ interior and exterior spaces renovated due to without limitation by private ownership. This condition has made the process easier in terms of technical infrastructure work, strengthening the structural bodies of buildings and compatibility between entities and the street.



Figure 4.29. Adaptive Reuse of Traditional Structures as Mutfak Müzesi (Kitchen Museum) (upper) and Hamam Müzesi (Hot Bath Museum) (bottom) (Photos taken by the author, 2019)



Figure 4.30. Adaptive Reuse of Traditional Structures as a Bakırcılar Bazaar; before the intervention (left), during the process (middle) (Kutay İnşaat, 2019) and after the process (right) (After period photos taken by the author, 2019) Under the Leadership of Gaziantep Metropolitan Municipality

For example, regarding the building façade with commercial uses, the guideline includes the design rules for front yards and the limitations in sizes, materials of signboards and canopies or as street rehabilitation, the electricity and telephone poles renewal and the elimination of the complexity created by the infrastructure lines (E&G Architecture, n.d.). However, within these improvement works, only the interiors of public or foundation-owned buildings were renewed. None of the private property such as Zeugma Bakırcılık's interiors could be renovated due to the property problem according to their owners (2019). While retailers who are in good economic condition can make their own internal arrangements; however, this has not been possible for most retailers (Figure 4.31).



Figure 4.31. Privately-owned Coppersmith Stores Which Their Interiors Not Renovated by both the Metropolitan Municipality and the Owner near Gaziantep Castle (Photos taken by the author, 2019)

With this renovation, most of the local copper-makers were gathered to Bakırcılar Bazaar and regenerating local handcrafting and retailing activities which were tended to be forgotten (ÇEKÜL, n.d.). Therefore, with this regeneration project, adaptive reuse has been achieved in street scale - Culture Route and integrated eight streets rehabilitation. The gathering of coppersmiths and functional spaces together where local products are sold has led to the creation of a strong public space to meet the needs of the local population. The original values and ambiance of the area make citizens from other areas of the city prefer for their needs according to Şahinbey Municipality (2019) (Figure 4.32).



Figure 4.32. Almacı Bazaar Which Most of the Citizens Use and Creates Sense of Public Space and Authentic Gathering Space (Photos taken by the author, 2019)

Another element evaluated in the field is whether the accessibility of the services could be increased. The most important point that draws attention during site observations is the one-way public transport services and car parks that continue along the linear axis (Figure 4.33).



Figure 4.33. One-way Public Transportation and Vehicle Circulation System Arrangement on Central Axis (Photos taken by the author, 2019)

In this area where pedestrian use is very active and dominant, the necessary barriers and pavements have been separated from the motorway and the safety of pedestrian circulation has been ensured (Figure 4.34).



Figure 4.34. Street Arrangements for Pedestrians and Their Safety (Photos taken by the author, 2019)

Şahinbey Municipality (2019) states that pedestrianization is not possible due to active vehicle and public transportation; and they are looking for a solution because objections from users on this issue are still in the agenda. Besides, the density of the car parks in the area has been increased near the Gaziantep Castle, which is the starting point of the Culture Route, and this situation damages the 1st degree archaeological sites around the castle (Şahinbey Municipality, 2019) (Figure 4.35).



Figure 4.35. Car Parking Density around the Castle which destroy Archaeological Site and Visual Image (Photos taken by the author, 2019)

The fact that the historic center has a very dense texture, narrow streets; so squares as public spaces necessitated the gathering place for the locals. Due to the fact that most of the buildings in the area are registered and vehicle use is still available, openings can be created only to the extending some parts allowed by the site. According to Şahinbey Municipality (2019), unregistered and contradictory buildings were

destroyed, and some places were extended for the small squares and gathering areas with this project. Conservation Plan Developer, Urban Planner Necati Uyar, also clarified that to create open space across Gümrük Inn, the five-floor concrete structures were demolished and converted to public space (Figure 4.36).



Figure 4.36. Open Spaces Created by Destruction of Contradiction Structures (Open Space across Gümrük Inn at left) (Photos taken by the author, 2019)

According to KUDEB, Urban Planner Ökkeş Kavak (2019), these small squares and landscape arrangements provided along the Culture Route provided a healthy environment especially for the elderly local people.

Considering the process of changing and improving the infrastructure services, Şahinbey Municipality (2019) stated that the area has undergone a comprehensive construction and infrastructure change process in close to one year and no problem related to the infrastructure has been encountered since then. Interviews with five different traditional retail owners along the Culture Route also support this pleasantness. As a result of the interviews with local retailers (2019) conducted especially at the Bakırcılar Bazaar and the Almacı Bazaar, they stated that the renovations made on the roofs and facades of the shops addition to the underground infrastructural systems were very helpful in protecting their products (Figure 4.37). It is observed that not only in the bazaar retailers, the users are satisfied with these regulations. Working together as business owners in cooperation with each other reinforces the sense of community and interaction of pedestrians and makes the space attractive, safe and continuously circulated by the society.



Figure 4.37. Roofing the Bakırcılar Bazaar and Street Arrangements which Enable Protection of the Products (Photos taken by the author, 2019)

It is observed that apartments have been replaced through the south of the Culture Route, along Şehitler Street to Kepenek Neighborhood. According to Şahinbey Municipality (2019), construction of these buildings dates back to the period before the Conservation Master Plan was put into force, so even though they disturbed the visual image, the necessary interventions were made with consistent façades and paints to increase the compatibility with the traditional texture (Figure 4.38). Along the street, traditional commercial units and coherent facade arrangements of these units are preserved.



Figure 4.38. Façade and Street Rehabilitation of Şehitler Street, During the Interventions (Şahinbey Belediyesi, 2013) and After the Interventions (After period photos taken by the author, 2019)

In addition to them, according to KUDEB (2019), the control of registered structures is provided by the Conservation Regional Council, and the simple repair approvals and licensing for the unregistered structures in the conservation site prevent the illegal interventions.

Through the central axis, there are also caves as underground assets which was needed to be conserved; therefore, some of the caves have been adaptively reused as museum and retail functions (cafes etc.). Milli Mücadele Müzesi (National Struggle Museum) is one of the examples of this conversion which is located in (or under) Şehitler Street; it has been turned into a museum which exhibits Independence War Period and its living conditions in that period with apparent additions such as wood and iron material passages which do not harm the original formation. Therefore; it is observable that not only above-ground assets, but also underground traditional components could be adaptively reused, and in the central line of Gaziantep Historical Quarter, they were revalued by Şahinbey Municipality (2019) (Figure 4.39).



Figure 4.39. Adaptive Reuse of Underground Cave as Milli Mücadele Müzesi (National Struggle Museum) (Photos taken by the author, 2019)

The actors of the project – especially the metropolitan and local municipalities - also made social improvements by educating the children as potential stone masters in the historical quarter (Kulaklı Ağanoğlu, 2009). The most important work on this subject is the training courses of the coppersmith craftsmen made by the Turkish Business Association (İŞKUR – Türkiye İş Kurumu) and the Chamber of Coppersmiths; however, according to local retail owners (2019) - the owner of Zeugma Bakırcılık - six months of copper art education courses are generally attended in aims of either a

hobby or the financial means provided by İŞKUR via mostly middle-aged individuals. According to him, very few people carry out this craft as a master. For this reason, they think that the ethnic copper production of Gaziantep and the pearl handicraft can last for ten years maximum even if supported by the metropolitan municipality and the Governor's Office. In particular, due to declining number of tourists in recently, they do not expect continuity of their business and stated that: *"Administrations said that one million people visit Gaziantep, we do not even see a hundred thousand people in a year."* According to Şahinbey Municipality (2019) and retailers, many business owners already do not live in the area; therefore, it is quite likely that they will leave the area soon as they cannot continue local production. Thus, the historic center is in danger of losing both local community and local production. Additionally, the perception change in tourism sector Gaziantep was observed in the site observations; the traditional tastes are preferable by the tourists rather than the history. Therefore, the attractiveness of the physical interventions in the historical area has decreased and the income from the local production sector has been left to the service sector.

Through the interview with the tourists in Bakırcılar and Almacı Bazaars (commercial node) (2019) who visited Gaziantep Historical Quarter for the weekend mentioned that they visited Zeugma Museum, Bakırcılar Bazaar, Tahmis Coffee House located near the Almacı Bazaar, İmam Çağdaş Restaurant and other traditional dessert restaurants; that means, they visited the quarter for gastronomic purposes, not experience unique traditional ambience and the history.

Finally, "Collaborative Platform" (Ortak Akıl Platformu) is a unit which was established specific to Bey Neighborhood rather than Culture Route. For this reason, the results of physical, social, economic and environmental interventions cannot be measured as a platform formation and continuity cannot be achieved within the scope of the Culture Route Project, in which the feedback mechanisms of the interventions or the stakeholders with which the process will take one step further cannot be achieved. In the case of future demands and issues, current physical and sociological evaluations will have to be updated again.

having L-shape and rectangular architectural plan (KUDEB, 2011) demonstrate that they are peculiar units in themselves. Having the elements such as pond and well in courtyards – called as “hayat” by dwellers – of the buildings, usage of the wood materials, existence of traditional Ottoman ornaments and underground caves and granary in addition to kitchen usage at ground floor for storage (KUDEB, 2011) also indicate that buildings are unique characteristics. Sheet metal coverage which is observed exterior facades of the buildings provided protection for hot climate, at the same time, they are also used with plaster for bay windows in order to reduce burdens (KUDEB, 2011) (Figure 4.41).



Figure 4.41. Traditional Court-yarded Structures and Narrow Streets in Bey Neighborhood (Photos taken by the author, 2019)

Architectural values, original street orientation and urban pattern which the neighborhood has is worth to protect; and after comprised by Urban Conservation Site,

street rehabilitation, restoration and improvement practices started simultaneous with Culture Route Project and completed in 2010 (Figure 4.42). Bey Neighborhood, located within Urban Conservation Site, contained the historical Kendirli Church, the Armenian Girls' College (1877), the old cinema building, sixty-eight registered Antep Houses and identical houses with the traditional pattern (KUDEB, 2011).

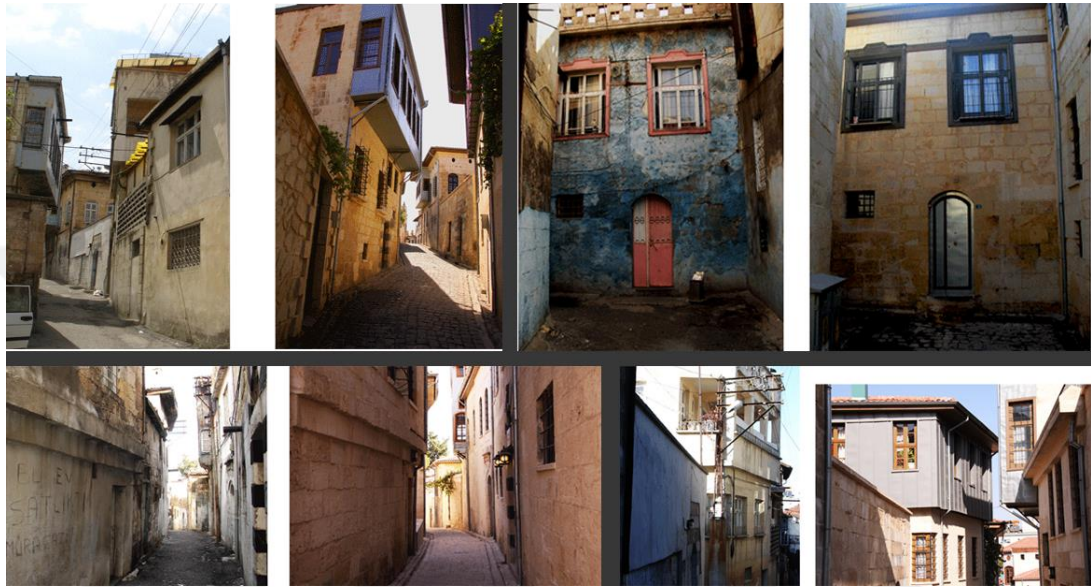


Figure 4.42. Before and After Structure Renovation and Street Rehabilitation Practices in Bey Neighborhood (Source: E&G Architecture, n.d.)

Implementations in Bey Neighborhood are specified below:

1. Reinforced concrete constructions against Conservation Master Plan (2010) were demolished in accordance with the projects.
2. Expropriations were made units considered necessary.
3. Eliminating deterioration exterior facades face to the streets; chemical and mechanical cleaning were made.
4. Restorations on door and window joineries was implemented.
5. Roof restorations and reconstructions, and chimney fabrications were applied.
6. Removing asphalt material on the streets, renewal of water and sewerage infrastructures, taking power and communications lines underground and flooring traditional basalt stones were implemented.

7. 125 traditional structures restored and reused; 3328 meters path improved.
8. Informing and evaluation meetings on project were realized with Bey Neighborhood dwellers (KUDEB, 2011).

The Conservation Master Plan (Figure 4.43) had three aim: The first aim is that transferring the cultural pattern to the future via having protective and progressive culture vision understanding, preserving fundamental structures and preparing conservation-aimed urban plans. In order to accomplish this aim, infrastructure renovation, façade restoration, street rehabilitation, changing land use and reactivation of the cultural activities were implemented. The second aim is providing a link between the historical and modern parts of the city. That is, providing the integration of the residents' social life to historical city center via attracting human appeal in the region. The third aim is the integration of the castle, commercial activities and neighborhood pattern to each, so that the bound between local residents and historic center could be strengthen (ÇEKÜL, 2017).



Figure 4.43. Bey Neighborhood Conservation Master Plan (Source: Şahinbey Municipality, 2019)

Strategies and actions in directions of these objectives has been successful physically; however, in terms of social and economic initiatives has failed.

In Bey Neighborhood, the most remarkable alterations are restoration of Old Armenian Girl School which was turned into residence, and then chronologically Ottoman Bank, Bekirbey Primary School, Fatih Sultan Mehmet Primary School and lastly KUDEB Building by adaptive reuse (2007), and restoration of Prof. Dr. Metin Sözen Culture House (2009) (Bey Mahallesi: Gaziantep'in Tarihi Beşiği, n.d.). Additionally, Church of Aziz Bedros was restored and has started to serve as Ömer Ersoy Cultural Center and traditional houses which have architectural value in Gaziantep were restored; some of the houses' functions have changed, while some of them have remained as a residential function (Tarihi Kentler Birliği, 2013 and Gaziantep Tarihi, n.d.). The adaptively reused buildings are listed as below:

1. Kendirli Church (1860) was used firstly Teacher School (Öğretmen Okulu) for many years and then converted into Teacher House Restaurant (Öğretmen Evi Lokali)
2. Residential building donated to Ministry of Culture and Tourism and converted into Hasan Süzer Ethnography Museum which accommodates food storage places, Turkish bath, cooking and daily life routines.
3. Residential building donated to Gaziantep Metropolitan Municipality was converted into Atatürk Memorial House which accommodates Atatürk Research Library, study room, exhibition hall and cinevision room.
4. Residential building was disappropriated by Gaziantep Metropolitan Municipality and converted to Gaziantep Museum of Games and Toys.
5. Residential building was disappropriated by Gaziantep Metropolitan Municipality and converted into Ali İhsan Göğüş Museum and Gaziantep Research Center (KUDEB, 2011).

In addition to building restoration, renovation and refunctioning, project included six streets: Hanifoğlu Street, Noter Street, Eski Sinema Street, Kayacık Street, Özışık

Street and Kısra Street. Even if most of the streets were rehabilitated in the neighborhood, some remain non-rehabilitated. A few traditional buildings were not renovated face to these streets (Figure 4.44).



Figure 4.44. Rehabilitated Streets: Noter Street (top left), Kayacık Street (top middle), Eski Sinema Street (top right), Özişik Street (bottom left) and Hanifoğlu Street (bottom right) (Photos taken by the author, 2019)

In this rehabilitation project, 125 traditional buildings were restored. While some of them remained residential, some has become cultural centers and museums; some are used as cafes, restaurants and accommodation. Some buildings which were converted into common uses such as commercial and socio-cultural functions by public or private sectors along with interior renovations. However, some residential units were renovated, but some interiors remained in obsolete conditions because their owners could not afford their renovation.

This area had more residential land use than historical center (axis of “Culture Route”). In an aspect of actor participation, this project differentiates from the other regeneration projects: not only provision of cooperation of actors and participants, but also collaboration with city of Karlstad – Sweden in international level in order to instill “adaptive reuse” and networking program between Karlstad and Gaziantep Municipalities. Adaptive reuse strategy resulting from partnership with Karlstad city has been successfully accomplished; however, in the project, the sustainability of this partnership in terms of receive feedback and contributions for further practices and production facilities to be called as “productive” cannot be observed.

After the first part of the project ended, the new restoration plan got into force as a continuation of it with a name of: “Action Plan 2012-14” which has covered the connection axes between Culture Route and Bey Neighborhood. The aim was creating connection each other with pedestrian and vehicle axes. There are streets which provide connection connections: Karagöz and Suburcu Streets (Figure 4.45).



Figure 4.45. Karagöz and Suburcu Streets as a Transition Line from Central Line through Bey Neighborhood (Source: Google Earth Pro, 2019)

Mütercim Asım Street, Gaziler Street and Hakim Mehmet Uygun Street were pedestrianized by this project (Figure 4.46).



Figure 4.46. Gaziler Street (left), Hakim Mehmet Uygun Street (middle) and Mütercim Asım Street (right) (Photos taken by the author, 2019)

In order to make evaluations on adaptive reuse practices and how much these practices has ensured sustainability of the community; firstly, interview with Şahinbey Municipality (2019) which Bey Neighborhood locates, then interviews with KUDEB (2019) and headman of Bey Neighborhood, Şahin Yeşilyurt (2019), and lastly, interviews with four local dwellers who inhabit in the neighborhood were realized.

According to KUDEB (2019), based on Conservation Master Plan (2010) made in large scale, detail plans and practices in small scale were made through tender; by reason of the structures in the site are registered, parcel and building order were protected. Unregistered buildings were removed due to square formation and increase in visibility of traditional structures, street improvement and infrastructure services were realized via corporation of architects, urban planners and archeologist via not damaging the original pattern. These practices comprise only façade restoration and relief implementations, because project and supervision rights on registered structures belong to Conservation Regional Council, illegal indoor interventions cannot be observed in site observations by the author, because according to local dwellers, due to their economic condition is insufficient to comprehensive project design performs which Conservation Council approves, indoor renovations are impossible. Besides, there are also traditional structures have not been renovated yet (Figure 4.47).



Figure 4.47. Traditional Residential Structures' Interiors and Exteriors not be Renovated (Photos taken by the author, 2019)

Deficiency on indoor renovation and improvements or lack of financial support on this subject to dwellers has caused unqualified and unhealthy life conditions for them, and they indicates that if they have better advantages economically, they will move out to new settlement areas of Gaziantep where more qualified residences locate.

Interview with KUDEB (2019), as an active actor and supervision unit, states that six months before the project start, infrastructure service studies and determination of statically problematic structures were made, and later on, applications started. According to KUDEB (2019), before the project began, three income groups lived, and the project process and refunctioning were shaped according to these groups:

1. High-income group: Their properties were converted into **museum, art and culture houses** by donation to municipalities or foundations.
2. Middle-income group: Their properties were converted into **cafes, boutique hotels, guesthouse and student lodging** by themselves or their renters.
3. Low-income group: They benefit from **residential purpose** improvements.

Just as other registered buildings in Urban Conservation Site, approvals and licensing supervisions on refunctioning are made by Conservation Regional Council. However,

just as not limiting adaptive reuses, refunctioning was made tourism-oriented; according to KUDEB (2019) and site observations, change in functions according to traditional lifestyle, income resource and local economic development, and community center, library etc. for society could not be enabled because structures donated by their owners mainly. For this reason, project has been incomplete in terms of constituting improvement of local society and socializing activities. KUDEB (2019) stated that there were no socializing and traditional activity spaces before the project, so there was no initiative for protection that kind of area and they have had thoughts on creating green open spaces and squares by demolishing contradictory structures. However, open space and socialization spaces could not be created yet, so even if the community did not have traditional activities, it could not strengthen the sense of unity and belonging in the community which caused the locals to leave or willing to leave.

According to an interview with headman of the neighborhood, Şahin Yeşilyurt (2019), KUDEB informed the dwellers on the processes; however, property owners who use the buildings for residential purpose had to leave because only façade improvements were realized. Besides, according to an interview with the local dweller (2019) who was not willing to tell her name and lives in western periphery of the neighborhood, in the process of boutique hotel conversion and restoration in rear front of the housing has caused permanent damages on dweller's roof, and due to financial scarcity, they could not repair.

The interview made with Conservation Plan Developer, Necati Uyar (2019); Bey Neighborhood was designed as residential neighborhood. Even if urban planner in Conservation Regional Council (2019) stated that there is no illegal interventions and all of conversions to new functions permitted, aimed residential neighborhood with the plan could not be achieved and service units have started appeared densely (Figure 4.48). Additionally, the headman, Şahin Yeşilyurt, (2019) stated that while refunctioning the structures to accommodation and café-type uses have damaged privacy of society and community's structure. However, these conversions were made

for touristic purposes rather than traditional life and activities, but still, touristic activities are very few in the neighborhood (Figure 4.49).



Figure 4.48. Current Appearances of Cafes and Restaurants (red), Boutique Hotels (yellow) and Planned Museums via Plan (blue) on Traditional Pattern (Source: Google Earth Pro, 2019)



Figure 4.49. Caf  Uses Converted from Residential Function in Their Courtyards (Photos taken by the author, 2019)

Through in a year, according to site observations made twice in September 2018 and March 2019, indicated that conversion to museums does not appeal tourist attraction as much as keeping the neighborhood dynamic; in other words, it is observed that the site turned into a ghost city, even if there is no attraction at boutique hotels (Figure 4.50).



Figure 4.50. Traditional Structures Turned into Boutique Hotels Mainly Unpreferable (Photos taken by the author, 2019)

Even if the aim was tourism-oriented refunctioning, due to both non-provision of community-oriented development and not assigning new functions trigger tourist attraction, upgrading the site in terms of both society and historical-tourism development has failed. In addition to this, because of failure in tourist attraction, in the site, tourism could not create sub-branch for economic gain (Figure 4.51).

Even if conversion of all structures were determined in plan as commercial uses and all alterations and additions on structures were approved by Conservation Regional Council and implemented, the independency of actors by means of purchasing or property transferring led to monotype uses - accommodation or cafes - in neighborhood which cannot enable functional variety in land use. This has caused stationary and monotonous environment for society even if physical condition was supplied flawlessly. According to Şahinbey Municipality (2019), if an historical neighborhood is only developed for touristic purposes just like Bey Neighborhood,

because the site cannot live without touristic activities, it will turn into deserted space; and what happened in Bey Neighborhood is that case.

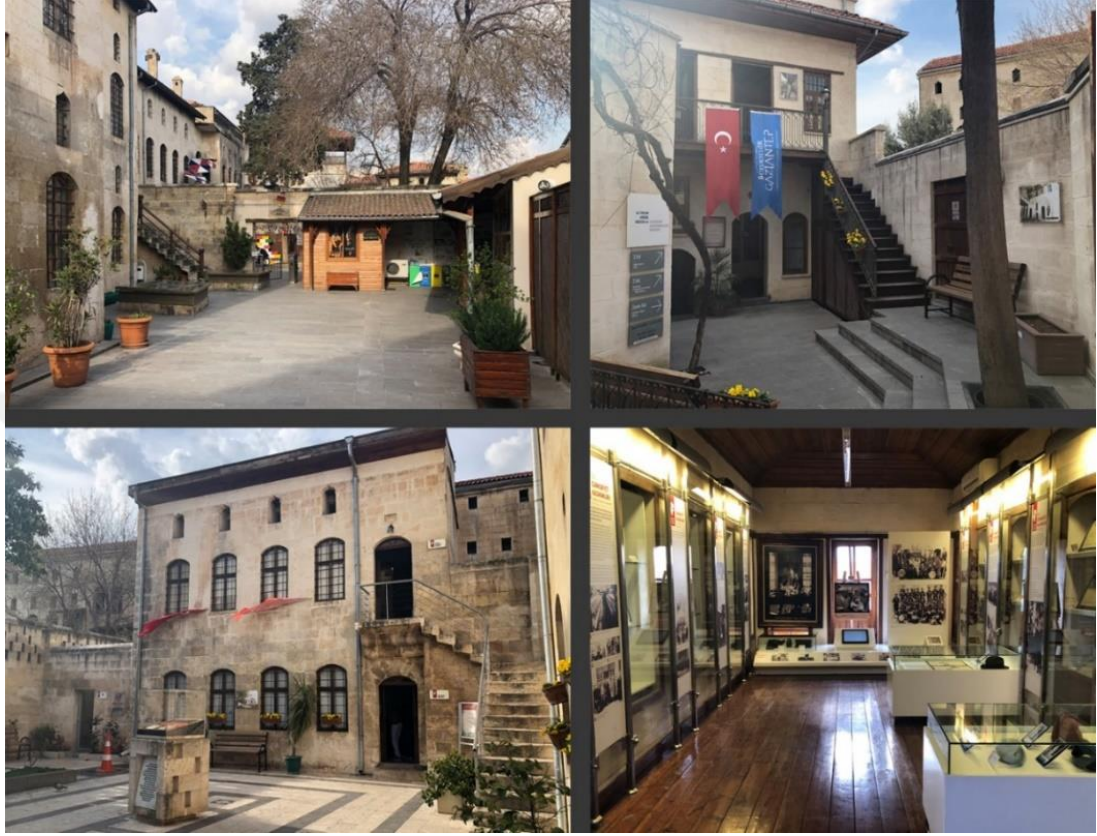


Figure 4.51. Games and Toys Museum (top left), Ali İhsan Gögüş Museum (top right) and Atatürk Museum (bottom) as an Empty Space due to lack of Tourist Attraction (Photos taken by the author, 2019)

In implemented project, because street widths have been protected and there has been no contradictory actions to registered buildings, unique urban pattern conserved and therefore, pedestrian priority has maintained in narrow streets which motorized vehicles cannot enter (Figure 4.52). The neighborhood streets which do not have massive accessibility from the environment provide privacy in community for this aspect at least.



Figure 4.52. Narrow Streets Which Their Widths Conserved (Photos taken by the author, 2019)

The question of how much change realized in neighbor relations and street usage especially by children as a playground directed to mentioned four local dwellers who was not willing to give their names and have lived before and after the interventions (2019); they answered that neighbor relations were much better, but because of the reasons as mentioned earlier, neighbor relations are now scarcely any. They also add that children cannot play in the streets due to decreased child population and they only play in courtyards of their houses. In addition to them, according to local dwellers and site observations, migration of Syrians to the abandoned houses in last couple years by the reasons of affordable prices of building rents, resemblance of traditional living units and closeness to the old center, led to disappearance of neighbor relations and street uses. Besides, ending commercial activities after a certain hour in the evening

and lack of communication in the neighborhood has brought security problems in the site and society has started to beware using streets, especially at the evening hours. These security problems caused to be unavoidable to open police station for continuous supervision in the neighborhood (Figure 4.53).



Figure 4.53. Recently Opened Police Station for Security Problems (Photo taken by the author, 2019)

In interviews with residents living in the area (2019), it was learned that the inhabitants are either retired or working outside the neighborhood. In addition, the owners of commercial buildings such as accommodation and café-restaurants are not the locals; they are people who only manage the functions via renting or purchasing the units but does not live in the area. That is, people who benefit from the conversion of the structures to new functions are not local dwellers, they are the outsiders; locals who could not sell their properties in general have moved out by leasing out them. In the site observations, signboards for dwelling sale were observed, and it is verified via locals' interviews in 2019 (Figure 4.54).



Figure 4.54. Signboards for Sale or Rent by Property Owners who abandoned the Neighborhood
(Photos taken by the author, 2019)

In addition to them, it is observed that local business managers have not brought to area specific functions related with community's traditions and contemporary needs; it was understood that they have used authentic pattern derived from architectural typology only for trigger tourist attraction and external consumers. Except that there were no individual travelers or tourist groups experimenting local history in the site observations.

4.4.3.2. Adaptive Reuse in Kepenek Neighborhood

Kepenek Neighborhood is at southernmost part of the Urban Conservation Site and has organic urban pattern which includes traditional Antep Houses just like Bey Neighborhood. In the site, restoration, rehabilitation, renovation and improvement actions still continue as follow-up project of Culture Route Project (Figure 4.55).



Figure 4.55. Urban pattern of Kepenek Neighborhood (Source: Google Earth Pro, 2019).

Kepenek Neighborhood has been projected depending on Conservation Master Plan (2010) and has been put into practice by Şahinbey Municipality cooperation with foundations (mostly financially) when required (Figure 4.56).

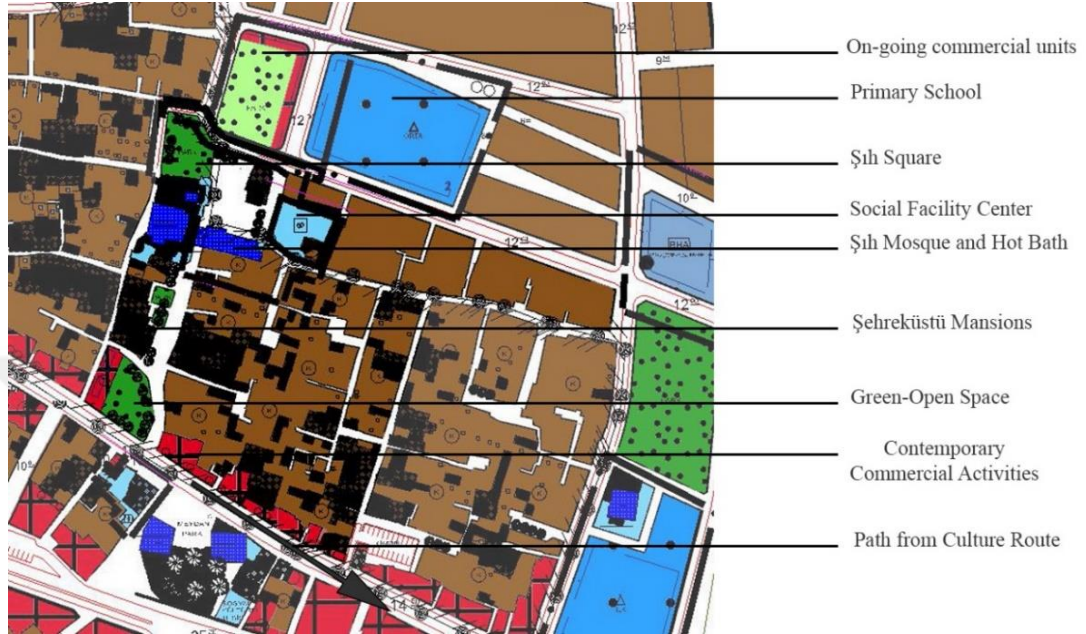


Figure 4.56. Kepenek Neighborhood in Conservation Master Plan (Source: Şahinbey Municipality, 2019).

The neighborhood which has narrow street paths and traditional two- or three-story houses with courtyards has strong interactive relations with its surrounding living spaces, functions due to it does not locate sloping land just like Bey Neighborhood and more than four entrances. Kepenek Neighborhood, which has a unique historical pattern with registered structures, has been observed that local population is higher than Bey Neighborhood and there is a more dynamic life among the inhabitants (Site Observations in 2019). The interview with the Şahinbey Municipality (2019) confirmed that this area is a less abandoned space than Bey Neighborhood.

In addition to being in the continuation of the Culture Route Project, it was completed in 2014 as the third stage of the street rehabilitation works. It is located in the area called as Şehreküstü District which is above the main commercial axis and its accessibility is much higher than Bey Neighborhood (Şahinbey Neighborhood

Website, 2019). Within the scope of implementations made by Şahinbey Municipality, Directorate of Development and Urbanization, Historic Environment and Protection Unit, in Kepenek Street, Köroğlu Street, Aşağı Köroğlu Street, Kesik Minare Street, Meydan Çıkması (dead-end), Kerim Paşa Çıkması and Elmacı Çıkması, façade rehabilitations and restorations on traditional structures including eighteen registered buildings were made (Figure 4.57 and 4.58) (Şahinbey Municipality Website, 2019). Additionally, as mentioned by Şahinbey Municipality (2019), in the scope of street rehabilitations, treatments of sewage system, taking power lines into underground and lighting projects were implemented integrally – foreseeing its sustainability in further initiatives through on south of the neighborhood.



Figure 4.57. Street Rehabilitation Project in Kepenek Neighborhood (Source: Şahinbey Municipality Website, 2019)



Figure 4.58. Façade Restorations and Street Rehabilitations in Kepenek Neighborhood (Şahinbey Belediyesi, 2013)

As stated by Şahinbey Municipality (2019) and headman of Kepenek Neighborhood, Ergün Kıcıkoğlu (2019), local dwellers were informed about the implementations. In the process of street rehabilitation, width of the streets has been preserved and pedestrian dominance has maintained due to very few car accessibility (Figure 4.59).



Figure 4.59. Narrow Streets Which Their Widths Conserved (Photos taken by the author, 2019)

During the restoration of the facades, it was stated by all the owners, who were interviewed through the site observations in 2019, that there was no interference with



Figure 4.61. Şih Square, Before the Interventions (left) and After the Implementations (right)
(Source: Şahinbey Municipality Website, 2019)



Figure 4.62. Adaptively Reused Structures Which Define Şih Square and Şih Square as a Gathering Place (Photos taken by the author, 2019)

Basemap derived from Şahinbey Municipality, Conservation Master Plan and designed projects demonstrate that interventions which was made paid regard to original street pattern and structure silhouette. So, that supports the neighborhood and history, architecture and urban pattern of Gaziantep has been protected and adopted. In addition to mentioned applications, Şahinbey Municipality stated that MEB (Ministry of Education) mass houses which were built in contradiction to original texture were demolished and authentic commercial structure compatible with the site which increases visibility of historical Şeyh Fetullah Mosque, Kastel and Hot Bath has been designed and constructing recently (Figure 4.63).

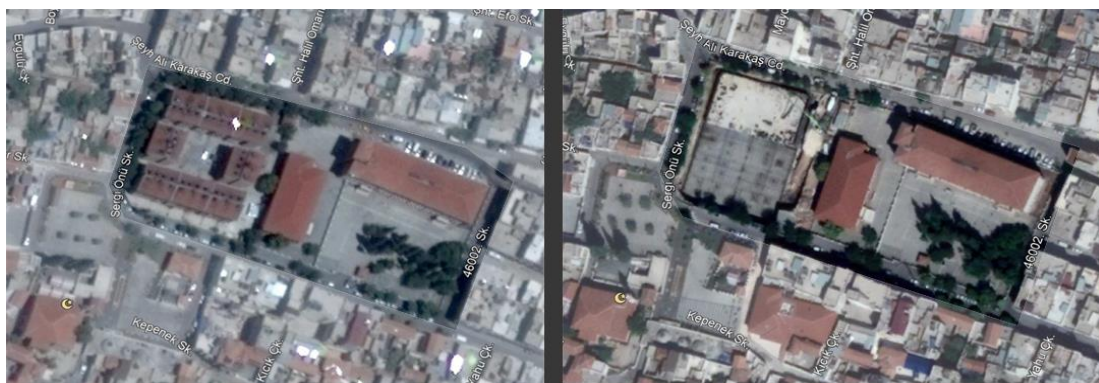


Figure 4.63. Demolishment of MEB Houses and Construction Period of Commercial Entity (Source: Google Earth Pro, 2019)

In addition to these, Şahinbey Municipality (2019) stated that they have had objectives on refunctioning structures adaptively not based on tourism, but on local community predominantly; in order to do that they provided expropriation of the registered traditional buildings from entrance of the neighborhood through defined square were converted into uses which enables locals to accommodate and socio-cultural improvement. Therefore, at the entrance of the site, four registered traditional houses and mansions belongs to 1900s were adaptively reused and called as Şehreküstü Mansions whose implementations started in 2012 and ended in 2013 (Şahinbey Municipality Website, 2019). These four buildings were restored without damaging the originality of their interior and exterior spaces because they belong to the district municipality. They were re-functioned as a library, culture house, reading hall,

Condolence House (Taziye Evi in Turkish) and association according to the needs of the society (Figure 4.64).



Figure 4.64. Şehreküstü Mansions, Before and After the Implementations (Şahinbey Belediyesi, 2013)

The open space and landscape arrangements on the façades together with the function given to these four structures enabled the active use of both the interior and the exterior of the function, and it was understood that children and the elderly people have spent time here during the site observations (Figure 4.65).



Figure 4.65. Open and Green Space Provisions Related with Şehreküstü Mansions (Photos taken by the author, 2019)

It has been observed that these re-functionalized structures have been defined by a new minor axis leading to the new square (Şih Square) and the local population actively uses this axis and the square (Figure 4.66).

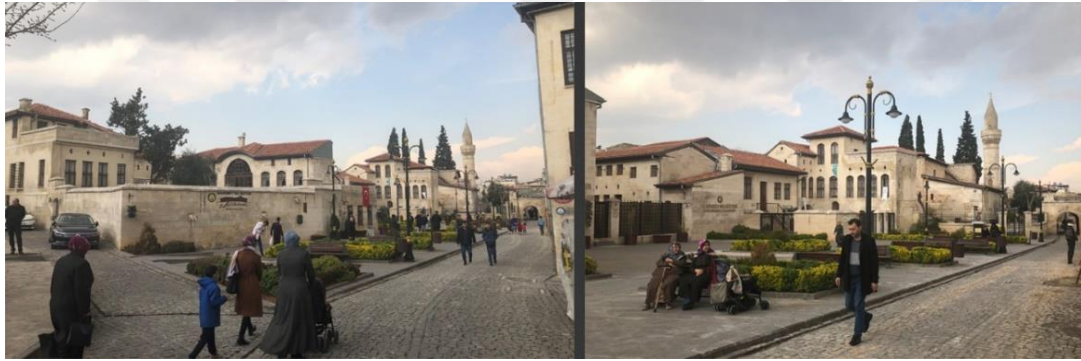


Figure 4.66. Minor Line Through Şih Square from Major Central Axis (Şehitler Street) Which Şehreküstü Mansions Face to (Photos taken by the author, 2019)

At this point, refunctioning way of the buildings at the site can be divided into two categories:

1. Rehabilitation and restoration of interior and exterior spaces of buildings allocated to the municipality by means of expropriation.
2. Rehabilitation and restoration only facades of the structures owned by private owners.

Şih Square becomes active space by parents and primary school children (between ages of 6 – 10) at the end of the school which located adjacent to square, and they use the square as playground due to it is an extensive and pedestrianized space. Landscape

arrangements and urban furniture in the square enables parents to watch over their kids and socialize (Figure 4.67).



Figure 4.67. Şih Square as Children Playground and Adult Socialization Place (Photos taken by the author, 2019)

As a result of the interviews with eight people, who were also not willing to share their names in the site observation processes in 2019, three of them were property owners and five of them were tenants. They stated that the families use the square as a meeting point and the children use the square as a playground especially in summer months. When the question asked on the period except the summer months, they answer that the students spend their time in the library and the study halls of Millet Kırathanesi, which are the units in Social Facility Center after the school to do their homework and study until late hours in the evening. In the site observations (2019), visits to Millet Kırathanesi after school hours, it was observed that a lot of students benefit from this unit to study. That means, adaptive reuse of this traditional structure utilizes not only by local society but also dwellers from adjacent Suyabatmaz and Kozluca Neighborhoods, especially on supporting children's education and improvement.

When asked to question of if traditional activities community had before the applications still maintain or not to Şahinbey Municipality (2019), headman – Ergün Kıcıkoğlu, and locals; all of them stated that there were no traditional activities belonging to the community, but after the interventions, they have conventional iftar, bazaars and other religious activities especially at Şih Square.

Except square and social center formations, when the question of what have changed on users' privacy, neighbor relation and street usage especially by children was asked to the dwellers in street rehabilitation and façade restoration processes; they answered that they have lived for more than 15 to 20 years and these interventions did not change on their lives significantly, did not impair their private lives and their relations. In the meantime, during touring and site observation period, in the neighborhood unit, it is observed that community members know each other very well and children play in narrow and safe streets which vehicles cannot pass (Figure 4.68).



Figure 4.68. Dynamic Street Life Including Neighbor Interaction and Children Mobility (Photos taken by the author, 2019)

When Conservation Master Plan (2010) is analyzed, it is understood that the space and type (retail, social, residential and green/open space) of re-functioning for Kepenek Neighborhood has been applied one-to-one with the original plan. Besides, interview of Şahinbey Municipality (interview with Muhammet Ali Şahin, 2019)

which is in charge of implementation of the project also verified that the process continues according to plan exactly. In accordance with the plan, the neighborhood was not transformed to a non-residential or a function which is not determined in the plan; that means, specification and limitation of reuses ensures integrity and unity within environment and the region, whilst excessive service requirement was not deficient. The municipality, which stated that they received financial support in some projects, realized a large part of the practices in Kepenek Neighborhood itself. Therefore, in the implementation process, except for obtaining approval from the Conservation Regional Council, the municipality was the only developer actor; which means a complicated actor system could not be provided.

In addition to physical and social analyses, when the question of if there is a tourist attraction and accordingly an income provision from tourism or not is asked to headman and locals (2019): Both stated that the site is not preferred by tourists; therefore, there is no touristic activities and income delivery. Except several local shops located at the entrance from the central main axis, there are no units where conventional handicraftsmanship or retailing maintenance, so it means that Kepenek Neighborhood cannot provide economic sustainability by itself (Figure 4.69).



Figure 4.69. Local Shops Only Supply Daily Needs of the Community (Photo taken by the author, 2019)

Lastly, interventions required by Conservation Master Plan (2010) in Kepenek Neighborhood are still incomplete and continue. The commercial functioned structure and underground car park are still under the construction in south-east part of the site and it is built up according to site's specific architectural feature (Figure 4.70).



Figure 4.70. Ongoing Construction of Commercial Entity with Underground Car Park (Photos taken by the author, 2019)

According to Şahinbey Municipality, Şıh Square defined by Social Facility Center, mosque, hot bath and upcoming commercial unit will be integrated open green space located in southern part, in Kocaoğlu Neighborhood; so, it will work with adjacent squares and neighborhoods in unity.

4.5. INVESTIGATING THE CASE AREA WITH ASSESSMENT TOOL

Within the light of investigation of the site in three scales, in this section, outcomes for each scale are summarized with reasons and assessment tables as follows:

4.5.1. Results of Adaptive Reuse in Building Scale: Monumental Gaziantep Castle

Spatial Results:

There are seven spatial criteria to evaluate adaptive reuse in building scale, and Gaziantep Castle achieved five of them according to building scale assessment tool.

- Gaziantep Castle is physically accessible from new settlement districts and functions while its accessibility is also extensive from the old city due to its massiveness and landmark feature; however, the castle is only visited by tourists because of its authentic image and history; and local dwellers who live close to the castle due to its surrounding green space for leisure time. The main reason of dynamism deficiency is that the structure cannot appeal to people with its surrounding entities which almost fall into disuse such as coppersmith crafting. Therefore, people prefer to reach the site from the direct axis to Bakırcılar and Almacı Bazaars where they can meet all their needs at once.
- The first point the castle fails is that *“flexibility of unit usage convenient to further transformations and upgrading”*. The reason of this failure is that Gaziantep Historical Castle is as an entity 1st degree archeologic site with its surrounding. The adaptively reused museum is for socio-cultural refunctioning; therefore, further transformations and upgrading for another uses are not possible. It is not a failure, but a limitation which prevents further improvements.
- As achievements of this adaptive reuse practice; it enables *“preserving the original work as much as possible and culture existence with new functions”* and *“getting rid of ruin view”*. Original work has had to be conserved by reason of its archeologic feature, but ruins for visual quality has also been removed by landscaping.
- Its cultural existence sustains due to *“new additions are apparent on old structure,”* especially through the remnants on the top of the castle so, its unique identity is still observable.
- Even if its refunctioning did not trigger regeneration through its environment and it was initiated via Culture Route Project, because its monumental size and being a landmark in the site where it locates, it has been accepted as the beginning point of the regeneration project. Due to this reason, it might be assumed that it had a triggering effect on the regeneration process.

Social Results:

There are seven social criterias to evaluate adaptive reuse in building scale, and Gaziantep Castle achieved five of them.

- In community and social life terms, adaptive reuse of Gaziantep Castle ensures that its heritage value and urban identity due to being landmark in the Gaziantep has been conserved. Not only by citizens in Gaziantep, by people who live in the South – Eastern Anatolian Region and in other cities locate in Turkey or foreign countries, the castle is a well-known image.
- The castle has enabled gathering and socializing space for the local dwellers in the site and they are pleased to use green and open spaces which the castle provides.
- Gaziantep Castle had already historical importance due to its building features and the period it witnessed, but together with refunctioning to the museum, which exhibits Independence War and the role of the city during the period, it has contributed to its authentic value.
- As much as adaptive reuse of the castle meets the social criterias majorly, giving a museum function to the castle cannot provide knowledge, skills and self-improvement platform for the community. The content of the museum is permanent and known by almost all Turkish citizens in Gaziantep; therefore, constant visiting by the locals is not possible. Besides, due to restrictions mentioned before, in addition to museum, usage of the castle for education or community center purpose adaptively could not be provided.
- The refunctioning of the castle has initially aimed tourist attraction; however, due to change in perception type of tourism (historical to gastronomy), it has lost its dynamic character for touristic attraction.

Economic Results:

There are three economic criterias to evaluate adaptive reuse in building scale, Gaziantep Castle can achieve none of them. Therefore, in terms of economic criteria, it is unsuccessful.

- Taking into account social results which mentioned refunctioning has not enabled knowledge and skills for the society, refunctioning does not acquire economic benefits for users because new use does not give ability dwellers for qualified competence.
- Due to its life of time and size and gaining very little amounts of income from the museum entrance fee, the castle cannot maintain its presence economically. Its conservation and renovation practices which occur in course of time because of depreciation require high amounts of budget, so they are supplied by Metropolitan Municipality.
- After refunctioning Gaziantep Castle and Culture Route, it contributed to representation of the city; however, as mentioned, the paradigm shift in tourism type and focus, the castle has lost its public recognition as touristic income source.

Environmental Results:

There are three environmental criterias to evaluate adaptive reuse in building scale, Gaziantep Castle can achieve all of them.

- The reuse of Gaziantep Castle is successful in terms of enabling higher quality environment via landscaping and creating green space for dwellers. It has also ensured that all kind of renovations and rehabilitations are made to getting rid of the ruin and its unattractive view (Table 4.1).

Table 4.1. Assessment of Building Scale Adaptive Reuse of Gaziantep Castle

ASSESSMENT SCALE	ASSESSMENT TYPE	ASSESSMENT CRITERIA/TOOL	Gaziantep Castle
GAZIANTEP CASTLE IN (MONUMENTAL) BUILDING SCALE	Spatial	Preserving the original work as much as possible and culture existence with new functions.	✓
		Getting rid of the ruin view visually.	✓
		Enabling environmental and visual integrity.	✓
		Flexibility of unit usage convenient to further transformations and upgrading.	✗
		Visible old and new distinctness with apparent additions.	✓
		Evoking the idea of surrounding environment regeneration.	✓
		Accessibility from other functions.	✗
		Conservation of architectural heritage value and urban identity.	✓
	Social	Existence as a landmark, gathering place and socializing space for community with its all components.	✓
		Being elating space for community.	✓
		Enabling community, knowledge, skills and self-improvement platform.	✗
		Well-known by society, in national or international scale.	✓
		Keeping the environment dynamic via attracting the community or the visitors.	✗
		Additional authentic value for urban image.	✓
		Continuity of refunctioned structure economically.	✗
		Gaining ability of acquiring economic benefits by users.	✗
	Economic	Contribution to representation of the city via awareness of the new function.	✗
		Healthy environment for the locals.	✓
	Environmental	Landscaping the surrounding to contribute green system of urban environment.	✓
		Getting rid of manmade ruin of the structure and its pollutants.	✓

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4.5.2. Results of Adaptive Reuse in Street Scale: Culture Route Project

Spatial Results:

There are seven spatial criterias to evaluate adaptive reuse in street scale, and Culture Route achieved six of them. Therefore, it is successful in terms of physical implementations.

- Along the streets, the pedestrian movement and safety have been provided by sidewalks, small openings and fixed bollards to segregate from vehicles; however, very dense commercial lines could not be pedestrianized totally by the reason of objections on service delivery.
- Through the street line, all of the registered monumental structures are re-evaluated by contemporary functions; especially new functions derived from title of “Gastronomy City”; that is, service sector which reflects city’s food culture is dominant in addition to souvenir stores. It stimulates these structures are still in use under the conservation guidelines.
- This project, even if applied in 2008 initially, its extensions are still continuing; therefore, it has triggered further initiatives on existing plot and structure pattern thanks to being registered under legally bounded documents.
- Due to its commercial character by traditional and modern uses with adaptively reused structures, a public space is constituted which not only accessible from the castle, but also Suburcu and Karagöz Streets where provide car parking spaces.

Social Results:

There are eight social criterias to evaluate adaptive reuse in street scale, and Culture Route achieved six of them. Therefore, it is successful in terms of social implementations.

- Most of the structures are monumental and registered and their conservation is under legally bounded documents, so all of the reuse practices were made adaptable to their heritage value and architectural character. That is, urban

image and identity has been preserved by appropriate functioning. Besides, legislative basis has ensured prevention of illegal decisions and actions.

- Refunctioning for all kind of users – locals and tourists – has enabled pedestrian interaction, attractive, safe and constant mobility for local activities by tourists and has increased sense of unity in the community.
- Creation of small openings and dynamic area with service sector has led to local dwellers from adjacent neighborhoods use the commercial lines; therefore, it has encouraged sustainable community within sense of place and public realm.
- Culture Route Project has failed in terms of participation and feedback mechanism. Because Gaziantep Metropolitan Municipality took over all the implementation process, there has been no collaboration between stakeholders; they were only informed about the process. Deficiency on cooperative organizational structure, required data for feedbacks has not been collected, outcomes have not been evaluated for further actions.

Economic Results:

There are four economic criterias to evaluate adaptive reuse in street scale, and Culture Route achieved only one of them. Therefore, in terms of economic criteria, it is unsuccessful.

- Due to traditional and unique commercial density, especially in Bakırcılar and Almacı Bazaar – the tourist attraction is also in high which brings income for locals, or wider scale, for the city.
- Boutique coppersmith producers have updated their concepts according to this project as a traditional coppersmith store in which productions sell; however, tourism sector change has started to terminate the local craftsmanship activities. It has resulted in local production disappearance and its economic benefits to local community.
- When copper craft courses were not able to provide local producers due to mentioned reasons, enhancement of employment with local production for

future generations is failed. Discontinuation of local production and income source has caused not be able to part of the local and national economic goals.

Environmental Results:

There are three environmental criterias to evaluate adaptive reuse in street scale, and Culture Route achieved all of them. Therefore, in terms of environmental criteria, it is successful.

- According to professional and user assessments, along the main street and its extensions, all of the infrastructure system was renewed from power lines through water and sewage systems, and the route was adjusted via keystone covering rather than asphalt and additional green spaces (or trees).
- As mentioned before, to make the dense commercial site breath, illegal or contradictive structures were demolished, and open spaces has been created and landscaped for healthier environment for locals.

Table 4.2. Assessment of Street Scale Adaptive Reuse of Culture Route

ASSESSMENT SCALE	ASSESSMENT TYPE	ASSESSMENT CRITERIA/TOOL	Culture Route
CULTURE ROUTE IN STREET SCALE	Spatial	Restoration or rehabilitation of valuable structures via adaptive reuse.	✓
		Rehabilitation of entities which stimulates further improvement and initiatives.	✓
		For further developments, maintaining existing plot and structure pattern.	✓
		Preservation and improvement quality of public spaces (revitalizing the streets with pavements, barriers for pedestrian safety).	✓
		Street (public space) design for pedestrian movement encouragement.	✓ / ✗
		Creation of powerful public space and accessibility to fundamental functions.	✓
		Enhancement of accessibility for services.	✓
		Conservation of urban image, identity and architectural heritage value through the street within its historical character.	✓
	Social	Delivering sustainable community which includes sense of place and public realm.	✓
		Pedestrian interaction.	✓
		Sense of unity in the community.	✓
		Attractive, safe, constant mobility for local activities and sustainable space for pedestrians.	✓
		Registration of socio-spatial values under legislative basis to prevent illegal decisions and actions.	✓
		Having feedback mechanism for actions and investigating the outcomes of further actions.	✗
		Enabling further cooperation between stakeholders for further initiatives	✗
		Continuation of boutique economic activities with local production support in historical attraction zone.	✓
	Economic	Enhancement of local employment for future generations.	✗
		Integration of local – national economic goals.	✗
		Tourist attraction due to unique historical environment.	✓
		Healthy and pleasant streetscape due to technical arrangements (i.e. drainage system) and street adjustments.	✓
	Environmental	Landscaping the public space and (if there is) protection of unique biodiversity and fertile lands.	✓
		Preservation and advancement of open spaces.	✓

4.5.3. Results of Adaptive Reuse in Neighborhood Scale: Bey and Kepenek Neighborhoods

4.5.3.1. Results of Adaptive Reuse in Bey Neighborhood

Spatial Results:

There are eight spatial criterias to evaluate adaptive reuse in neighborhood scale, and Bey Neighborhood achieved four of them.

- Most of the monumental dwellings are expropriated or sold to developers by their owners, and refunctioned as boutique hotels, museums and cafes for tourist appealing, but no adaptive reuse initiative through community center, local education units or traditional activity center (visitor-based refunctioning rather than society-based refunctioning).
- Through the time restoration and streets rehabilitations were realized, non-residential reuses are adaptively refunctioned with their interior and exterior spaces; however, residential buildings' only facades are restored, and their interiors were not rehabilitated because of legal restrictions on property. Therefore, physical conformity has been provided in non-residential uses, but not in residential buildings where local dwellers live.
- According to KUDEB (2019), there was no restriction in refunctioning number which triggers massive service system, for this reason, in terms of land use, number of residential entities has reduced.
- Due to narrow street widths, there has been no over-accessibility by vehicles. On foot mobility is still valid in the site.
- By reason of registered structures are dominant in the site, there has not been excessive alterations and additions, such as too much technical equipment to the structures that could be harmful their originality.

Social Results:

There are seven social criterias to evaluate adaptive reuse in neighborhood scale, and Bey Neighborhood achieved two of them. Therefore, it is unsuccessful in terms of social implementations.

- Because the refunctioning ignored community's needs and wishes such as community centers and realized for visitors, keeping the traditional activities and improving gathering places for socialization could not be possible.
- Over-refunctioning to non-residential uses has caused damage on society's privacy and locals whose number is very few are willing to abandon the site.
- Each structure has refunctioned by different developers and sub-projects, but this variation has led to individual practices and establishment of unity and integrity of the actors and compatible interventions could not be ensured.
- Through the process, the architectural features, street widths, high walls which are elements of conservative society and climatic-specific components have been preserved, so the authentic urban pattern and value of heritage architectural typology have been protected.
- The community was informed by the initiators of the interventions about the process in detail, they were in aware which practice affects where and how on their dwellings.

Economic Results:

There are two economic criterias to evaluate adaptive reuse in neighborhood scale, and Bey Neighborhood achieved none of them. Therefore, in terms of economic criteria, it is unsuccessful.

- Even if all kind of adaptive reuse practices were made visitor-oriented objective, the neighborhood has not appealed visitors as much as they aimed, so appropriate level of income which be derived from touristic activities could not be achieved.
- As long as social centers which are useful for the community cannot be provided, refunctioning initiative which is adaptable to traditional production and economic maintenance of the site could not be enhanced.

Environmental Results:

There are three environmental criterias to evaluate adaptive reuse in neighborhood scale, and Bey Neighborhood achieved two of them.

- As long as Culture Route, technical infrastructure including power line arrangements, water and sewage system upgrades etc. was improved successfully; and material waste did not occur.
- Even if in existing condition, there was no green space system or agricultural production, there was no practice on creating green/open areas for healthier environment for the dwellers.

4.5.3.2. Results of Adaptive Reuse in Kepenek Neighborhood

Spatial Results:

There are eight spatial criterias to evaluate adaptive reuse in neighborhood scale, and Kepenek Neighborhood achieved seven of them. Therefore, it is successful in terms of physical implementations.

- In contrast to Bey Neighborhood, adaptive reuse of the structures was made beneficial for local community. Dominant structures in terms of size and the location refunctioned as Social Facility Center, Public Soup-kitchen, Condolence House, library, culture house, reading hall and association centers, so recycling the structures has been made society-based, not visitor-based.
- Through the Street Rehabilitation Project, all kinds of features belongs to authentic pattern have been conserved relating with street widths, building originality (high walls, courtyards etc.), climate-focused typology; and technical infrastructure has been improved with contemporary technology and its requirements. All of the technical alterations on houses was made in optimum level, so the damage caused by extremism was prevented.
- The use of specific functions such as commercial and accommodation are restricted according to the Conservation Master Plan (2010) and the compliance with this decision, the need for excessive service was prevented in the whole neighborhood and kept privacy. The other factor limited the service needs is that protection of street widths which do not allow vehicle uses and encourage pedestrian dominance.

- Non-residential structures which mainly belongs to district municipality or foundations are restored with interior and exterior spaces because they do not have ownership problem; however, residential structures belongs to private owners are restored as only street and façade level due to ownership problem. Therefore, physical conformity of the non-residential buildings is much higher than residential buildings as living spaces.

Social Results:

There are seven social criterias to evaluate adaptive reuse in neighborhood scale, and Kepek Neighborhood achieved six of them. Therefore, it is successful in terms of social implementations.

- Thanks to achievements on physical implementations and refunctioning the structures for local community benefit (community center according to user type) at maximum, the urban identity and architectural value in its historical character have been protected.
- The local community did not have traditional activities before the projects, but adaptively reuse of the structures and adjacent open spaces which are created integrated way have led to community to have traditional activities such as conventional iftar, religious activities and local charity bazaars. In that way, this practice has enabled gathering places and reason for gathering for socializing in the district.
- Due to aforementioned accomplishment on physical society-based actions, local community's privacy has not been damaged and as a result of that, the abandonment level of the community is too low, and local population is much higher in comparison with Bey Neighborhood.
- In regeneration project, the only developer is the district municipality, so there is no active cooperation and integrity between other actors for whole area and the municipality has acted individually. Therefore, there is no participatory approach in between possible developers and the municipality.

Economic Results:

There are two economic criterias to evaluate adaptive reuse in neighborhood scale, and Kepenek Neighborhood achieved none of them. Therefore, in terms of economic criteria, it is unsuccessful.

- Because the regeneration has not been realized dependently on visitors, there are no tourist emergence and related income, so locals cannot have benefit from this refunctioning in this respect.
- In the neighborhood, there is no function derived from adaptive reuse practices which encourage traditional handicrafts and retailing to ensure economic sustainability of the neighborhood. In this aspect, the site becomes disadvantageous to settle.

Environmental Results:

There are three environmental criterias to evaluate adaptive reuse in neighborhood scale, and Kepenek Neighborhood achieved all of them. Therefore, in terms of environmental criteria, it is successful.

- Şahinbey Municipality has provided infrastructure delivery and supervision according to environment protection and upgraded.
- Alterations on the structures, to keep their identity and uniqueness, has been made at minimum, so material and time waste was not applicable.
- In the neighborhood, there was no green and open spaces, yet together with the demolishment of illegal and concrete structures against to traditional configuration, parks and open spaces on newly defined pattern has formed. Thus, environmentally healthier neighborhood for individuals has ensured.

Table 4.3. Assessment of Neighborhood Scale Adaptive Reuse of Bey and Kepenek Neighborhoods

ASSESSMENT SCALE	ASSESSMENT TYPE	ASSESSMENT CRITERIA/TOOL	Bey N.	Kepenek N.
BEY NEIGHBORHOOD AND KEPENEK NEIGHBORHOOD IN NEIGHBORHOOD SCALE	Spatial	Refunctioning for local dwellers' benefits.	✗	✓
		Physical conformity of the structures (community centers, residences etc.)	✓ / ✗	✓ / ✗
		Keeping the authentic urban pattern as much as possible (i.e. street widths, climatic features, pollution preventer characters)	✓	✓
		Due to potential enormous number of visitors to the site, not visitor-based, but local society-based refunctioning.	✗	✓
		Optimum level of physical additions or alterations to the structure should be done, so not excessive technical equipment delivering.	✓	✓
		Limitation on refunctioning for specific uses (retail, accommodation etc.) which triggers massive service system.	✗	✓
		Preventing over-accessibility via vehicles or on foot with consistent street design.	✓	✓
		Validity of spatial requirements delivered in building and street scale.	✓	✓
		Conservation of urban image, identity and architectural heritage value through the street within its historical character.	✓	✓
		Keeping the traditional activities local society has.	✗	✓
	Social	Protection and improvement of gathering places for socializing.	✗	✓
		Community center development for neighborhood.	✗	✓
		Informing the community on interventions and their essentials.	✓	✓
		Strategies on not destroying local community's privacy and their common rituals.	✗	✓
		Unity and integrity of developers, so that incompatible interventions cannot emerge - preventing individual practices.	✗	✗
		Appropriate level of tourist visits and related income.	✗	✗
		Enhancement of traditional handicrafts and shops and economic sustainability in the neighborhood.	✗	✗
		Infrastructure (water, electricity etc.) delivery and supervision according to principles of sustainability and environment protection.	✓	✓
	Economic	Prevention of waste of material and time during refunctioning period.	✓	✓
		Continuity of (if there is) agricultural production and protection.	✗	✓
	Environmental			

4.6. CONCLUDING REMARKS OF THE CHAPTER

This chapter provides the reasons of why Gaziantep Historical Quarter has been selected for case study, background information and its significance within its history and geographic location, and its valuable features of physical space and the society. Later on, the urban regeneration initiatives and conservation practices together with its failures and revisions. After that, more importantly, the case study area is investigated within three assessment tools of adaptive reuse practice derived from literature review and completed practices to provide social sustainability. Gaziantep Castle in (monumental) building scale, Culture Route in street scale and Bey Neighborhood and Kepenek Neighborhood in neighborhood scale are evaluated with professional assessments, user assessments and author's assessments via site observations. Lastly, each adaptive reuse investigation results are supplied according to assessment tools in order to discuss evaluations, contributions and limitations of the study in the next – conclusion – chapter.

CHAPTER 5

CONCLUSION

The study started from the problem of deficiency of social sustainability in historical quarters through urban regeneration practices. Therefore, this thesis, by exploring the origins of the problem, aims that clarifying urban regeneration initiatives and significance of social sustainability provision in its context. Later on, it determines in which point deficiency occurs and constitutes adaptive reuse concept in historical sites' regeneration as a solution tool for socially sustainable quarters. In order to test if adaptive reuse in urban regeneration in historical sites as a strategy in obtaining social sustainability or not, certain cases are investigated according to their implementation scales and their outcomes on delivery for sustainable communities. With all these detailed explanations, assessment tool for each three scale in measuring social sustainability in terms of achievement in adaptive reuse is established because it is assumed that adaptive reuse policies and their effects on social sustainability differentiates according to scale it implies. Therefore, the solution is tested via these three scale adaptive reuse tools in Gaziantep Historical Quarter, which contains all of them as a sample to deduce on social sustainability accomplishment. All scales are evaluated via tool and results are clarified. This chapter provides evaluations of the results, contribution and limitation of the study and suggestions for further studies and tool establishment are given.

5.1. EVALUATIONS OF THE RESULTS

In this section, if social sustainability has been enabled via adaptive reuse in Gaziantep Historical Quarter (or not) is evaluated and if adaptive reuse is the most appropriate strategy for enabling social sustainability in urban regeneration initiatives in historical quarters.

In general aspect, there are scale-independent evaluations of adaptive reuse in Gaziantep Historical Quarter as below:

- As mentioned in Chapter 2, Carter (2000) has defined three models of partnership approach as *facilitating partnership*, *coordinating partnership* and *implementing partnership*. Revision of the Conservation Master Plan (2010) and first stage of implementations were initiated by the metropolitan municipality and in political process, equilibrium point between actors was determined by the metropolitan municipality, so from this aspect, it had **facilitating partnership**. Later on, the control mechanism still belong to central authority, but it has delegated and shared the tasks between partners, especially in Culture Route Project, and utilization of natural and financial resources in a certain timetable through that period. Therefore, in Culture Route, **coordinating partnership** and **implementing partnership** are observed. However, after the project period, even if all implementations has been made according to plan, most of the authorities and supervisions distributed into district municipalities and individual developers. **Therefore, in recent cases, participatory approach could not be delivered.**
- These adaptive reuse practices has supplied benefits mentioned in literature review as spatial, social and environmental dimensions; however, due to the fact that economic failures in adaptive reuse, economic regeneration has also failed because of deficiency in policies on local employment improvement. As mentioned by Özden (2016) “*on mutual advantage derived from economic development and participatory approach*” also failed.
- Within these implementations, “*soft location factors*” (Scheffler et.al. 2009), which are intangible values formed by local culture and geographical context features such as memory, sense of belonging, identity and lifestyles, have been protected in greater part of the quarter.
- According to Said et.al (2013), the chance for further development will increase, if revival achievements of the site accomplished depending on

performance scale. In Gaziantep Case, the achievements in first two stages (Gaziantep Castle and Culture Route) have triggered the other initiators to wider regeneration processes and contribute to authentic pattern.

- Urban design framework in historical quarters is clarified by Celikyay et. al. (2010) under nineteen items in Chapter 2, and the case study only has not satisfied the public survey on determination of needs in Bey Neighborhood.
- As it has been clarified by Plan Developer (2019) and by the plan in itself, the aims and required action guidelines mostly jibe with the guidelines of the UNEP (2004) for urban regeneration practices in historical environment in terms of the points it mentions: ***“encouraging rehabilitation of architectural heritage, avoiding museumification, construction of cultural buildings, restoration of networks, creation of pedestrian access and maintenance of traditional businesses and service activities”***. It also aims in the neighborhoods ***“avoiding trade-related practices which cannot ensures residents maintenance”***, but in Bey Neighborhood, it could not be achieved while Kepenek Neighborhood can succeed.
- Additionally, Gaziantep Historical Quarter has been worth to adaptively reuse due to its societal value, historical importance, the potential for reuse and the natural ecological conditions which support climatic suitability as mentioned by Tanaç Zeren (2015); therefore, the decisions made in Conservation Master Plan (2010) has allowed for compliance with this issue.
- In the circumstances of Turkey, in which regeneration practices are mainly restricted by spatial implementations and being short in terms of social sustainability (Ulger et.al., 2016; Uysal Sahin & Sahin, 2016), Gaziantep, with the adaptive reuse strategy, is an exceptional case in terms of creating socially sustainable space. Within this practice, the paradigm shift in social sustainability context from traditional (tangible values) to emerging (intangible values) aspect (Colantonio & Dixon, 2009; 2011) and it's directly effect on physical regeneration and the society can be observed. In adaptive

reuse, conserving intangible values is one of the dominant objectives while renovating tangible values.

- Adaptive reuse implementations have been realized by reason of obsolescence of space because of ***“the original occupants may move to more modern facilities; the original building may be too expensive to moderate; and owners cannot allocate funds for necessary maintenance”*** (Tanaç Zeren, 2015, cited in Kuban, 2000). In Gaziantep, the mentioned abandonment the district by locals through the new settlement areas due to need of modern facilities required renewal of original structures for maintenance. As mentioned in Chapter 3, Douglas (2006) provides nine key points which should be paid attention in building conversion as ***“meticulous recording, minimum intervention, minimal loss of fabric, reversibility, compatibility of use, explicitness of alteration, honesty and appropriateness of repair or restoration and sustainability”*** and in physical terms, adaptive reuse has been accomplished these points entirely. These adaptations has been realizing, as Douglas (2006) mentioned, in three ways in Gaziantep Historical Quarter, ***“adaptation to same use”*** as residential functions or commercial functions which have same functions before the project; ***“adaptation to alternative reuse”*** as conversions of residential functions to commercial functions (boutique hotel, cafes, museum etc.) in Bey Neighborhood, to socio-cultural functions (Social Facility Center, museum, library, foundations etc.) in Kepenek Neighborhood; and to commercial and socio-cultural functions (restaurants, museums in underground caves, traditional bazaars etc.) in Culture Route which is central axis of the quarter; and ***“adaptation to mixed use”*** as some of the residential functions in Culture Route and Bey Neighborhood to commercial functions partially (stores and restaurants in ground floor, residences in upper floors). Therefore, all type of adaptations are observable in the quarter.
- According to Fisher-Gewitzman (2016), in adaptive reuse cases, new legislations and redevelopment permissions due to physical processes might

be needed because it is a kind of land improvement as mentioned in Chapter 3. The metropolitan municipality and public-private institutions constituted for regeneration processes specific to Gaziantep Historical Quarter demonstrates that it has its own legislations and redevelopment permissions. In the quarter, there is a legislative system in terms of action period which depends on ownership pattern (public → interior, exterior restorations, renovations; private → only exterior space restoration etc.), developer type (public, foundations or private) and dominance of conservation plan decisions, supervision project period before the implementing process by Conservation Regional Council and during the implementing process by KUDEB.

As a general evaluation on adaptive reuse for all scales is that all principles of adaptive reuse practices mentioned by Eyüce & Eyüce (2010) as being “*case-specific, context-dependent and space configuration concerns*” in all physical implementations have been considered. They are all applied “in the light of potentials offered and constraints imposed by existing architectural entities” via “caring tectonic aspects” of the quarter.

Evaluations on Building Scale Adaptive Reuse:

- Even if adaptive reuse in building scale is not exactly in scope of urban planning scale, by reason of the entities which reflects monumental and landmark characteristics has a major impact on urban regeneration practices due to their architectural identity. For this reason, as a monumental structure, adaptive reuse of Gaziantep Castle is examined. In adaptive reuse of the castle, even if it does not allow the further improvements on its own components, it has still the most appropriate function due to its 1st degree archaeologic site registration.
- According to Tanaç Zeren (2015), in order to get feedback on adaptive reuse process, questions on encouraging renewal of the environment of Gaziantep Castle, ensuring the protection of tangible and intangible values, realizing the spatial features of the new function in accordance with the old function, not

harming the structure originality and keeping the interventions in the building envelope in optimal level demonstrates that adaptive reuse has been investigated and achieved physically. However, excessive car-parking spaces surrounded the castle has enabled visually unattractive image and destruction of registered green landscape which includes ancient remnants. Therefore, in the near future, it seems that the castle and its environment may able to be rearranged again.

- The fact that the local craftsmanship around the castle is gradually ending and no appealing in the tourist sense caused a reluctance to reach the castle. Even if this does not constitute an obstacle to the sustainability of the local dwellers' lives in the field, the historical - commercial identity of the area and dynamism derived from it is almost lost. The castle has become an idle part of the commercial axis because it also did not bring up economically benefits due to it was only a conserved structure and had no material benefit to the society.
- As a result, adaptive reuse of Gaziantep Castle is mostly successful in spatial and environmental manner, partially social manner, but it fails economic manner. The points the reuse of the castle could not solve especially ***on social and economic aspects are leading to bleed out in terms of community sustainability and interaction of the individuals which should be immediately needed to be solved. Besides, in building scale it can be clarified that the only problems the castle has are the criteria which adaptive reuse fails in the assessment tool; therefore, if they turn into achievement, the issues will be solved in terms of community's favor, and social sustainability will be ensured and improved. This connectivity in between building scale adaptive reuse assessment tool and derivation of socially sustainable community demonstrates that assessment tool determined in building scale in Chapter 3 are the strategies in accomplishment of social sustainability on monumental buildings in urban regeneration areas.***

Evaluations of Street Scale Adaptive Reuse:

- Adaptive reuse in street scale is mainly common in the non-residential / commercial traditional axis. The adaptive reuse initiatives on these streets are made for not losing the aliveness by virtue of inherent ability on conventional public space, and upgrading public space defined by the buildings has also significance as much as adaptive reuse of the structures. Culture Route Project is an example of traditional commercial axis within its extensions in which registered structures refunctioned adaptively and rehabilitation of the open space – they constitute the street as a whole intrinsically -, so it differentiates from neighborhoods where residential purposes are dominant and from monumental buildings which are less effective than streets on the community. Therefore, Culture Route has been needed to be examined separately in terms of strategies applied on, but still as a part of the same context.
- Within the adaptive reuse of Culture Route has enabled contemporary commercial needs together with traditional goods and services via protecting authentic structures which carry historical value; so, this unique environment optimize both tradition life and modern necessities and provides accessibility to fundamental goods and services via creating powerful public space. However, it has still issued on safe pedestrian mobility due to vehicle density which is needed to be solved by pedestrianization of the main line and sub-projects which reduce car-dependency while travelling to traditional center. In this way, unity and interaction in between locals and outside dwellers will get stronger which enable sustainable community and life.
- In historical commercial zones, the regeneration initiatives aim to upgrading traditional economic activities for future generations. Adaptive reuse of unique coppersmith and mother of pearl production units to retailing stores took an attention firstly, but policies on sustaining them have failed. The first reason of the failure is that ineffectiveness to follow the results of courses which stimulate local copper production; in other words, the fact that this craft and

the economic benefit obtained from it were not controlled by the feedback mechanisms. Therefore, the area where the stores was located lost its activity, caused local production to decrease. One of the key factors to provide sustainable communities in urban regeneration defined by Colantonio & Dixon (2009) as mentioned in Chapter 2 ***“Municipal authorities to have plans in place – to minimize the involuntary displacement effect on local communities in terms of housing and local economic activities and services”***. In the Culture Route, the store owners already settle outside of the traditional center, and if economic consistency could not be ensured, no reason to stay there, it will directly affect social sustainability in negative way by their abandonment. Besides, raising individuals for local craftsmanship will not prevalent.

- Except commercial activities on copper-product retailing, traditional taste and restaurants on traditional food and deserts keep the middle and the south part of the traditional street socially active and sustainable.
- As a result, adaptive reuse of Culture Route is mostly successful in spatial, social and environmental manner, and partially in economic manner. The points Culture Route fails are economic strategies which enables community maintenance financially. The findings derived from site observations and traditional storeowners is that if these issues could be solved and continue as previous dynamic life before the paradigm change in touristic activities, local users' movement will be strengthened again. ***Satisfaction of shop owners and inhabitants from other spatial, environmental and social aspects, all users in the southern part of the street are satisfied with all aspects and no other problems or results are mentioned apart from the criterias in the assessment tool mentioned in Chapter 3 demonstrates that the assessment tool is an adequate on a street scale. The adaptive reuse strategies in the tool should be achieved in urban regeneration initiatives in (especially commercial) street scale to ensure socially sustainable traditional centers.***

Evaluations on Neighborhood Scale Adaptive Reuse via Comparison of Two Neighborhoods:

Adaptive reuse has been done over the years, not maybe in the same name, to utilize the structures via adapting conditions of that time. However, it has been used as a strategy for traditional buildings, but recently, it has been observed in wider scales which include historical neighborhoods providing unique pattern and identity in region it located. The clear examples on adaptive reuse in neighborhood scale are observed in foreign literatures and only one case in Turkey is Şanlıurfa Historical Quarter, apart from Gaziantep, which is clearly explained in Chapter 3. It has prepared base for understanding initial case in Turkish context and taking lessons from its outcomes on social sustainability in order to establish assessment tool for the neighborhoods in Gaziantep Historical Quarter to evaluate. There are two neighborhood examples in traditional Gaziantep in which adaptive reuse applied. It is important to investigate adaptive reuse in neighborhood scale; because firstly, neighborhood unit is fundamental entity for urban planning field and secondly, examining the social sustainability term is more descriptive, meaningful and worth to evaluate in neighborhood scale. Due to the differentiations on implementations, the outcomes of the assessment strategies are diversified. Their comparison brings more accurate evaluations on assessment tool and relatedly sustainable community supply.

- In Bey Neighborhood, different from Kepenek Neighborhood, refunctioning was not made according to society's characteristics and the main concern was creating tourism district with combination of peculiar history. But no matter how much the public does not live in an area in which equipped with tourist functions, it cannot survive as long as there are no individuals in it that reflect the locality. Bey Neighborhood has lost its dynamism as it has no function other than tourism and it has become a ghost city as its original society has disappeared. Contrarily, refunctioning the structures to social facilities and community benefits in Kepenek Neighborhood has ensured individuals' lives maintenance and their relations; shortly social sustainability. This local

community-focused refunctioning in Kepenek Neighborhood has enabled sense of belonging and privacy for the community. **The inference derived from is that choice of reuse has vital importance as much as physical competency in old and new functions.**

- There were no limitation on reuses in Bey Neighborhood which is concluded as extinction of residential uses while the restrictions on plan decisions suited and implemented as they are in Kepenek Neighborhood and balanced land use which mostly includes residents has supplied. Thus, because Kepenek Neighborhood has left structures to live, social sustainability has enabled more than Bey Neighborhood.
- Each interview made by professionals and users has confirmed that there were not gathering places to socialize or traditional activities before the regeneration practices in both neighborhoods. Nevertheless, creating a green/open spaces (i.e. Şih Square) in Kepenek Neighborhood via demolishment of contradictory buildings has been supplied. In Bey Neighborhood, where the uses return to commercial function, suppling open space for individuals are restricted with only courtyards. **Having a green or open space system in existing situation may not be matter, but in reuse practice, it is significant to improve these kinds of spaces for community's benefit and maintenance;** Kepenek Neighborhood is much more accomplished them rather than Bey Neighborhood. Besides, environmentally, healthier space is enabled more than Bey Neighborhood via created open and green spaces.
- Mainly, in most aspects, Kepenek Neighborhood is much more successful than Bey Neighborhood in terms of criteria which adaptive reuse should achieve for social sustainability; but in some aspects, both have failed in economic criterias. Both in two practices, adaptive reuse could not provide enhancement of local business development and related income; therefore, individuals still work outside the quarter which may cause abandonment of the site to the dwellings close to new job opportunities in the future, especially in Kepenek Neighborhood where local density is higher. Additionally, they have both

failed in terms of visitor attraction and related income; it can be advocated that it conserves privacy for Kepenek Neighborhood because reuse made for society improvement, but still it is non-ignorable fact. In Bey Neighborhood, over refunctioning for tourism caused leaving the site by locals: It created a place nobody would want to come. **In each case, they could not find the middle of the road approach which ensures income source and the privacy.**

- The participatory approach could not be continued in Bey Neighborhood and the practices carried out in Kepenek Neighborhood were monopolized by the district municipality; so the cooperation and participatory process in both neighborhoods were incomplete. Key factors determined by Colantonio & Dixon (2009) to social sustainability delivery in urban regeneration as *“single task ad-hoc agencies and public private partnerships (PPPs), a well-resourced and integrated approach, regeneration agency offices in the areas – to guarantee a forum for discussion and transparency, helping reduce mistrust towards city authorities, which often characterizes these areas”* clearly demonstrate that in both neighborhoods have the deficiency of integrated participatory approach. In Kepenek practice, even if this condition has not caused disadvantageous actions for the society yet, still deficiency in participatory approach may lead to restricted perspective for its benefit.
- According to interviews made by dwellers in both neighborhoods have mentioned that physical conformity of the structures has not been upgraded by the practices by reason of private ownership. The fact that municipalities and other public institutions cannot regenerate private properties legally creates problems for the inhabitants. The physical problems experienced at the interiors of the houses lead to the desire of individuals to leave their homes and to seek a better-qualified living space. **From this perspective, deficiency on adaptive reuse strategy on residences has caused not ensuring sustainable community in both districts.**

- According to Colantonio & Dixon (2009), key factors to deliver social sustainability in urban regeneration practices as mentioned in Chapter 2, there could be positive scenarios including “*social capital (Di Cento, 2007), the reduction of social problems and increased engagement and participation of residents (Hemphill et. al, 2006), improved image of local community (Pratt, 2009) and reduction of crime and illegal activities (Raco, 2003)*” which is highly valid for Kepenek Neighborhood due to its achievement on adaptive reuse practices. However, there could be also negative scenarios including “*gentrification and displacement (Scarpaci, 2000), the exacerbation of particular groups within community (Gosling, 2005) and the generation of low skill retails jobs for local residents (Law, 2002)*” which is highly recognized in Bey Neighborhood as a result of failures in adaptive reuse criteria.
- Lastly, social sustainability components defined as “*Interaction with social networks or other residents, participation to activities of collective community, sense of pride of place, residential stability (vs. turnover) and security (lack of disorder and crime)*” (Dempsey et. al., 2012; Darchen & Ladouceur, 2013) in urban regeneration have been accomplished in Kepenek Neighborhood, but not in Bey Neighborhood. ***Therefore, it is very obvious that failure of Bey Neighborhood in most of the criteria in assessment tool in neighborhood scale (Chapter 3) and achievement of Kepenek Neighborhood in most of them indicate that how much the assessment tool in neighborhood scale performs efficiently, the social sustainability provision is much that high and advanced. The only point it does not consider is that legal restrictions on property ownership and its possible consequences. Thus, in general terms or in context-dependent terms, the proper solutions should be suggested and put into social criterias of the assessment tool.***

5.2. CONTRIBUTIONS OF THE STUDY

The thesis aims several contributions on urban planning and design field on theoretical, methodological and praxis aspects (Figure 5.1).

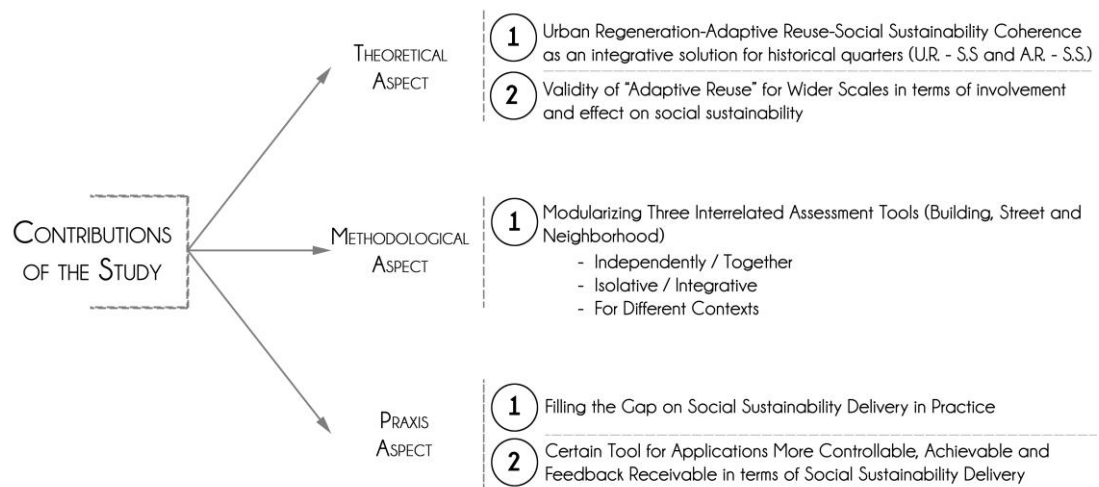


Figure 5.1. Contributions of the Study

Theoretically, this study aims urban regeneration, adaptive reuse and social sustainability coherence as an integrative solution in historical quarters. There are so many cases examine urban regeneration – social sustainability integration or adaptive reuse – social sustainability integration, but there is no integration of these three concepts; on the other hand, this thesis have theoretical approach on social sustainability procurement in urban regeneration practice via tool of adaptive reuse. Therefore, it aims formation of theoretic framework for interoperability of these notions different from other theories and praxis evaluations. There is a common understanding on adaptive reuse concept is only eligible only building scale – it is an accurate perception already – however urban space does not consist of only one building or building clusters, it is established by public spaces, variety of land uses, economic conditions and social structure derived from nationality, traditions, religions, languages and rituals; that is, adaptive reuse is also valid and effective tool in different scales and on other crucial elements in urban space. The benefits of adaptive reuse mentioned in Chapter 3 is operative on the buildings, on streets where structures and public space compose and on the neighborhoods. That means, if the impacts of adaptive reuse are evaluated in terms of social sustainability, it should have an impact on larger scales either as a monumental structure level or street and neighborhood levels. These scales are related with mostly historical commercial

streets or traditional neighborhoods which are generally under the subject of urban regeneration initiatives. Due to their interrelations which seem independent at first, actually parts of inseparable collaboration for the quarters. This study propounds this theoretical integrity is a requirement in historical quarters for more unique urban spaces and identities.

Secondly, the thesis aims reaching a method via enabling three interrelated assessment tools in building, street and neighborhood scales because of the reasons mentioned in previous paragraph; while these assessment tools carry into action independently in the same or different contexts, they can also operate as parts of the whole, in only one context as Gaziantep Historical Quarter. These tools are constituted context-independent; therefore, each of them is general tool for its scale which is open to use for evaluations in different contexts. That means, this study enables both isolative and integrative assessment tools of adaptive reuse in achievement of social sustainability in urban regeneration actions.

Thirdly and lastly, the study aims provision of social sustainability in praxis. Social sustainability is more recent phenomena than sustainable development, and hypothesis on this concept is still progressing in literature as mentioned in Chapter 2. Therefore, most of the ideas and principles on sustainable society delivery remains as a theory and in implementation period it is ignored intentional or unintentional in heritage regeneration sites. However, this study offers a certain tool for ensuring social sustainability with a detailed evaluation criteria on space, and in praxis its applications are more controllable, achievable and feedback receivable. As a result of them, in this study, the practical response of the concept of social sustainability can be observed more clearly.

5.3. LIMITATIONS OF THE STUDY

Just like contributions of this study, there are also limitations (Figure 5.2).

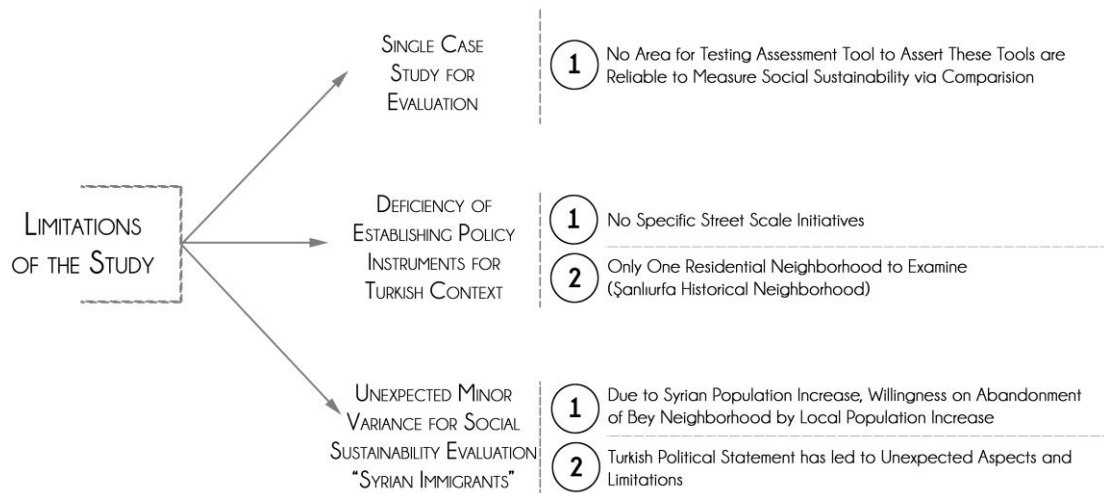


Figure 5.2. Limitations of the Study

First of all, even if the assessment tools of the study are constituted via literature ground and other case studies adopts the adaptive reuse as a strategy in historical structures and zones, the case study of this thesis includes single case study. The reason of Gaziantep is chosen as case only is that there is no historical quarter which undergoes urban regeneration practice with adaptive reuse; particularly, three individual scales which constitutes the whole as an example just like this have not been observed. Therefore, there was no another case to compare with Gaziantep Historical Quarter and no area for testing assessment tools to assert that they are reliable to measure social sustainability as a whole in historical quarters. Comparison of multiple case studies' results gives more executive and accurate strategies which are convenient for all contexts and cases.

Secondly, there are single cases on building scale, but there is no specific street scale example in Turkish context. Besides, the only case in neighborhood scale in Turkey is Şanlıurfa as mentioned in Chapter 3. To clarify appropriate strategies on adaptive reuse in street and neighborhood scales, studies which are guided within their positive outcomes and negative consequences are deficient for Turkish context, so establishing policy instruments on the subject and operating them in Turkey is still on process. Due to these reasons, assessment tools has to be constituted by mostly foreign and Turkish cases, even if they encourage more general tool formation on the subject.

The other limitation on the study or unobserved point through the study period until the second site observation is Syrian immigrant issue. This issue has become critical recently in Gaziantep Historical Quarter because due to affordable prices and similarities on ethnic origins and conservative living spaces (high wall – courtyard houses) in historical neighborhoods; Syrian population is getting increase while the local population is reducing. Currently willingness on abandonment of Bey Neighborhood by locals is intensified due to mixed community life with Syrians. Language dissimilarities, large family structure and polygamy perception has started to segregate the communities each other and not finding a middle ground to set a relationship between locals and immigrants. Even if in this study physical implementations via adaptive reuse and thoughts of locals on them are investigated in whole quarter, Syrian immigrant issue is also a minor reason for replacement of the society and affects the decision-making process on sustainability of the society. As a result of this, political statement and its effects in Turkey has led to unexpected aspects and limitations on evaluating the case area.

5.4. IMPLICATIONS FOR FURTHER STUDIES

This thesis focuses on adaptive reuse concept as an appropriate strategy in urban regeneration initiatives and for this purpose via constituting scale-dependent assessment criteria. Each of the assessment scale is investigated and evaluated in Gaziantep Historical Quarter context in order to deduce about modularizing criteria in terms of their scales which conduces that each scale has distinctive character and requires specific criticisms. To achieve this objective, sampling from other case studies in defined scales is made and criticized in Chapter 3.2 to establish the tools.

The creation of these tools is intended to provide a survey instrument for ensuring social sustainability for other contexts in single scale or integration of different scale with different combinations. This study, which aims insert historic areas in a part of the urban system, aims to turn the regeneration works into an opportunity rather than a victimization on individuals in the social sense; and it becomes the reference point on this subject in urban planning and design literature.

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INTERVIEWS

Interview with Şahinbey Municipality Plan Project Director and Urban Planner Muhammet Ali Şahin, conducted on 26th March 2019 in Şahinbey Municipality Building, Gaziantep.

Interview with KUDEB Inspection Department Manager (Denetim Şube Müdürü) and Urban Planner Ökkeş Kavak, conducted on 27th March 2019 in KUDEB Bey Neighborhood Bureau, Gaziantep.

Interview with Conservation Master Plan (Revision) Developer Urban Planner Necati Uyar, conducted on May 2019 in Egeplan, Ankara.

Interview with Conservation Regional Council Member and Urban Planner Dr. Arzu Sert conducted on May 2019 in Gazi University, Ankara.

Interview with Headman of Bey Neighborhood, Şahin Yeşilyurt, conducted on 27th March 2019 in Headman Office, in Bey Neighborhood, Gaziantep.

Interviews with 4 Local Dwellers located in Bey Neighborhood, conducted on 27th March 2019 in Bey Neighborhood, Gaziantep.

Interview with Headman of Kepenek Neighborhood, Ergün Kıcıkoğlu, conducted on 28th March 2019 in Headman Office, Kepenek Neighborhood, Gaziantep.

Interviews with 8 Local Dwellers located in Kepenek Neighborhood, conducted on 28th March 2019 in Kepenek Neighborhood, Gaziantep.

Interviews with 4 Tourists travelled from another cities (Ankara, İstanbul), conducted on 29th March 2019 in Gaziantep.