URBAN REHABILITATION: REINVENTING A PRODUCTIVE LANDSCAPE
Istanbul, Golden Horn Case Study

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Abstract
The international workshop "Golden Horn Urban Rehabilitation, Reinventing a Productive Landscape" was hosted at Istanbul Kültür University (IKU), Turkey, during the dates of the 4th to 11th July 2011. It counted with the bilateral collaboration of Istanbul Kültür University (IKU), Yildiz Technical University (YTU), Instituto Superior Manuel Teixeira Gomes (ISMAT), in Portugal and Studiomeb. The case study was located in the estuary area of Golden Horn, in Istanbul, and it was centred in the neighbourhoods of Balat, Fener and Hasköy, which are in an advanced process of urban and architectonic degradation. The paper presents our educative research methodology inside the program GreenEngines, developed during three years of continuous collaboration, and shows the results of our international research cooperation in this specific case study. Our pedagogic research method uses the principles of landscape urbanism, landscape planning, and environmental planning. Our research aim, specifically for this workshop was to educate students on the professional responsibility to create new sustainable planning alternatives for urban rehabilitation in deteriorated urban areas, and specifically, in the case study of Golden Horn in Istanbul. Our research questions were centred in how to preserve and protect the multicultural and multifunctional character of Golden Horn, evaluating its built and socio-cultural heritage, together with how to regenerate the physical urban tissue, reinventing a new productive landscape. Our research statement considered that to achieve a sustainable urban rehabilitation, it was necessary that the planning proposals should adapt to the cultural landscape and the local environment, creating a multifunctional character with different actors involved in the same urban context.

Keywords: *Sustainable planning; urban rehabilitation; productive landscapes; urban agriculture; architectural heritage; cultural landscape; multifunctional space; water fronts; World Heritage Sites.*

INTRODUCTION

The research program GreenEngines, developed by the office Studiomeb (architecture, planning and landscape), was created in 2009, inside a collaborative network between Universities, practitioners and local governments. Since 2009, the program GreenEngines has counted with the permanent support and cooperation of Istanbul Kültür University and Yildiz Technical

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University. GreenEngines is a platform for action research in the field of sustainable landscape planning and sustainable food planning design. It aims to explore the potentialities of productive landscapes to generate a sustainable territory that is respectful to the existing local environment and its multifunctional character, community involvement, heritage and cultural identity. GreenEngines develops as a pedagogic tool in the education of multidisciplinary teams, involving students of architecture, geography, landscape architecture, design, urban planning and environmental studies among others. Through education, students can understand the complexity involved in strategic landscape planning for the preservation, creation or re-invention of productive landscapes, with the objective to reach a sustainable equilibrium between economy, society, culture, the environment, and food production.

We state that a productive landscape is any natural, rural, coastal or urban environment used and exploited for agricultural, industrial, business or touristic activities. In the case of the rural territory, the shift, in recent years, towards the ecological technologies (solar, wind, power plants), together with the production of industrial agriculture for bio-fuels, bio-mass, and economies of scale, has transformed many rural landscapes into technological and productive ecological deserts, expelling society from their environment, and destroying the equilibrium of their cultural landscape. In the case of the urban context, urban conurbations are also productive landscapes that aim to attract business, industry and tourism. Cities suffer processes of development that are temporal and discontinuous based on intermittent economical global interests, provoking processes of decay inside the urban tissue. A process of economical growth, and urban development, implies the de-urbanization of other areas of the city, or even the degradation of complete urban regions, the particularly those ones based on local economy. Cities with a high rate of unemployment and few work opportunities start suffering processes of forced shrinkage due to migration and population loss. The moving of industries offshore, due to differences in wage costs, affects cities in developed countries. Only cities that are the home to the players of globalization enjoy the privilege of having stable growth and urban development (Müller, 2006: 122-152). To avoid inequality, poverty and migration, a sustainable urban territory is needed. Sustainability, based on a local economy is necessary for the economic survival of cities, mainly those ones that run outside the global network. Our research is guided by the following main question: which new planning strategies and transformative processes could guide changes and improve self-sustained productive local geographies?

We state that any productive landscape entitled to be called sustainable should accomplish the following: First, it belongs to a cultural construction, which adapts to the cultural landscape and the local environment, with a clear strategy of preservation and maintenance of the cultural values and the identity of the territory, including the revitalization of the palimpsest of traditions, heritage (built and natural) and collective memory. Second, the landscape is multifunctional with different actors involved in the same space (energy and food production, industry, tourism, education, leisure, culture, nature, health, housing, commerce). Third, it takes into account social participation, involving the self-maintenance and self-organization of the space. It encourages individuals to interact with their close environment through participatory processes and a close physical experience. Fourth, it values the phenomenological qualities of the space. The territory is acknowledged by sensory experiences within the parameters of space and time. It is experienced by emotions, memories, and mental bonds. The phenomenal richness of the landscape is present in the social imaginary, the collective memory, the desires, the sensorial and the poetic experience of the inhabitants. Fifth, it considers new models of mobility thinking in alternatives to the car, and betting for intermodal ways of transportation (pedestrian, bike, bus, train).

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INTERNATIONAL COOPERATION AND THREE CASE STUDIES

Since 2009, GreenEngines has developed research on three different case studies, in three different countries. It uses the format of an international summer workshop, which always takes place in the country where the case study is chosen and with a close collaboration with educators, and researchers of the host University, expertises in different fields (geographers, designers, artists, art historians, town planners, architects, landscape architects) and local governments. The first summer workshop took place in the Faculty of Architecture of Barcelona, University Polytechnic of Catalonia, on July 2009, with the topic "Barcelona Tres Turons Park, a case study". Studiomeb coordinated the event and it counted with the relevant collaboration of Istanbul Kültür University , and Yildiz Technical University, and the participation of Delft Technical University (The Netherlands), University Autonomous of Barcelona (Spain), Polytechnic University of Barcelona (Spain), Elisava School of Design Barcelona (Spain), Consultancy and Engineering DHV, Department of Environment and Transportation, Eindhoven (The Netherlands), and the Department of Urban Planning from Barcelona City Council. The case study was chosen to test the implementation of a self-sustainable urban agro-ecosystem for the area of "Tres Turons" in Barcelona. The objective of the workshop was to elaborate a strategic plan considering the main catalyst processes for the creation of a self-sustained green space for the city, with a community self-organized productive landscape, where urban agriculture integrates inside a location with a heterogeneous character, embracing different historical sites (Moya Pellitero, Türkyılmaz, Canbay Türkyılmaz, Eliziario, 2009: 911)

The second international summer workshop took place in Covilhã, Portugal, on July 2010, with the topic "Covilhã, landscape of change. A prototype for a new integrated rural-urban growth model". It was developed with the collaboration of the University of Beira Interior (UBI, Portugal), Department of Civil Engineering and Architecture, and the close colaboration and participation of Istanbul Kültür University, Yildiz Technical University. Invited guests participated with us from University of Beira Interior, the Wool manufacturing Museum of Covilhã, the Association of Rural Development of Serra da Estrela, and Brighton University (England). Our aim, in the second edition of GreenEngines, was to discover how to regenerate a peri-urban territory, with a rural character, achieving a new rural-urban model of sustainable development, creating a multifunctional landscape with the development of new housing areas and facilities, together with the integration of knowledge and education, culture and heritage, industry, infrastructure, the natural and the rural environment. GreenEngines, in its third edition, chose the theme "Golden Horn Urban Rehabilitation, Reinventing a Productive Landscape". The international workshop was hosted at the Faculty of Architecture of Istanbul Kültür Univesity (IKU), and it was organized by Studiomeb, Istanbul Kültür University, Instituto Superior Manuel Teixeira Gomes (ISMAT, Grupo Lusófona, Portugal), and Yildiz Technical University (YTU). We counted with experts and invited guests from ISMAT, IKU, YTU and Sabanci University. The workshop took place during eight days work, from Monday 4th of July to Monday 11th, 2011. From Tuesday to Sunday, the groups took their decisions as a team on a specific strategic rehabilitation plan for the area, developing tactics and actions for their strategic proposal. On 11th of July 2011, each group presented their work to jury of expertises at IKU.

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Figure 1: Istanbul case study, “Urban Rehabilitation, reinventing a productive landscape in Golden Horn” © GreenEngines.

The themes of our workshops are all interconnected under the umbrella of the same main question: which new planning strategies and transformative processes could guide changes and improve self-sustained productive local geographies? In Barcelona case study, we studied the potentiality of “urban parks” to become spaces of opportunity in consolidated urban areas, in order to generate processes of community involvement, in which urban agriculture can be the catalyst of a new urban culture that activates a sustainable urban conscience. In Covilhã, we studied how a small city, surrounded by a rich agricultural territory, can benefit from the synergies produced in the interchange of activities between the rural and the urban environment. In our third case study, in Istanbul, we were searching to discover solutions in the urban rehabilitation of an obsolete productive industrial landscape in a consolidated urban area with a rich architectural heritage.

Educative Methodology

In the teaching of strategic landscape planning we apply a work methodology that integrates the practice of Landscape Urbanism (processes over time, scenario thinking, new operative techniques, and the social imaginary) and Landscape Planning (scenario-based analysis), with sustainable food planning systems. We establish a methodology of work, taking into consideration disciplines such us landscape urbanism, landscape planning, and environmental planning. Landscape urbanism is a hybrid practice that emerged in North America and Europe in the late 90’s as a new design discipline to respond to the conditions of sprawl under the phenomena of post-industrialization of the urban territories. That is when landscape emerged as a model for contemporary urbanism, especially in the context of complex natural and urban environments. The reference theoretical work of Charles Waldheim (2006), James Corner (2006) or Dean Almy (2007) is relevant in our work. Landscape planning also helps us to rethink the variables for a dynamic sustainable territory, in which economic growth supports social progress and respects the environment. Our theoretical and practical backgorund in this discipline is the work headed by Prof. Carl Steinitz, in the department of Landscape Architecture and Planning at Harvard University, which has provided, since the 1990’s, a modelling strategy for planning assessment. The model, of an analysis scenario-based study for alternative futures, considers which are the actors and issues responsive to policy and planning decisions. In the work ‘Alternative futures for changing landscapes’ (2003), propose an approach that follows the typical

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decision-making processes and choices that shape the future of a region (Steinitz, Arias, Shearer, 2003).

Our work methodology integrates the four themes involved in the practice of Landscape Urbanism (Corner, 2006: 28-33). First, it considers urban processes over time, second anticipates strategic scenarios and operational logics through a wide range of scales, third reconsiders representational and operative techniques, and fourth takes into account the phenomenal richness of physical life (social imaginary, collective memory, desires, the tactile and the poetic). The planning of a sustainable strategy contemplates the research by design at different scales. In each scale level (large, medium, and detail), it is possible to discover different phenomena, processes and relationships affecting the planning and design solution. We give priority to scenario thinking, actors involved, and processes over time, which relate with changes and re-adaptation reflecting a particular view of society and the groups that compose it. In our work it is included social analysis specific to each case-study. Any planning strategy should consider ecology and community. It is the social involvement with the close environment and the understanding of potential self-organized processes of the community that can generate designed interventions that trigger processes of change evolving over time (Moya Pellitero, Türkyılmaz, Canbay Türkyılmaz, Eliziario, 2010: 56). In this respect, we take into consideration principles of environmental planning, being aware that any alteration of the nature of the landscape, no matter how small, has deep implications for the ecological processes of the immediate area and the larger region. It also involves the respect for the heritage, the cultural identity and the historic context. The international workshops are always divided into five stages : analysis, strategy, tactics, actions, and evaluation. All these stages move from the large scale of the territory, to the medium scale of the neighbourhood, up to the detail scale of the design of the public space.

ISTANBUL, GOLDEN HORN, A CASE STUDY

Although the effect of globalization began to be felt since 1980´s, the idea that it is necessary to provide a new urban identity for the city of Istanbul, in relation with the new global dynamics, gained importance at the beginning of the 21st century. Industry retreated from the water fronts, and it left behind a passive social environment, with buildings that were no longer used and empty areas. Therefore, using these areas and creating new business opportunities are in Istanbul´s agenda today. Reforming the relation between the inhabitants and the waterfront through public domain is one of the most important objectives planned to be implemented. Golden Horn has a great potential in order to become a new sustainable productive landscape that can give solutions for the needs of people in Istanbul.

The Golden Horn, estuary on the European side of Istanbul, has a relevant historical past. It was a natural harbour during the Byzantine and Ottoman Empire, as well as a trade centre of the Mediterranean and the Near East throughout the 10th and 11th centuries. Along the centuries it gained an Islamic identity, with the construction of religious centres, public buildings and mosques. In the 18th century the waterfronts became a famous residential and recreational area for the city. Old Galata Bridge, built in 1836, connected, for the first time, both shores. Also steamships started being used as public transportation. With the foundation of the Republic in 1923, Istanbul was a city of recessing economy and population. Higher income groups were emigrating to new housing areas in the periphery. In 1937, the Master Plan of the European side of Istanbul, by the French urban planner Henry Prost, aimed to modernize the city and to sustain the economic development. As a consequence, the Golden Horn was transformed into an industrial zone. The increase number of factories and commercial areas in the 1950´s had a serious impact on the physical relation between the city and the water, and on the environmental quality and socio-cultural structure of the Golden Horn and its surroundings. The housing areas lost their prestige and became worker neighbourhoods. On the other hand, slums appeared as a result of the immigration from rural areas. The Golden Horn, which used to be one of the main

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recreation areas of the city, became an unrecognizable industrial productive landscape, with a damaged relation between the city and the waterfront. In the 1980s, during the administration of Bedrettin Dalan, Mayor of Istanbul, an urban renewal effort was initiated to solve the main problems of rapid urbanization in the metropolis, such us traffic congestion, noxious factories and air pollution, lack of services, amenities, open and green spaces. As a result, the Golden Horn experienced a process of "greening". However, urban renewal was concentrated on a major cleansing effort and the beautification of the estuary rather than dealing with its environmental ecology or historic character. Buildings were demolished, residents displaced, and the estuary banks were replaced with parks. The cleaning-up of Golden Horn meant the demolitions of factories, illegal slaughterhouses, and historical buildings, without taking into account the cultural and historical character and identity of the buildings, the economical survival and the life of its inhabitants. The basic question is how to preserve and protect the multicultural and multifunctional character of Golden Horn, evaluating its built and socio-cultural heritage. The actual state of deterioration of its architectural heritage, the lack of public facilities, transportation, services, and local economic activities have transformed Golden Horn into an unsustainable area in its socio-economic structure. In order to propose a strategy for urban regeneration of Golden Horn, it is also necessary to reinvent a new productive landscape.



Figure 2: Golden Horn, view of the Waterfront of Hasköy and its arsenal, shipyard and warehouses (Photo: Emrah Türkyılmaz).

GreenEngines, in its third. edition, “Golden Horn Urban Rehabilitation, Reinventing a Productive Landscape”, aims to develop a new sustainable planning alternative for urban rehabilitation. It reconsiders those spaces that once were industrial, inserted in the urban tissue of the city, generating an economical, social, cultural and architectonic synergy. Once these industrial areas, and therefore productive landscapes, are abandoned and dismantled, urban voids become wastelands or in the case of Golden Horn in Istanbul, green areas and urban parks that do not take into consideration the rich socio-cultural structure surrounding them. Therefore, to achieve a sustainable strategy of urban regeneration of an obsolete urban area, in a process of decay, it is necessary to integrate heritage and culture, energy and food production, industry, tourism and

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education, leisure, nature and open spaces, housing, commerce and new means of transportation. Regarding local food production, parks and green urban networks can integrate food gardens as an ecological lung and source for local food production, self-organized activities and ecological education. Despite the fact that urban agriculture will never be self-sufficient to sustain the food needs of a city, and its ecological footprint, it allows social interaction within the local environment helping to educate new generations, introducing new sustainable habits.

Three Different Realities: Balat, Fener and Hasköy

The study area is located between Haliç Bridge (Golden Horn Bridge) and Unkapanı Bridge. It includes the Northern and Southern shores of the estuary of Beyoğlu and Fatih district, which at the present do not have a common planning and development strategy. The case study area is located in the area that corresponds with the ferry stops of Fener and Hasköy, and the former ferry stop of Balat.

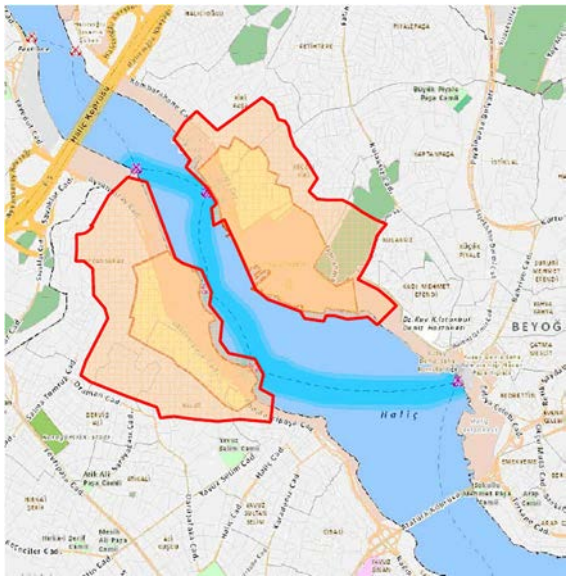


Figure 3: The location of case study area. The dark blue coloured area in Figure 1 shows the water transportation line. Dark pink parts indicate waterfronts in Golden Horn. The red line delimits our case study area © GreenEngines.

Balat, today belongs to Fatih's district, in the southern shore of Golden Horn, with once grand but now narrow impoverished streets. It is believed that the name Balat is probably derived from Greek word palation (palace). It was formerly a centre of Istanbul's Jewish population. Following the earthquake of 1894 and a series of fires that affected not only the neighbourhood but the entire city of Istanbul, the social structure of Balat underwent significant changes: The wealthiest section of the inhabitants left the district and moved to Galata. Emigration continued and one fourth of the population of Balat left for Israel after its establishment. After this period, the Jewish population was reduced to a minority, and a new wave of immigrants arrived from the towns of the Northern Anatolian region, especially from Kastamonu. After the 1960s, Balat suffered a transformation of the urban structure due to the heavy influx of newcomers, especially a further group of working class people who were attracted by job prospects of the industry and the rather low rent. Not only Sephardi Jews, but also Greeks and Muslims lived together in Balat for years. Although Jewish and Greeks still live there, their population is quite few compared with Muslim population. All neighbourhoods are listed by UNESCO as a World Heritage Sites. Ahrida and Yanbol Synagogues, Ferruh Kethüda Mosque, Balatkapı Taksiarhes Church are some examples of Balat's architectural heritage. After the beginning of negotiation between Turkey and EU,

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unfortunately some houses in Balat were sold to EU citizens mostly from England and Germany. As a consequence, the price of houses increased suddenly and the local people began to leave their neighbourhood.

Fener is situated near Balat. Its name is derived from the Greek word “phanar”, fanari. The Ecumenical Patriarchate is located here. It was formerly one of the major centres of Istanbul’s Greek population, known as Phanariotes. The settlement structure changed in the 19th century. Prominent Greek families of Fener left the neighbourhood and moved to villages along the Bosphorus, such as Tarabya, Kuruçeşme and Arnavutköy. Until the 1960s, Fener preserved its identity as a Greek neighbourhood. At the end of the 19th century, the population structure started to change radically with the first wave of inhabitants immigrating to the bourgeois neighbourhoods of Istanbul (the Prince’s Islands, Kadıköy and Şişli). In the 1960s, a second emigration wave occurred, when the Greeks left Istanbul in large numbers. The deterioration of the characteristic waterfront as a result of industrialization had an impact on Fener as well. Following the 1960s, new inhabitants arriving from the Black Sea region started to settle in the area in large numbers. Today, mostly low-income families are living in here. Bulgarian Iron (St. Stephan) Church, Church of St. Mary of the Mongols and Fener Greek Orthodox College are among Fener’s architectural heritage.

Today, Fener and Balat are squeezed between city walls dating from the Byzantine period and hills surrounding the region in the other directions. Both quarters are not attractive because of the low visibility seen from the transit road and a lack of parking facilities. Fener and Balat are designed according to a unique road plan where a continuing array of streets intersect one another at perpendicular angles. The urban structure of the district is rather peculiar and can be traced to the division of plots following the fires that damaged the districts. The architectural uniqueness of the districts can be traced from the religious buildings and the facades projecting a harmonious view because of the bow windows. The height of buildings in the district varies between one and four storeys. Over half of the buildings date to the pre-1930 period and give the area its characteristic atmosphere. Following these buildings in the order of importance, are those built between 1930 and 1950, which continue this architectural characteristic but at the same time reflect the interesting features of the time period.



Figure 4: Detail of the case study area of Balat, Fener and Hasköy with information about the nature of its intercultural character (churches, mosques, synagogues, schools, monuments and different public facilities) © GreenEngines.

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Hasköy, is a neighbourhood on the northern side of the Golden Horn in Beyoğlu district. The word Has-köy means “imperial village”. In the late 15th century, Sephardi Jews also settled in this quarter. The neighbourhood at one time also had many Armenian and Greek residents. Hasköy was a trading center for ages with dockyards and warehouses. The first Armenian theater company in Istanbul was opened there in 1858. Today, Taşkızak Dockyard is located in Hasköy and many local people work here. Although it is an important place for Istanbul’s history, dwellers of Istanbul know very little about this neighbourhood. Aynalıkavak Palace, Rahmi M. Koç Museum, Istanbul Naval Hospital are among some of the important architectural heritage of Hasköy. There are cemeteries in Hasköy that belongs to Muslims, Jewish, Greeks and Armenians.

While Hasköy and Fener have their own ferry pier connecting both shores, in Balat the former ferry pier is removed. Each opposite shore has similarities but also different characteristics. Although the southern shore is more residential compared with the northern shore, it is hardly possible to differentiate what is residential and what industrial. Especially in Hasköy there is mix-usage in many buildings. In Fener and Balat, we see many unique examples of residential architecture, however, only few of them are in good condition. One of the most common characteristics of each opposite shore is a high population density. The low-education and low-income level of the inhabitants have bad side-effects on the social participation and social commitment in the preservation and maintenance of the quarters.

Research Objectives for Golden Horn

It was expected from the participants in the third edition of the workshop in Istanbul to find appropriate solutions to the following problems: Transportation (inadequate vehicle network, reorganization of ferry lines, insufficient pedestrian ways), Green public spaces and new uses (insufficient and new usage of green areas, disconnection between city and waterfronts), Cultural identity (insufficient usage of local resources, failure of social recognition, deterioration), Bottom-up synergies (social insecurity, deficiency in social participation and social commitment, Illegal settlements). Through the analysis the participants could evaluate the qualities, potentials and problems of the site cultural built patterns, urban and architectonic identity, built heritage, housing typologies, transportation and road systems, food systems, diversity of green areas and public spaces, industry and commerce, leisure and tourism, multicultural synergies, diversification of the use of the space, public participation, self-organized activities, boundaries, conflict zones, wastelands, sacred spaces, historical settings, established community habits and traditions). In this phase, participants were guided by experts with a visit to the site and parallel lectures about Istanbul context and the specific case study.

The different groups were asked to draw a urban planning, and landscape planning strategy, which could identify different approaches in the time implementation of an urban rehabilitation project for the area of Balat, Fener and Hasköy. The main goal was the reinvention of a productive landscape considering the multicultural and multifunctional character of Golden Horn, and taking into account its built and socio-cultural heritage. The students worked in the creation of scenarios and actors involved mapping processes of change,re-adaptation and preservetion. Based on the strategy, different proposed tactics were studied. The working groups answered the following question: How do we reinvent a space that already has its own synergies, cultural patterns and multi cultural social identity? How do we integrate different programs to achieve a multifunctional space? How do we bring together food, leisure, tourism, housing and industry?

Based on the tactics, different design actions are developed. It involves the small scale design decisions and it answers the question WHAT? What type of urban landscape we will have as a result? What type of street-life, housing areas and neighbourhood facility programs we will

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achieve? What type of parks, green areas and public spaces do we need? The evaluation will help to draw the conclusions about the results and value their strengths and weaknesses.

Workshop Outcomes

Sense of water in public spaces: planning a sustainable future for tourism, heritage and environment: Group 1, M. Albano (Technical University Lisbon), D. Karadeniz (Yildiz Technical University) and E. Özkiliç and B. Özirişen (Istanbul Kültür University), consider that the water of the estuary has a leisure and cultural character that may help to connect physically and psychologically both shores, and also to improve the social integration between the different cultural groups and the citizens of Istanbul. They develop a rehabilitation plan based on four strategic decisions. First, they consider the rehabilitation of the old bridge for pedestrians, along with platforms on the water for cultural activities, sports and recreation. Second, Fener and Balat are neighbourhoods located in a hill, with steep streets downwards the estuary. The selection of specific axial main arteries to guide the rain water downwards the park at the waterfront is relevant. These platforms contain sculptures and follies, which give identity to the park and the water can be used for irrigation. The park contains also kiosks, to be used as libraries or bookstores, in order to encourage the dissemination of culture and self-development and attract visitors and residents to Golden Horn.

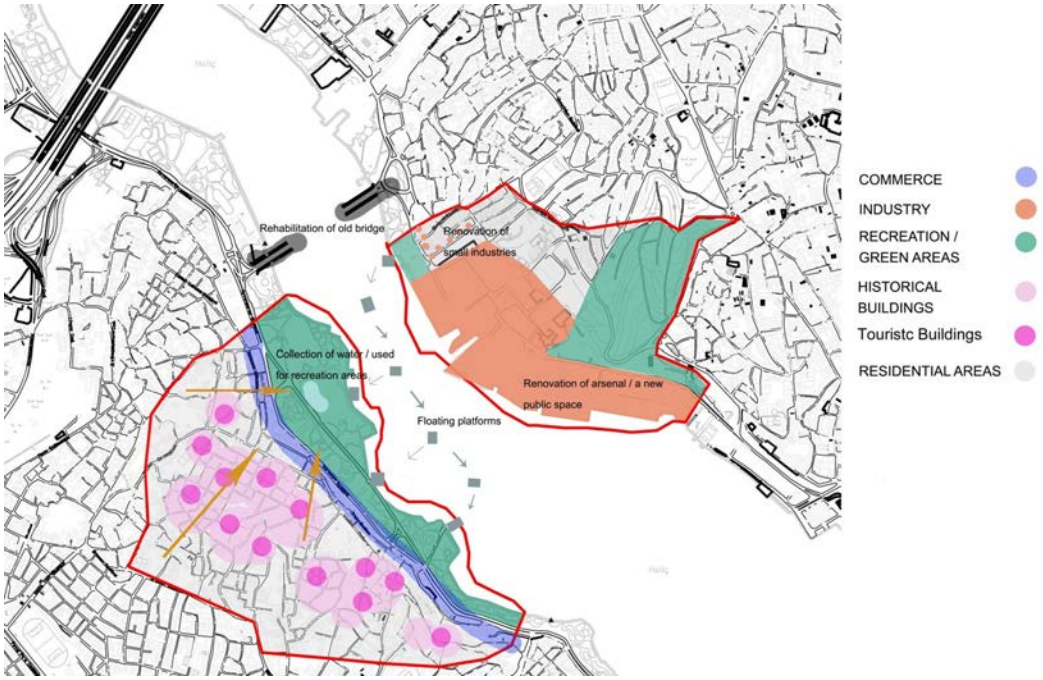


Figure 5: Strategic plan of rehabilitation for the case study on Golden Horn under the theme “Sense of Water in Public Spaces” © Albano, Karadeniz, Özkiliç and Özirişen.

Third, they give a new use to some of the historical residential buildings in Balat and Fener. The rehabilitation of existing housing blocks as touristic apartments has a positive effect in making street and public space life more dynamic. Their last and fourth strategy is to rethink a new use for the arsenal and the shipyards in Hasköy. They propose a new program of an open museum and a public park that can be visited by the citizens of Istanbul and tourists.

Green dynamic, rethinking the dynamics of the sea: Group 2, M. Reis (Instituto Superior Manuel Teixeira Gomes), E. Firinciogullari (Yildiz Technical University) and S. Killiç, A. Boztepe

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(Istanbul Kültür University), make a comprehensive SWOT analysis on the case study area. According to their analysis, they outline the most important strategic points of both shores of the estuary establishing strong visual connections towards the water. Using these strategic points, they propose a dynamic circuit for the area. On this dynamic circuit, they create follies inspired in "Parc de la Villette" to encourage cultural activities. To connect both shores, they suggest two new pedestrian bridges and around them new public spaces are defined. They restructure all the road system to improve the traffic connection inside the districts. To preserve the identity of the area, they propose new industrial and commercial areas. In the habitable areas they create new green spaces using the urban voids, which include community parks and urban agriculture. What is important in their strategic proposal is the dynamic connectivity of the space, in which pedestrians, bicycles and cars are segregated, and when they meet together, there is always a priority for the pedestrian. The pedestrian bridges also contain greenery, and spaces for commercial exchange such as street markets. The objective is to allow the neighbours to move freely between the neighbourhoods, in an enclosed circuit.



Figure 6: Strategic plan of rehabilitation, dynamic connectivity of pedestrians, green areas and road traffic. Visualization of examples of pedestrian bridges and folies at night
© M. Reis, E. Firinciogullari S. Killiç, A. Boztepe.

Green network, continuous productive urban landscape: Group 3, C. Cardoso (Technical University Lisbon), A. Çaynak (Yildiz Technical University) and H. Savli (Istanbul Kültür University), develop in their strategic planning the concept of continuity of productive landscapes. The analysis help them to understand the multicultural nature of this urban area in which different social and cultural groups do not cohabit, instead they live isolated. They also observe that there is a lack of pedestrian accessibility and pedestrian continuity. One of the aims

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of their rehabilitation plan is to create a sense of social belonging and proximity among the community.

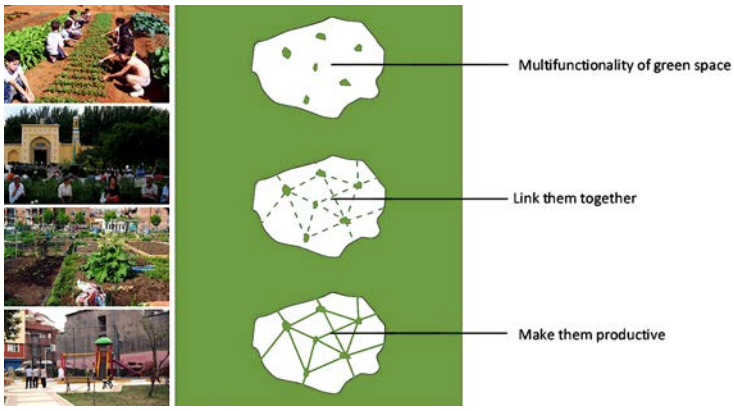


Figure 7: Strategy to create a network system of open green spaces. It is created four multifunctional green spaces, spaces for public use, educative spaces, spaces of exchange and productive spaces (food gardens) © C. Cardoso (TUL), A. Çaynak (YTU) and H. Savli (IKU).

Their first strategy is to promote the mixture of uses and programs and the requalification of the public space. It is important the rehabilitation of housing areas, with the participation of the same community and providing identity by means of a new market and a new bridge. The bridge is a space of exchange of the communities for street commerce. It is also important the rehabilitation of the old arsenal, as a big market place for the whole city, creating a new centrality. The second strategy is to create a network system of open green spaces. They also suggest new walking paths and a touristic route, giving priority to the pedestrians. All the different green areas are interconnected. They characterize four categories of green spaces which include food gardens (residential, educational, religious, and urban parks). These green spaces create a network that stimulates the social participation and a sense of belonging.

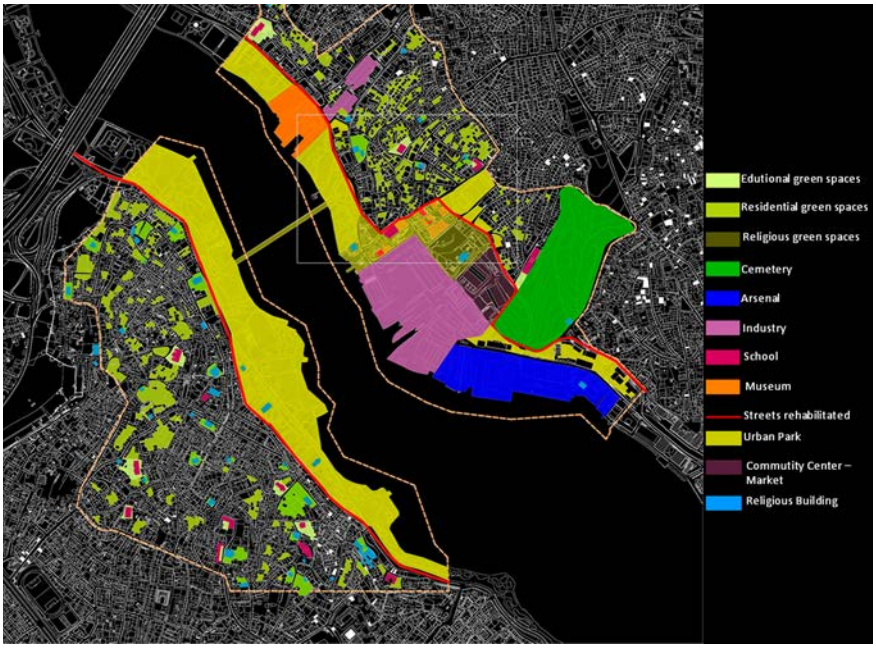


Figure 8: Strategic plan with the location of the green network and food gardens
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Fragile, improving physical and social networks: Group 4, A. Soler (Politechnic University of Catalonia), M. Süleyman, O. Özbudak, E. Meva Tokmak (Istanbul Kültür University), analyze the negative and positive aspects of the case study area. Among the most important issues that they stress is the disconnection of these neighbourhoods of Golden Horn from the rest of the city. It is difficult to find landmarks or meeting points except from the skyline of the arsenal and the shipyard in Hasköy. Another important topic that they detect is that women in these areas do not move far away from their homes. They come from families in the Black Sea, with few resources, poor education and strict traditional rules.

Their first strategy is to improve the road system, by changing the section of the existing avenue, in order to make disappear the limit of the traffic road. By hiding the cars, it is possible to have views of the waterfront and bring closer the water to the neighbourhoods. Their second strategy is to connect both sides of the Golden Horn, by a new bridge, in front of the arsenal, and a new public transportation system by tram, with stops in Balat, Fener and Hasköy. A third strategy is to improve the social life of women living in these neighbourhoods. With new public spaces and public facilities it is possible to improve the quality of life of the women collective.



Figure 9: Women in Balat, Fener and Hasköy move close distances and they are dependent on their home duties © GreenEngines.

They create a social and cultural centre for women in Balat, well linked by the new tram, and in front of the new pedestrian bridge. This new social building has a semi-public courtyard where social relations with the community take place. The building offers workspaces for women where they can socialize. Their last strategy is to create a landmark by means of giving new functions to the old arsenal area. It contains a program of restaurants, exhibitions, concerts, workshops, a library, and a space for cultural activities. It would be a meeting point of the local people and the inhabitants of Istanbul. In this way, the new program adapts to the scale of the neighbourhood and the scale of the city.

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Figure 10: Strategic plan of rehabilitation, Social women center in fron of a pedestrian bridge and a network of public transportation by tram. The blue area is the new Center of Arts of the arsenal and shipyards. © M. Reis, E. Firinciogullari, S. Killiç, A. Boztepe.

CONCLUSIONS

Any strategic plan for a sustainable urban rehabilitation that aims to activate an economic productive urban landscape should take in account the society and the community needs. In our case, all the strategic plans proposed by the students show a sensibility, and a deep analysis, of the heterogeneous and multicultural character of the communities living in the area. They also present a concern for the critical poor and isolated conditions of the inhabitants. All the proposals aim to strengthen, through strategic urban tactics, a sense of belonging and social cohesion. In this sense, the waterfront and the green spaces are the two main elements of cohesion for all the proposals. All of them see as a priority the reconstruction or the rehabilitation of a pedestrian bridge that links both shores. In two of the proposals a new bridge is built connecting Fener with the Arsenal area. All the proposals give priority to the pedestrians versus the car, trying to solve networks of connectivity by foot, and the construction of a public tram line. Identity is one of the themes that are repeated along the strategic proposals, which has two scales, the scale of the neighbourhood, and the scale of the city. For the local scale, there is a concern for the women and the need of public space for social interaction; together with a special care for the connection of public buildings and playgrounds with green spaces for education and urban agriculture. In all the strategic proposals, there is an urge to rethink different ways to restore and rehabilitate the traditional housing areas, in a state of decay. All the groups decide that the best way to do it is by microsurgery and processes of community self-organization. The area of study needs a new identity also at the macro scale of the city of Istanbul, therefore, the arsenal and the shipyard is transformed into an important cultural centre. In a megacity like Istanbul, a neighbourhood is an island that if it is not attractive, if it does not offer a public space and public services for the city, it extinguishes and decays relentlessly, creating a ghetto or a void in the city. In our case we opted to create a new area of centrality, with its multicultural richness and a rich program for educational, entertainment, nature and the attractiveness of community self-organized ecologic food gardens.

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