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# URBAN ACUPUNCTURE IN GÜMÜŞSUYU PARK FOR RETHINKING GREEN AREAS WITH RECYCLING

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## ABSTRACT

Public spaces are spaces used by all individuals living in the city. For this reason, these areas must be capable of meeting the needs of all user profiles in society. Public buildings, parks, squares, streets, avenues and boulevards are the main urban public spaces. Squares, boulevards and streets are among the most important and dynamic elements of public spaces. These elements connect public spaces and structures, providing access to individuals living in the city, interaction and communication between individuals and make complementary and flexible interventions in public spaces, which are an integral part of the city identity that constantly changes depending on cultural and political changes in ensuring the sustainability of these areas. The literature focusing on the possibility of creating livable and lively spaces with intervention tools recommended by Habermas (2004) and Arendt (2006) presents urban acupuncture as a solution method proposed by Rubió (2008), Hoogduyn (2014), Casanova (2014), Casagrande (2015), Jooshani & Polat (2019) and Nassar (2021). This study aims to develop Gümüşsuyu Park in Istanbul, Turkey, as a living part of the city again. In this study, the urban acupuncture approach was used to improve the unused area in Gümüşsuyu Park. The data for the study were collected through observations made during field trips and presented as visuals and documents. Problem definition and visualisation methods were used in the presentation format. The ideas put forward for Gümüşsuyu Park will become a part of the park's life and a breathing space for people living there or those passing by.

***Keywords:*** Urban Acupuncture, Gümüşsuyu Park, Istanbul, Recycling, Urban Design

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## INTRODUCTION

Public spaces are areas of publicisation (Arendt, 1999) that meet users' functional and cultural needs (Madanipour, 1999). Public spaces are spaces where individuals who are part of the local society can unite without restriction on societal issues, organise, and express their opinions and thoughts, where individual access is guaranteed (Habermas, 2004). 2006), and these areas allow people to socialise, exercise, play, buy goods and services, or enjoy being outside (Gehl, 2011). The importance of public spaces has been recognised in the urban and regional planning discipline since the 1980s through the urban studies literature of Lewis Mumford, Jane Jacobs, Paul Davidoff, E.F. Theorists such as Schumacher, Christopher Alexander, Allan Jacobs and Donald.

Appleyard has emphasised the importance of public spaces (Minhao et al., 2014) as they can contribute to increasing the quality of life and economic development, as well as social and reactionary interactions, thus strengthening the image of the city (Jacobs, 1992; Arendt, 2006). The 20th-century planning approach advocated large-scale and permanent planning of public space. However, this understanding of permanence has encountered increasing resistance in this era, where changes are constantly experienced at an accelerating pace (Ellin, 2006).

The pioneers of urban acupuncture, inspired by Chinese medicine, argue that there is no need for large-scale investments in the transformation of public spaces to gain attractiveness and that this change and transformation can be achieved with smaller-scale, faster interventions that cost less for the public (Minhao et al., 2014). According to Nassar (2021), many local governments have turned to urban acupuncture practices with practical and sustainable solutions in public spaces to maximise public participation with less budget (Nassar, 2021).

This study aims to enhance public social life in Istanbul, Turkey's Gümüşsuyu Park, through the urban acupuncture approach. The field research and site observations further defined the issues of Gümüşsuyu Park and were presented before information on Gümüşsuyu Avenue was provided.

## DESIGN CONCEPT DEVELOPMENT

A design concept was developed for Gümüşsuyu Park (Figure 1) to make the existing green space a usable area for social activity for the people living near the park and to create a waiting/resting area for people passing by and those waiting at the bus stop. Thus, this area in the park can be used more functionally, with sitting areas for the visitors, animal feeding areas, and meeting areas designed and made into a part of social life.

*Figure 1: GÜMÜŞSUYU Park (Source: Google Earth, 2023)*

## METHOD / PROCEDURE

In this study, the concept initiatives to enhance public social life in Gümüşsuyu, Gümüşsuyu Park was approached from the perspective of urban acupuncture. All textual materials from Gümüşsuyu and its surrounds were scanned at the start of the study using the document analysis approach. The visual material analysis assessed all space maps, plans, projects, and design schemes (see Figure 2 as an example), while site investigations were conducted through the case studies to identify issues of Gümüşsuyu Park. From Google Earth, the park's surroundings were studied and compared. The collage technique and the Adobe Photoshop programmes demonstrate the urban acupuncture concepts generated for the project.

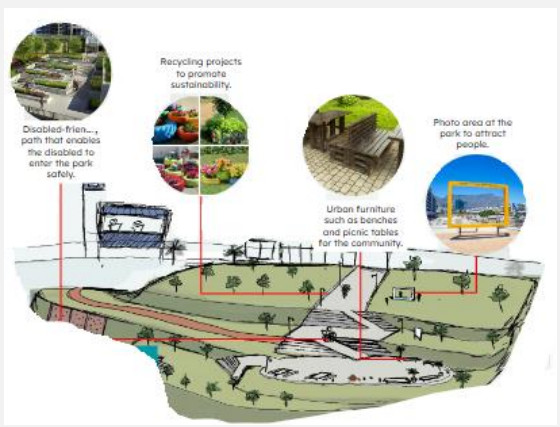


*Figure 2: GÜMÜŞSUYU Park Design (Source: Authors, 2023)*

*Figure 3: Gümüşsuyu in the 2020s (Source: Authors, 2023)*

## WHAT IS URBAN ACUPUNCTURE?

Although the concept of urban acupuncture is frequently referred to in this project, there is yet to be a clear idea of who first used the term (Hoogduyn, 2014). The first urban acupuncture application known in the literature was performed in Barcelona by Spanish architect and urban planner Manuel de Solà-Morales, who advocated working on the city for its development (Tang et al., 2015). Manuel de Sola-Morales designed 100 parks in different areas of Barcelona between 1980 and 1985 while trying to solve urban problems through strategic architectural projects using urban acupuncture practices, which he defines as small-scale urban interventions that can be applied in a short time and contribute to the development of the environment.

According to Manuel de Sola-Morales, to achieve success in urban acupuncture applications, the location of the needles (intervention areas) must first be determined correctly (Hoogduyn, 2014). These intervention areas must also have the potential to provide change and transformation in the urban area (Rubió, 2008). Sensitive areas where there are problems, such as lack of energy and blockages in the urban area, are urban acupuncture points (Lerner, 2007).

Unlike traditional planning approaches, the urban acupuncture approach focuses on searching for creative answers in revitalising urban areas rather than focusing on the ordinary solution to resolve problems. According to Casanova and Hernandez (2014), this process should be carried out holistically with the visions of architects, urban planners, designers, landscape architects or artists. Again, instead of the long-term planning processes of traditional planning, urban acupuncture practices emphasise the importance of fast, flexible and changeable applications that are non-permanent. However, in this rapid applicability process, public participation is required to integrate local understanding and knowledge (Hoogduyn, 2014).

On the other hand, performing urban acupuncture applications in line with the principle of rapid mobility is directly proportional to the low cost of the applications. In the 1970s, when urban acupuncture applications emerged, it was accepted that it was more logical to implement less costly urban projects due to the economic crisis in Europe. For this reason, it is advocated that natural materials and sometimes even recycled materials should be used in urban acupuncture practices (Casagrande, 2015).

In addition, for an urban acupuncture application to be described as "successful", the application must also create a domino effect. It has been stated that a successful urban acupuncture application will cause addiction in users that will lead to improved quality of life and solidarity and then spread to other areas of the city in a reproducible manner (Lerner, 2007) by creating a domino effect (Jooshani and Polat, 2019).

## DESCRIPTION OF GUMUŞSUYU PARK

*Figure 4: Gümüşsuyu in the 1950s*
*(Source: Anonymous, 2023)*

BEYOĞLU GÜMÜŞSUYU neighbourhood (Figure 3 and 4) is a neighbourhood dominated by a grid-like urban structure located on a sloping terrain with wide open urban spaces. Gümüşsuyu Caddesi (Official name: İnönü Caddesi) is the street that lies between Taksim Square and Dolmabahçe-Gazhane Avenue in Beyoğlu, Istanbul. CVK Park Bosphorus Hotel, German Consulate General, Gümüşsuyu Military Hospital, and Istanbul Technical University Gümüşsuyu Campus are on the street.

## CASE STUDY: BEYOĞLU GÜMÜŞSUYU

The following Figures 5, 6, 7, 8, and 9 show the case studies and site analysis done for the project.


*Figure 5: Nirenghi Spots of Gumussuyu*
*(Source: Authors, 2023)*


*Figure 6: Atatürk Cultural Center*
*(Source: Authors, 2023)*

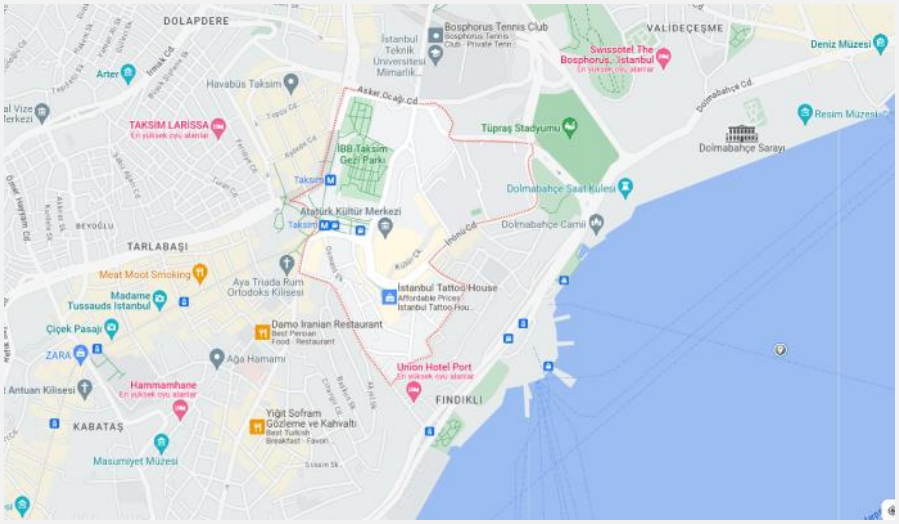


*Figure 7: Location of Beyoğlu Gümüşsuyu Neighbourhood*
*(Source: Google Maps, 2023)*

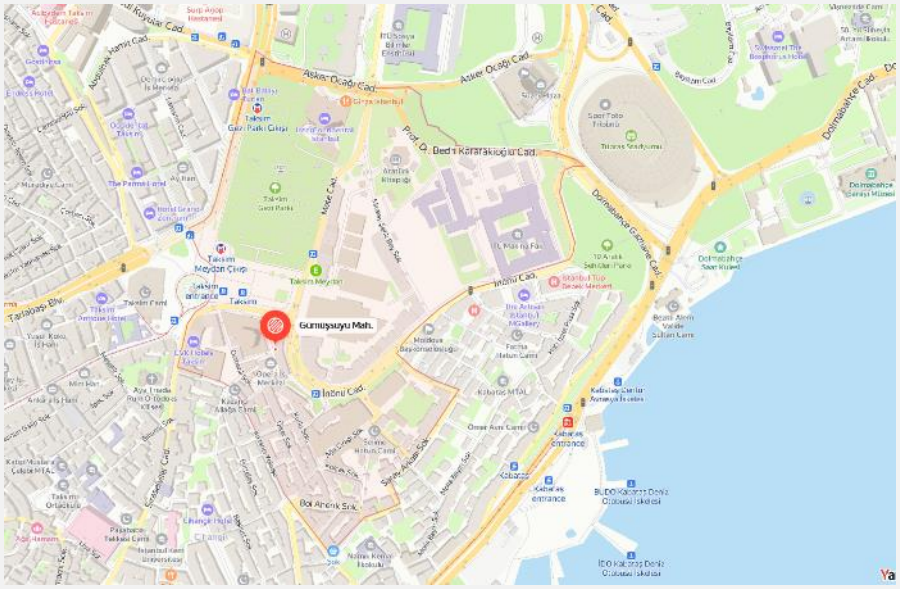


*Figure 8: Physical Pattern of Beyoğlu Gümüşsuyu Neighbourhood*
*(Source: Yandex Maps, 2023)*


*Figure 9: Beyoğlu Gümüşsuyu Neighbourhood Satellite Image*
*(Source: Yandex Maps, 2023)*

# ISSUES AND PROBLEMS

## INSUFFICIENT TRASH RECEPTACLE PROVISION

There are insufficient trash cans on Inönü Avenue to meet the neighbourhood's residents' needs. As a result, many people resort to throwing their trash on sidewalks and next to busy streets (see Figure 10).

Due to a lack of waste management infrastructure, rubbish builds up in the wrong places, which causes this problem. Inadequate garbage cans make the area look unkempt and put both locals and outsiders in danger of health and sanitation issues. Thus, it is essential to expand the number of carefully placed trash cans along Inönü Avenue to solve this issue. By making disposal choices publicly accessible, people will be more likely to dispose of their waste correctly, decreasing littering and encouraging a cleaner, more sanitary public area.

## INADEQUATE UPKEEP OF PUBLIC AREAS

A visually unpleasant atmosphere has developed from the lack of maintenance in public areas along Inönü Avenue. The area's visual value has declined due to a lack of routine maintenance, including cleaning, landscaping, and repairs.

Poor visual care has effects that go beyond how the surroundings first appear. Residents and visitors may feel abandoned and apathetic due to neglected public areas, ultimately affecting how desirable and livable they find their neighbourhood.

Inönü Avenue's aesthetic appeal could be improved through regular maintenance procedures. Putting in place a thorough maintenance programme that considers cleaning schedules, landscaping upgrades, and prompt repairs will make the atmosphere more hospitable and attractive for everyone to enjoy.

## THERE ARE NOT ENOUGH ACCESSIBLE FACILITIES

There are currently insufficient facilities on Inönü Avenue to assist people with disabilities. Notably, the lack of ramps and other accessibility elements in the neighbourhood restricts the independence and movement of people with disabilities.

Prioritising the construction of infrastructure along Inönü Avenue accessible to people with disabilities is essential to resolving this problem. In order to make the region more accessible and inclusive for people with disabilities, ramps should be provided in important areas, including pedestrian crossings and public buildings.

Additionally, considering the requirements of people with various disabilities, such as vision, hearing, or mobility impairments, while planning public spaces can encourage inclusion and guarantee fair access for all community members. These problems can be resolved by making Inönü Avenue a welcoming and inclusive place for locals and guests.

*Figure 10: Views from Gümüşsuyu*
*(Source: Authors, 2023)*

## URBAN ACUPUNCTURE STRATEGY

Based on the site plan in Figure 11, Gümüşsuyu Park does not have many trees. The park merely serves as a location to come and go, providing no social context for those around it. As a result, a design that can appeal to many park visitors was created with the park merging into the entrance stops and thus made accessible to those waiting for buses. The park has ramps and slanted descending ways for people with disabilities. In the park, facilities for gathering and playing music were also made available to locals. The goal is to feed the animals in locations where the facilities are made more aesthetically pleasing and healthy. Special containers for food and food left on the ground are provided using materials chosen for the park, made using an environmentally friendly, sustainable, and recyclable technique.

*Figure 11: Case Study Area*
*(Source: Authors, 2023)*

## DETAILS OF DESIGN IDEAS

- The planned environmental park project on Inönü Street has the potential to be a very important and useful project. This type of park will contribute to the green areas of Istanbul, protect natural life, meet the people's rest and recreation needs, and play a major role in improving air quality.
- The design of the park will include various trees, flowers and plants, and endemic species.
- Park will generate its energy by making use of renewable energy sources.
- LED lighting will be used for energy efficiency (see example in Figure 13).
- By placing recycling points in the park, it will be ensured that waste is decomposed and recycled.
- Seatings will be designed using recycled materials (wooden crates, pallets) with a natural design concept (Figure 14).
- Recycled materials, such as car tires and packaging boxes, will be designed as pots and used as landscaping elements by planting them (Figure 12).
- Training boards will be put in the park to increase environmental awareness.
- By creating bicycle paths around the park, traffic pollution will be reduced.
- Structures and houses that attract insects and birds will be created in the park.
- In addition, food containers and huts will be created for cats and dogs.
- Universal design will be considered for stairs and pathways (Figure 12).

*Figure 12: Universal Design of Stairs and Pathways and Recycled Materials as Landscape Elements.*
*(Source: Authors, 2023)*

*Figure 13: Contemporary Light Column*
*(Source: Archiexpo, 2023)*

*Figure 14: Natural Sitting Elements*
*(Source: Nelda, 2023)*

## CONCLUSION

The application of urban acupuncture techniques stands out as a crucial tool for enhancing the vibrancy and usage density of public spaces. Examples in the literature underscore that the impact of this practice extends beyond its immediate design location, radiating to the surrounding areas and even influencing the entire city through a domino effect.
Again, urban acupuncture applications are preferred by local governments and planning authorities as they are less costly and easier to process compared to urban transformation and plan change to increase urban vitality.
The proposed environmental park project on Inönü Street presents a fantastic opportunity to address various environmental, socioeconomic, and accessibility issues, while simultaneously elevating the overall quality of the area. This park will contribute to Istanbul's green spaces and safeguard natural life through the inclusion of diverse trees, flowers, and plants. The commitment to sustainability and energy efficiency is evident in the use of LED lighting and renewable energy sources. Additionally, features such as recycling stations, informational signs, and bicycle pathways promote environmental awareness and contribute to pollution reduction.
The incorporation of habitats for domestic animals, birds, and insects further fosters biodiversity and encourages a sense of respect for all living beings. By utilizing sustainable materials in the park's construction, the project minimizes its environmental impact. In essence, this eco-friendly initiative not only enhances community harmony but also creates a welcoming atmosphere, significantly improving air quality, and meeting the recreational needs of visitors.

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