



NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF ARCHITECTURE

URBAN PARK AMENITIES: A STUDY OF NORTHERN NICOSIA

M.Sc. THESIS

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Nicosia
June, 2022

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MASTER THESIS

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Supervisor

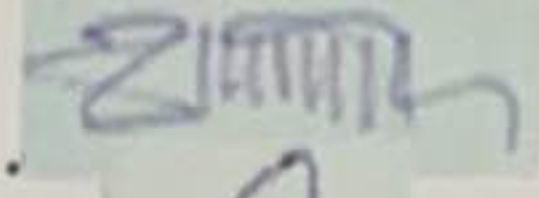
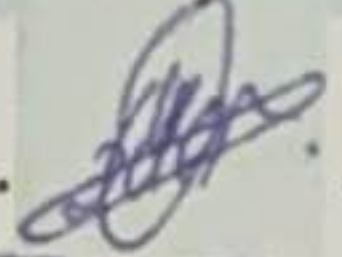
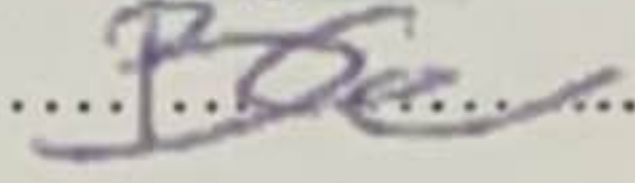
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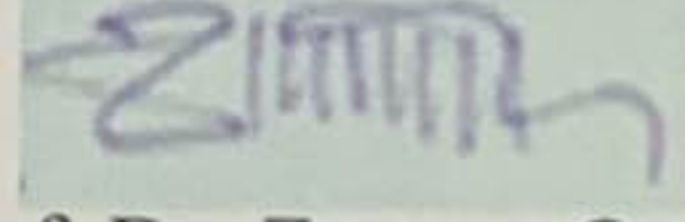
Approval

We certify that we have read the thesis submitted by **Youssef Almasri** titled "**Urban Park Amenities: A Study of Northern Nicosia**" and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Applied Sciences.

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Declaration

I hereby declare that all information, documents, analysis, and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of the Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Youssef Almasri

15/06/2022

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Youssef Almasri

Abstract

Urban Park Amenities: A Study of Northern Nicosia

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Urban green spaces are reliable places that can serve the population, using their amenities, such as natural and artificial ones which may deliver a high experience in terms of leisure, safety and wellbeing etc. Chapter one explains a brief introduction to the topic including research problem and aim etc, and in chapter two a literature review has been carried out regarding the urban park amenities, chapter three explains the methodology of the study, chapter four displays the findings of the study, and finally chapter five evaluates the conclusion and recommendations. Two main types of amenities (natural and artificial) has been used within the study. Kumsal Park, Kuğulu Park, and Çağlayan Park in Northern Nicosia were assessed in terms of natural and artificial amenities, using an evaluation scale (low, average, and high). Assessment in the study was made according to the physical appearances of the existing park amenities via on-site observation. The study's findings revealed a scale of average natural amenities as well as average artificial amenities in Kuğulu Park, and Çağlayan Park, while Kumsal Park had relatively higher urban park amenity score. Nevertheless, urban parks within northern Nicosia require more attention for the natural amenities, also rehabilitation for the artificial amenities. In other words both types of amenities need to be strengthened in northern Nicosia parks.

Key Words: green space, urban park, natural and artificial amenities, theoretical evaluation, northern Nicosia

Özet

Kent Parkı Ögeleri: Kuzey Lefkoşa Üzerine Bir Araştırma

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MA, Mimarlık Bölümü

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Kentsel yeşil alanlar, boş zaman, güvenlik ve refah vb. açısından yüksek bir deneyim sunabilen, doğal ve yapay öğelerini kullanarak nüfusa hizmet edebilen yerlerdir. Birinci bölüm, giriş bölümü olarak, araştırma problemi, çalışma soruları ve amacı gibi konuları açıklamaktadır ve ikinci bölümde, kent parkı öğeleri ile ilgili bir literatür taraması yapılmıştır, üçüncü bölüm çalışmanın metodolojisini açıklar, dördüncü bölüm ise çalışmanın bulgularını göstermektedir ve son olarak beşinci bölüm sonuç ve önerileri değerlendirmektedir. Çalışmada kent parkı öğeleri doğal ve yapay olarak sınıflandırılmıştır. Kuzey Lefkoşa'daki Kumsal Park, Kuğulu Park ve Çağlayan Park için doğal ve yapay öğeler açısından bir değerlendirme ölçeği (düşük, orta ve yüksek) kullanılmıştır. Çalışmada değerlendirme mevcut park öğelerinin fiziksel görünümüne göre gözlemlenmiştir. Çalışmanın bulguları, Kuğulu Park ve Çağlayan Park'ta ortalama seviyede doğal ve yapay öğeler ortaya çıkarırken, Kumsal Park'ın puanı nispeten daha yüksek hesaplanmıştır. Sonuç olarak, kuzey Lefkoşa'daki kent parkları, doğal olanaklara ve ayrıca yapay olanaklar için rehabilitasyona daha fazla çaba sarf etmelidir. Diğer bir deyişle, kuzey Lefkoşa parklarında her iki tür öğenin de güçlendirilmesi gerekmektedir.

Anahtar Kelimeler: yeşil alan, kent parkı, doğal ve yapay öğeler, teorik değerlendirme, kuzey Lefkoşa

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List of Abbreviations

EEA	The European Economic Area
PA	Physical Activities
PGS	Public Green Spaces
PUGS	Public Urban Green Spaces
QOL	Quality of Life
QOUL	Quality of Urban Life
SDWSRF	The Safe Drinking Water State Revolving Fund
TRNC	Turkish Republic of Northern Cyprus
UGI	Urban Green Infrastructure
UGS	Urban Green Spaces
UN	United Nations

CHAPTER I

Introduction

Background

The emergence of the first public urban green spaces as we know them today coincided with the industrial revolution in the early nineteenth century, when parks assumed a new function and were used to preserve a sense of nature amidst the crowded urban settings of industrial cities. Urban green spaces for the benefit of everyone subsequently emerged, especially among the working class, which at the time endured substandard living conditions (Georgi & Zanou, 2017).

Since the city itself needs a break and a place to purge the air of the toxins produced by daily activity in urban areas, urban parks are just as crucial to our system of urban architecture as green spaces. For people to spend some quality time away from the noise and heavy urban vibration, as well as sound pollution, green spaces must exist in daily life in urban areas.

Particularly in densely populated areas that have been flooded with concrete to provide the necessary facilities for living and meeting the needs of urban life, urban parks play a crucial role in improving life quality. Our green batches, starting with rewilding, may benefit city people by lowering urban heat and human activity.

Urban parks serve a critical role in enhancing life quality, particularly in densely populated regions that have been flooded with concrete to offer the amenities for living and meeting the necessities of urban life. Rewilding is the first of our green batches, and it may help city dwellers by reducing heat and activity. Chiesura, (2004), noted that urban parks and open green spaces are essential to the quality of life in our increasingly urbanized civilization. A trip to the park can help people decompress, become more reflective, revitalize urbanites, and foster peace and quiet.

Quality of Urban Life

No matter where we live in the world, it is well accepted that there has been a continuous movement from rural to urban areas in each of our various countries. In fact, more than half of the world's population now lives in cities, which indicates that we have hit a tipping point, according to a recent UN report. In a Scientific

American editorial published in the September issue, it was claimed that the population of cities increased more than tenfold in the twentieth century, reaching 2.8 billion people by 2000. The United Nations predicts that by 2050, there will be more than 6 billion people living in cities. Additionally, it is anticipated that in the next 30 years, two out of every three people born will reside in cities (Editors, 2011) , all cited in (Marans, 2012).

QOL – Quality of life indicators of the human condition that can be measured objectively, such crime and death rates, have traditionally been the subject of research. According to Kahneman, Deiner, and Schwartz (1999) in their book on well-being, people's quality of life experiences are integrated into the social and cultural environment (Marans, 2012).

Our families, places of employment, financial situation, and, as we get older, our health, all have an impact on how well our lives turn out. Those of us who care about the environment are well aware of the fact that we live in a variety of places, each of which has a certain set of environmental features and is also essential to our quality of life. It has been established that where people live has an impact on their lives and, as a result, their overall quality of life (see, for example, Marans and Kweon, 2011), all of which were cited in this article. We might consider places varying in size or scale from a single dwelling to a local area or neighborhood, a city, a bigger region, or even a state or nation (Marans, 2012).

Urban Parks

People who are unable to flee overpopulation, illness, or bad air can find a healthy setting nearby in a park, which is a pleasure garden. Prior to becoming the verdant havens we are accustomed to today, parks had a long history. Parks were originally used for farming, just as architectural and artistic achievements were once used to acquire wealth and power. The gardens were soon transformed into a place of sensual pleasure rather than agricultural objectives, just like all luxuries connected with the wealthy, (2010) Nassar cited in (Blaszczyk et al., 2020).

Urban parks are frequently viewed as important assets, yet occasionally their capital and maintenance costs are seen as their sole quantitative value. Parks are not financially profitable, like the bulk of publicly supported services, thus the investment case isn't always clear-cut. The leisure activities that take place in parks may be challenging to define and measure. The resources in parks and the activities

made possible by an urban parks system are commonly considered as being essential to a community, but it can be challenging to manage and maintain them in a way that maximizes their services without a clear understanding of their purposes and values (Schwartz, 2016).

Figure 1

Meihe Park in Zhengzhou Airport, China (Yin & Yating, 2021)



It is well known that urban parks have historical value. As towns grew, parks were constructed for a variety of uses, such as public squares, sports fields, fairgrounds, or just for the general public to engage in landscaping and beautifying activities. There are many instances where park systems were established as separate organizations before the town or city was formally incorporated. The need for these public meeting places in the expanding town made the creation of parks areas both clear and essential. A certain percentage of land must now be set aside for parks and other open space in new developments in some localities as required by law (Schwartz, 2016).

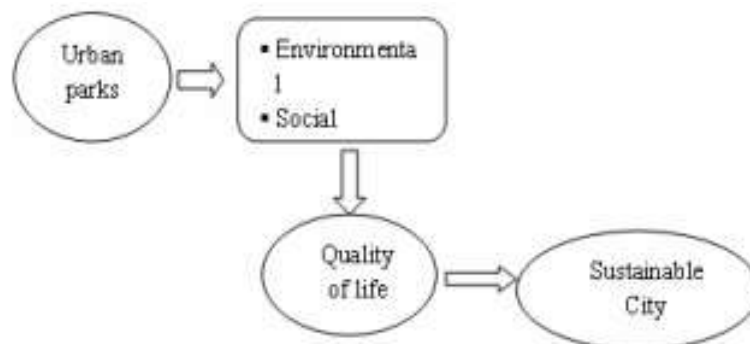
It cannot be denied that the public gains from the variety of urban park settings. Eleven uses (functions) of parks were found by Manning, Vallere, and Minter (1996) in their research. Understanding the themes for recreational settings pertaining to the benefits of urban parks would be made much easier with the use of this kind of information (Shuib et al., 2015).

Large, bio-diverse ecosystems that are generally pristine and under threat, as well as endangered or fragile animal and plant species, are the main targets of international environmental protection initiatives. On the other hand, less scientific and political focus is placed on urban green spaces, small-scale natural areas, and the advantages they offer to city dwellers. Cities' attempts at sustainability and regeneration are generally concentrated on the built and man-made elements of the urban environment. In contrast, the natural elements and green areas of the urban structure continue to receive scant attention. The recent decline in maintenance budgets in many municipalities demonstrates a lack of passion for green spaces (Tyrvaainen and Vaananen, 1998), cited in (Chiesura, 2004).

A healthy economy, a clean environment, social equity, and community involvement in development processes are all components of sustainable development, which is a strategy for attaining economic progress. This approach enables the growth of wholesome communities that will last for both the present and future generations. In terms of the protection of the environment, urban parks are a crucial part of a sustainable city. They encourage environmental betterment, ecological awareness, both active and passive leisure, aesthetic appreciation, and a sense of community (Faizi, 2006) cited in (Blaszczyk et al., 2020).

Figure 2

Urban Parks And Sustainable City (Hajmirsadeghi, 2012)



Sustainable development, a tactic for achieving economic advancement, includes a thriving economy, a clean environment, social fairness, and community involvement in development processes. With this strategy, healthy communities can develop that will benefit both the present and coming generations. Urban parks are a vital component of a sustainable city in terms of environmental preservation. They promote ecological awareness, leisure activities that are both active and

passive, artistic appreciation, and a sense of community (Faizi, 2006), cited in (Blaszczyk et al., 2020).

Within this research, a case study will be held on several urban parks that are located in northern Cyprus – Nicosia city in TRNC and compared within the illustration of the international cases related to the copy.

Urban parks are an important portion of the city planning and the life quality of the city, as well as for the users and the locals, as where humans live to have some quality time to understand the ecology and the importance of having the green planned areas within the city, or we can call it the urban areas.

According to the American National Park and Recreation Association, parks are crucial for a community's quality of life, health, advantages to the economy, and overall well-being (2010). Urban parks offer both active and passive recreational opportunities, which promote better health. Previous studies have demonstrated that having a natural environment around has a positive effect on people's lives (Shuib et al., 2015).

Health advantages of the urban parks

The two distinct facets of human health are physical and psychological health. Urban parks can enhance these two facets of human health by offering opportunities for leisure activities. According to several studies, those who engage in leisure activities are in better health than those who do not (Shuib et al., 2015).

Social benefits of the urban parks

The metropolitan community's social interactions may suffer as a result of the working pattern and busy schedules. The construction of urban parks could offer a solution for encouraging social connection among various community groups through organized events including health campaigns, sports, recreation, and tree planting programs. Urban parks may offer suitable areas for family members to engage in leisure activities together, which may help to strengthen social bonding in addition to boosting social interaction (Shuib et al., 2015).

Urban parks and the environmental benefits

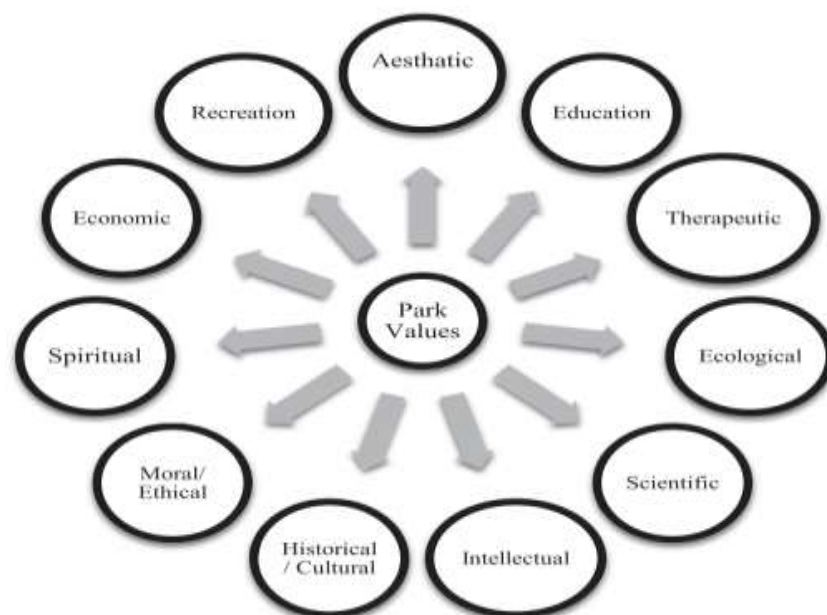
Urban parks' landscape features contribute to reducing city temperatures as climate change becomes a problem for the environment, particularly in cities.

Trees, flowers, vegetation, biodiversity, and other natural features can be found in urban parks, which support the ecosystem of the city. Sherer (2006) stressed the value of using soil and trees in urban parks because they work as natural filters to reduce water pollution.

According to Chiesura, numerous studies have shown that natural elements like urban parks and open spaces considerably improve quality of life (2004). Additionally, the natural environment affects how children develop (Shuib et al., 2015).

Figure 3

Urban Parks And Sustainable City (Hajmirsadeghi, 2012)



A study by Teymouri et al., (2017), illustrates that everyone understands the value of nature and its advantages in enhancing their mental and socioeconomic conditions, regardless of their social status or age. Most individuals love being in parks and see them as a place to unwind before engaging more actively in their daily life, including social, economic, and other pursuits. This indicates how parks either directly or indirectly enhance the quality of human existence.

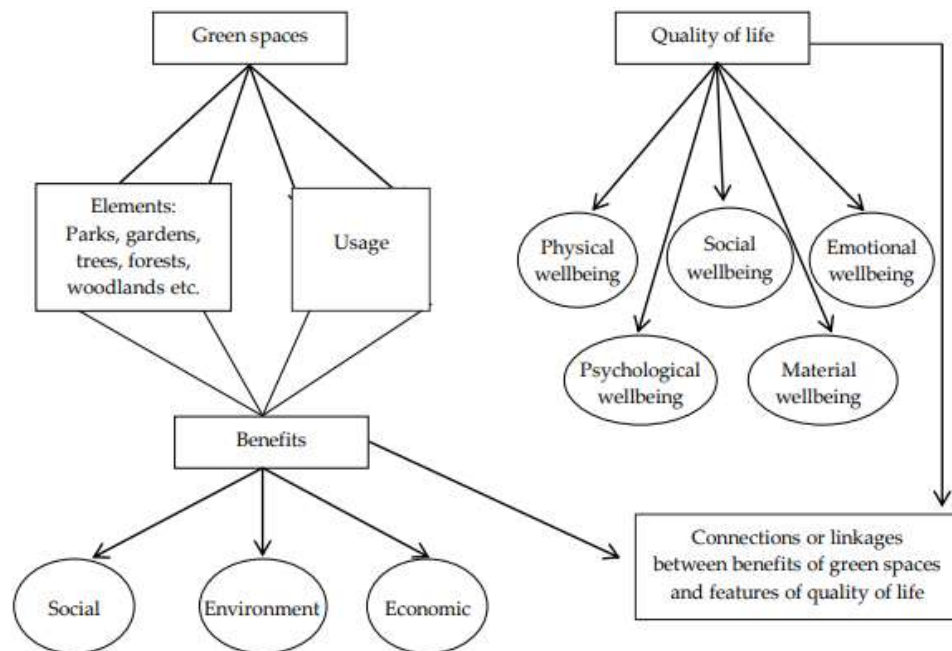
Urban green space is a type of land cover that includes public parks and other (public or private) vegetated spaces. A significant body of research outlines the many advantages of urban green space to human health and welfare. These

parks and green areas offer ecological services that enhance human wellbeing in many ways (Larson et al., 2016).

A set of activities known as "recreation" was used to counteract the negative effects of urban life, including poor space quality, pollution, traffic congestion, a lack of access to services, and a lack of social cohesion (Türkoğlu & Seçmen, 2019).

Figure 4

Relation Between QUL And Green Spaces (Mensah et al., 2016)



People who live in cities can benefit greatly from green space and plants in many different ways. The results of the research on children show a recurrent pattern of cognitive and social advantages. There is a connection between place attachment and aging. There may be challenges when attempting to extend these findings to locations with distinctive socioeconomic and environmental characteristics, like Scotland, which are primarily outside of the United Kingdom. (Bell, Simon; Hamilton, Val; Montarzino, Alicia; Rothnie, Helen; Travlou, Penny; Alvez, 2015).

The research is focused on the topic of green urban areas, which are typically represented by urban parks, in the urban setting, as many studies have linked the benefits of green areas (Urban Parks) in the urban context, such as the following studies:

(Ayala-Azcárraga et al., 2019a, 2019b; Blaszczyk et al., 2020; Chiesura, 2004; de la Salud, 2017; Ecosystems, 2000; EPA, 2017; European Environment Agency, 2022; Hansen, R., Rall, E., Chapman, E., Rolf, W., Pauleit, 2017; Marans, 2012; Novotny, 2014; Sanches et al., 2021; Schwartz, 2016; States et al., 2013; Vargas-Hernández et al., 2018; Vujcic et al., 2019; D. Wang et al., 2015; Woolley, 2003).

People's health and well-being are more and more dependent on the standard of urban environments (Nilsson et al., 2007). The positive relationship between the presence of green spaces in people's living environments and their perceived general health has been studied by a number of researchers (Maas et al., 2006; Mitchel and Popham, 2007; Wolch et al., 2014; James et al., 2016; Picavet et al., 2016; O'Sullivan et al., 2016), cited in (Vujcic et al., 2019).

Research Problem

Green places will be under increased stress as the population density rises. Fewer people are likely to have private gardens or other private green spaces. Smaller, locally accessible 'pocket' parks will continue to be significant. Blue space, on the other hand, is less likely to be developed. Other cities, on the other hand, have made use of blue space, and Lefkoşa – Northern Nicosia should explore doing so as well.

Climate change will be a major future concern, and green spaces will play an important role in adaptation and mitigation. There is a lot of evidence that parks, especially larger parks, can help with air pollution and temperature regulation (they are cooler locations).

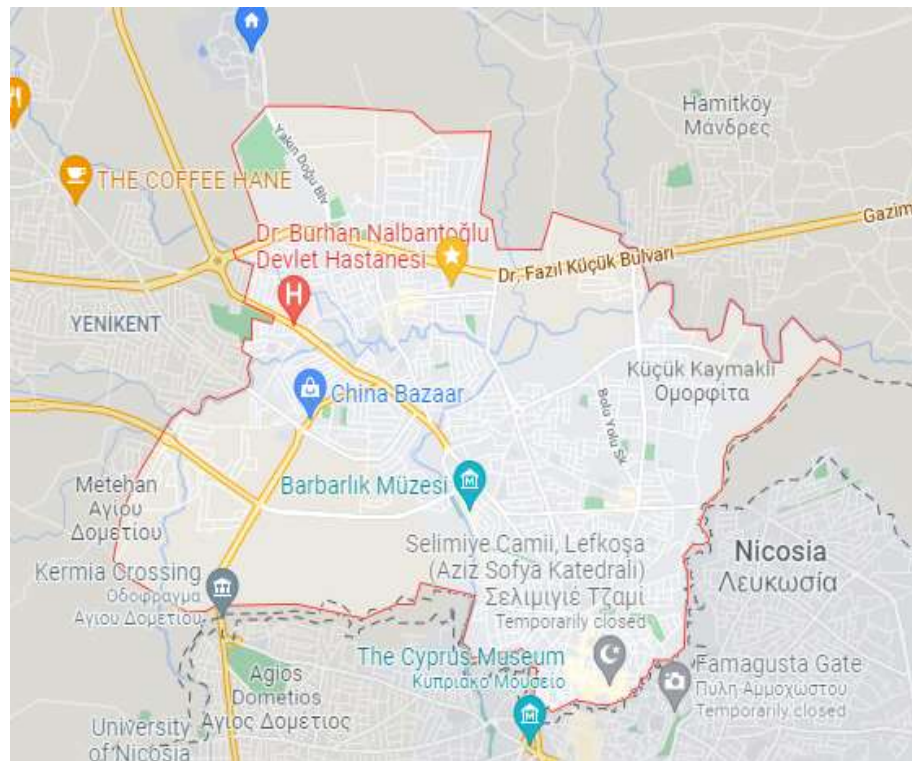
Existing infrastructures will certainly need to be reconfigured to include green spaces, breeze routes, and other amenities to help minimize heat. In the next 30-50 years, parks are projected to play a critical role in health, climate regulation, and improved connectedness.

The parks in northern Nicosia are typically small in scale and feature limited equipment. The park's equipment, such as the urban furniture and vegetation species, needs to be upgraded. As this city is regarded as a tourist attraction, the problem is represented by the limited green areas within the city.

The urban parks within the city must be more integrated within the urban planning of the city and updated to meet the users' needs such as the capacity of the population and the visitors, also the green areas, as well as the urban furniture, and the facilities. See Tables 8, 10, 12.

Figure 5

The Area Of The Study Is Northern Nicosia, TRNC (Google Maps)



Research Aim and Questions

The goal of this research is to examine several urban parks in Lefkoşa, Northern Cyprus, to investigate the urban park amenities (artificial and natural). The amenities are assessed using a scale of high, average, and low in the selected urban parks.

The study has focused on the appearance of the amenities as well as the availability of these amenities. The selected urban parks as case studies are the largest urban parks located within northern Nicosia city. These chosen parks are Kuğulu Park, Çağlayan Park, and Kumsal Park. Within this framework, the research questions are as follows:

- How can we define and classify urban green spaces, and how do they include urban parks?
- What are the benefits of having green spaces within urban areas?

- What are the amenities available within the urban parks in general and in northern Nicosia?
- Are the installed amenities have sufficient characteristics to serve the visitors/users?

Figure 6

Thesis Structure - Outline

The methodology uses a qualitative study based on the data that is collected via site observation by visiting the chosen parks in northern Nicosia (Lefkoşa). The study aims to focus on the city of Lefkoşa (northern Nicosia), as it investigates the presence of park amenities within the chosen parks (Kumsal Park, Ankara Çağlayan Park, and Kuğulu Park). These parks are the most popular parks within the city of northern Nicosia. See Figure 6 which displays the thesis structure.

CHAPTER II

Urban Green Spaces

Introduction

Urban green space (UGS) in this article is defined as all publicly owned and publicly accessible open space with a high percentage of vegetation cover, such as parks, woodlands, wildlife areas, and other green space. It can have both a designed personality and one that is more innate. Only physically accessible spots were taken into consideration; little roadside plantations and other locations that couldn't be utilised in practice were omitted (Schipperijn et al., 2013).

Urban green zones are associated with city sustainability because of the wide range of ecological services they offer, including carbon capture, air pollution reduction, biodiversity maintenance, aquifer recharge, and climate regulation (Jenerette et al., 2011), cited in (Ayala-Azcárraga et al., 2019b).

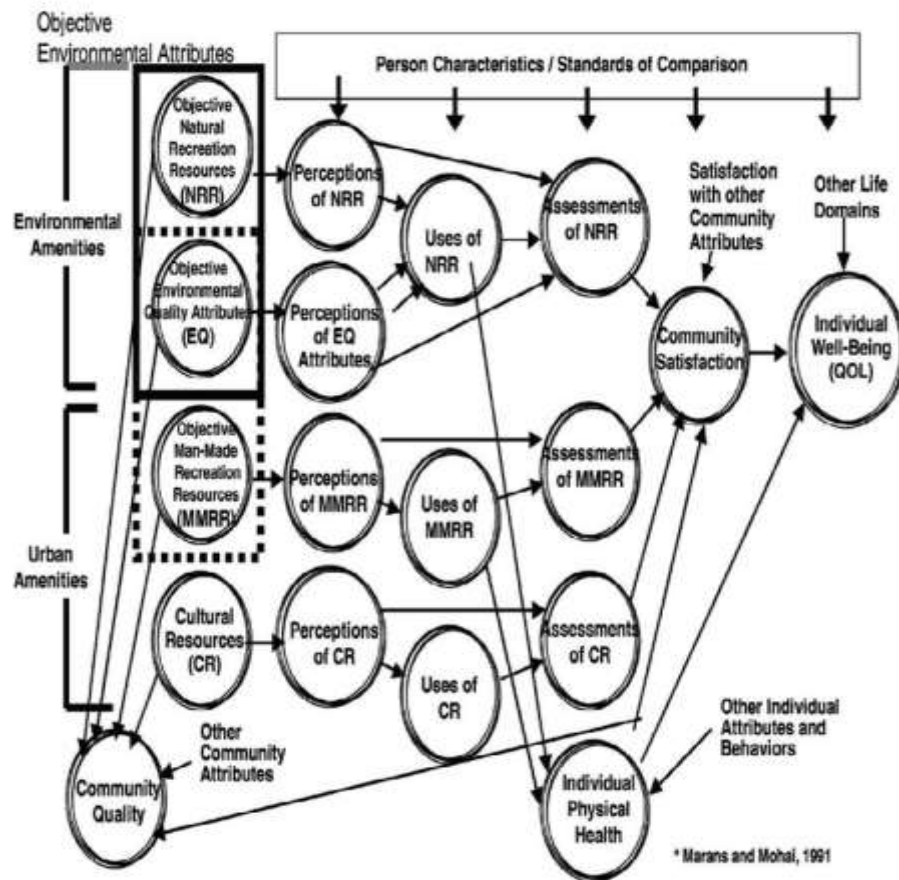
On the other side, the relationship between urban nature and human wellbeing can occasionally go unnoticed, especially in cities where planners are more focused on the growth of the economy than on social links. Individually, a decrease in exposure to natural settings is reflected in an uptick in mental and physical illnesses (Van Den Berg et al., 2015), cited in (Ayala-Azcárraga et al., 2019b).

QOL studies have historically looked at statistics on crime, death, and other objective measures of the human condition. According to Kahneman, Deiner, and Schwartz (1999) in their book on well-being, people's quality of life experiences are founded in the social and cultural environment, all cited in (Marans, 2012).

Generally speaking, attributes like "amount of public green space per person," "public parks," and "recreation locations" are widely cited as essential elements in making a city livable, pleasant, and appealing for its inhabitants. It is widely believed that creating more sustainable cities involves more than just enhancing the abiotic and biotic aspects of city life; it also involves factors such as how satisfied people are with their daily environments, how they feel about them, and how they perceive them to be (Hajmirsadeghi, 2012).

Figure 7

Model Relating Leisure Resources and Activities to Individual Well-Being, Health, and Community Quality (1991). (Marans, 2012)

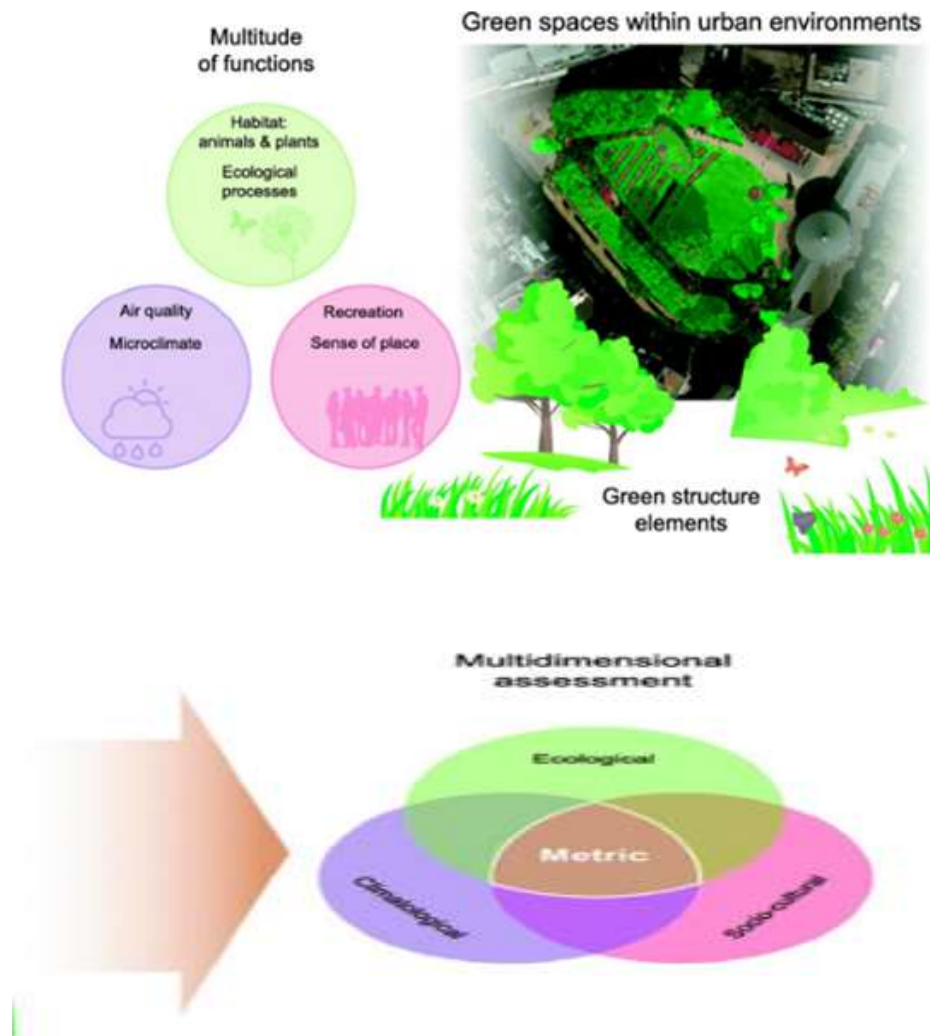


Cities have become more significant throughout the years, and some people believe that the current rapid urban population expansion is essential to the future of the planet. The shift from rural and village life to urban "civilization" has had an impact on society and the environment; also, the growth of urban populations and the associated industrialisation have had a number of detrimental and frequently dehumanizing effects. With only 20 million people residing in the top 100 cities in the globe in 1800, London was the only city in the world with a million inhabitants, cited in (Woolley, 2003).

There were 540 million people living in the top 100 cities in the globe in 1990, with 220 million of them residing in the top twenty (Girardet, 1996). Over 80% of the population of England by 1991 resided in towns and cities with a population of over 10,000. (OPCS, 1993), all cited in (Woolley, 2003).

Figure 8

Urban Environment And Dimension Functions Regarding The Urban Green Spaces (Daniels et al., 2018)



Mulligan et al. (2004) define QOL broadly as "the satisfaction that a person receives from surrounding human and physical conditions, conditions that are scale-dependent and can affect the behavior of individual people, groups such as households, and economic units such as firms" in their thorough review of the QOL literature, (Marans & Stimson, 2011).

Objective and subjective paradigms are the two main types used in QOUL research. This is so that what is best for people can never be decided without taking their viewpoints into account. Examples of objective measures are life expectancy, income, and access to educational opportunities (MacLean & Salama, 2019).

Figure 9

Model of the Conceptual QOUL Domain (MacLean & Salama, 2019)



Definition of Urban Open and Green Spaces

Although it would seem that the answer to this question is obvious, this is not the case. Different authors and philosophers have used various meanings of free space. Open space in an urban setting can be characterized as any undeveloped terrain or body of water that is not encircled by vehicles or structures (Gold, 1980).

On the other side, Tankel (1963) put out the idea that open space includes not only the undeveloped land or water in and around major cities, but also the air and light above the ground. According to Cranz (1982), open spaces are expansive, potentially flexible places (Woolley, 2003).

The quality, quantity, and accessibility of urban green space are greatly changed by interventions in urban green space. This could be done by building additional urban green spaces or changing the features and purposes of existing ones (de la Salud, 2017).

Open Green Spaces as a Component of Green Infrastructure

A network of high-quality natural and semi-natural areas with other environmental features that are intended and managed to provide a variety of

ecosystem services and protect biodiversity in both rural and urban locations is generally referred to as "green infrastructure." GI aims to increase nature's capacity to give a range of valuable ecosystem products and services, such as clean water and air, to people as a spatial structure that benefits from the environment (Ecosystems, 2000).

In 38 EEA (The European Economic Area) member countries, green infrastructure makes up, on average, 42% of the urban area. Spain's Cáceres has the highest percentage of all green space (96 percent). Only 3% of the average city's total area is made up of green spaces that are open to the public (European Environment Agency, 2022).

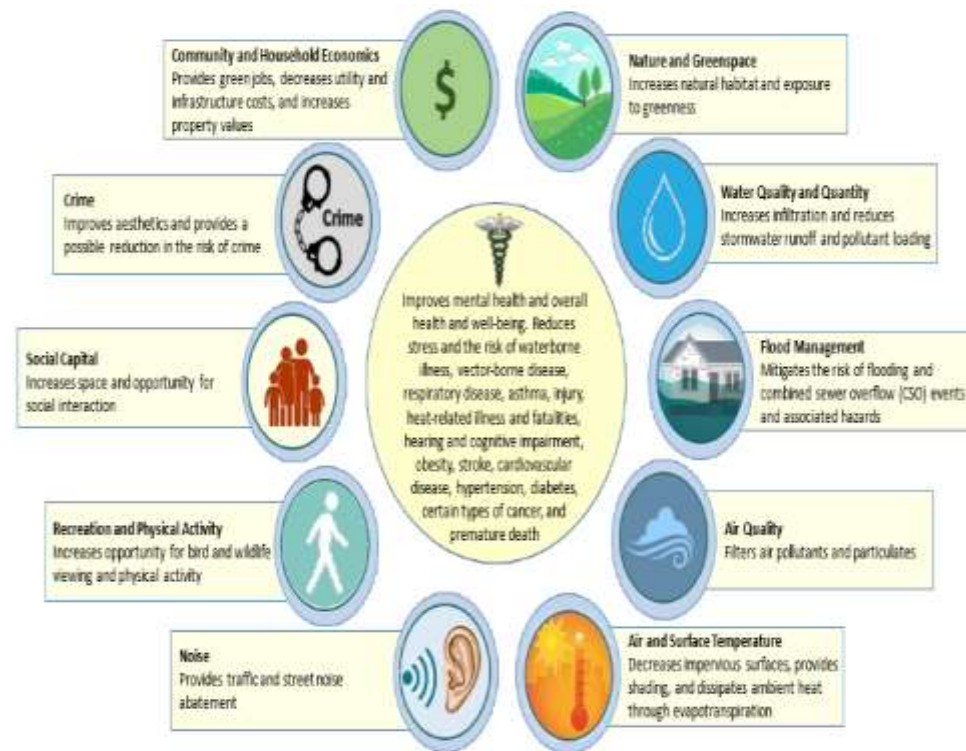
Green infrastructure in cities comes in many various forms, including parks and gardens. These buildings have the ability to provide crucial ecosystem services (ES) that have a big impact on people's quality of life. When adopting measures to protect and enhance the quality of life, such green infrastructure types must be given particular consideration from an urban planning perspective (Brzoska & Spage, 2020).

According to Health et al., (2012), the components of the green infrastructure can be listed as:

1. Energy Efficiency
2. Water Efficiency
3. Green Design
4. Environmentally Innovative Projects

Figure 10

Model Of The Conceptual QOUL Domain (MacLean & Salama, 2019)



Green infrastructure improves safety, promotes community identity and well-being, and increases exposure to the natural environment, lowers exposure to harmful substances and conditions, and offers opportunities for recreation and physical activity. It also has economic advantages for both communities and individual households (EPA, 2017).

Key concepts from landscape ecology that relate to green urban infrastructure for sustainable cities include the following: a multi-scale pattern recognition approach a focus on physical and functional connections, and process linkages (Novotny, 2014).

Table 1.

The Geographical Dimension of Green Infrastructure for Cities

Urban Patches	Urban Corridors	Urban Matrix
Parks	Rivers	Residential Neighbourhoods

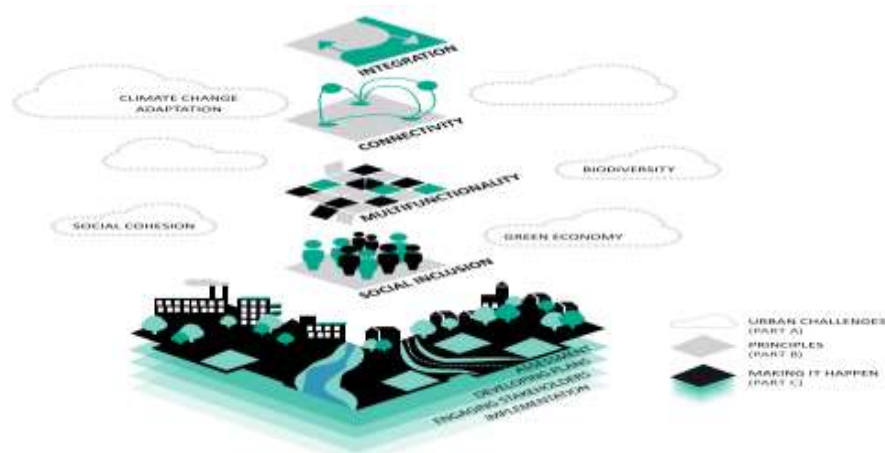
Sport fields	Canals	Industrial Districts
Wetlands	Drainage Ways	Waste Disposal Areas
Community Gardens	River Ways	Commercial Areas
Cemeteries	Roads	Mixed-Use Districts
Campuses	Powerlines	
Vacant Lots		

Source : (Novotny, 2014)

Cities offer a huge variety of green (and blue) habitats, from rooftop gardens to urban forests. While some of these locations are already taken into consideration during design, others—particularly private green spaces like gardens but also urban farmlands—have gotten less attention in both theory and practice. They are usually undervalued in UGI networks despite their importance (Hansen, R., Rall, E., Chapman, E., Rolf, W., Pauleit, 2017)

Figure 11

Planning Framework For Urban Green Infrastructure (UGI) (Hansen, R., Rall, E., Chapman, E., Rolf, W., Pauleit, 2017)



Urban parks in cities are made up of a range of various elements, including green structures. In addition to parks, these also include cemeteries, private gardens, green roofs, communal and allotment gardens, sports facilities, and so on (Konijnendijk et al., 2013)

Classification of Urban Open Green Spaces

An essential part of environmental preservation in cities is urban green space. In general, it refers to any green areas that are mostly made up of surfaces like soil, grass, bushes, and trees, including permeable hard-surface areas (Dunnett et al., 2002; Lee et al., 2015). According to the study, there are five different categories of urban green spaces: conservation, greenways, community, residential, and amenity green spaces, cited in (Nor & Abdullah, 2019).

There are many different types of green space in cities, such as high-maintenance urban parks, natural areas, and buffer zones between other land uses and noisy infrastructure (Panduro & Veie, 2013).

According to EPA, 2020, any open tract of ground that is undeveloped (i.e., without buildings or other built structures) and available to the public is considered open space. The following are examples of open space:

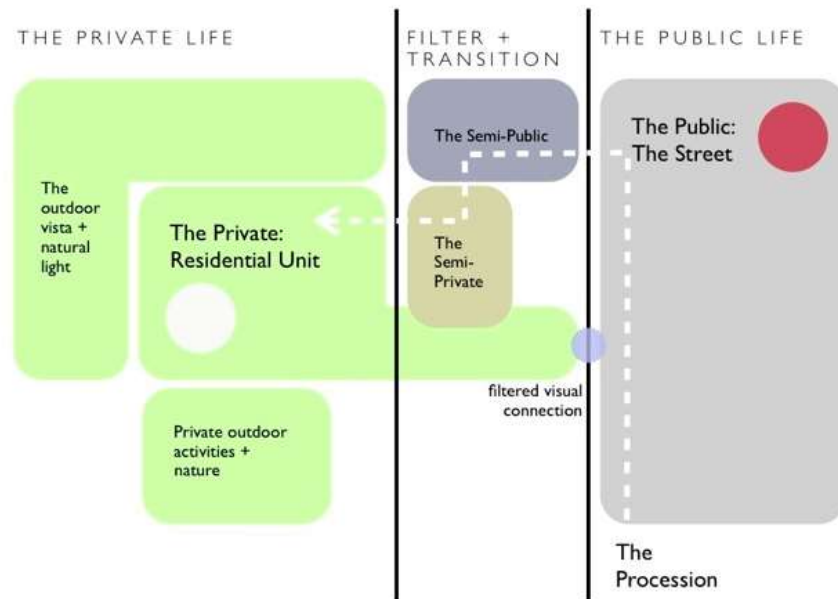
Greenery is present (land that is partly or completely covered with grass, trees, shrubs, or other vegetation). Green spaces include places like parks, community gardens, and cemeteries (EPA, 2020).

Classification According To Usage

According to the usage type, open green space is classified as public, semi-public, semi-private, and private space. Figure 12 presents the public urban spaces to the private ones and the relation between them.

Figure 12

The Connection Between A Public And A Private Location (Roos & Arlt, 2003)



According to Li et al., (2021), Park green spaces offer varying ecological, social, and economic benefits depending on their size. The advantages to society and the economy are greater when small and medium-sized parks are more accessible, equitable, and convenient to use.

The location of the green regions that have been able to have urban park amenities or even a green batch within the urbanized areas can be used to categorize the utilization of urban parks or even green urban places.

Public green space

The last few decades have seen rapid urbanization and population increase. Accessibility, or the degree to which facilities or open spaces are accessible, has grown in importance in the context of the urban environment and living quality (J. Zhang et al., 2021).

While the value of these settings for the residents has received less attention in the literature, the importance of public green space as a significant component of the housing environment appears to have received less emphasis (cf. Pincetl and Gearin 2005), all cited in (Coolen & Meesters, 2012a).

Studies show a positive correlation between access to parks, gardens, and green spaces (PGS) and physical activity. PGS can encourage people to engage in physical activity, but some of them may be hindered by a lack of resources or safety worries (Sugiyama et al., 2018).

Urban green zones are associated with city sustainability because of the wide range of ecological services they offer, including carbon capture, air pollution reduction, biodiversity maintenance, aquifer recharge, and climate regulation. However, the connection between urban nature and human well-being is frequently disregarded, especially in places where planners prioritize economic growth over social links (Ayala-Azcárraga et al., 2019a).

Public urban green spaces (PUGS), or those that provide the possibility to generate leisure activities, are significant elements in cities because of the ecological services they may provide. City dwellers mostly use these spaces for socializing, exercising, and relaxing in the crowded metropolitan environment. (Vidal et al., 2022).

Table 2.

Public Green Spaces Types

Public Green Space Type	Definition
Comprehensive Park	With an abundance of recreational elements, corresponding infrastructure, and a huge land area, it is ideal for all types of public outdoor activities.
Community Park	A densely packed green space with a limited portion dedicated to recreational features and facilities for neighbouring inhabitants.
Recreational Park	A little open park for the public to relax and wander in the fresh air.
Sports and Fitness Park	A unique park featuring sports and fitness facilities for a variety of competitions and training, as well as daily pleasure, fitness, and sports activities.
Waterfront Park	Close to a city's river or beach; uses vegetation, a bank slope, or a water surface as a unique park feature

Historical Garden	A garden of historical significance with a great visibility
Botanical Garden	A scientific research unit that studies, collects, identifies, introduces, domesticates, preserves, and promotes plants and their applications, as well as maintaining a public garden.
Heritage Park	A park that is dominated by significant historical sites and/or memorials.
Wetland Park	A park with mostly grassland wetlands.
Forest Park	A theme park in which the main attraction is a big area of artificial or natural forest.
Zoo	A location where wild creatures are displayed for public education or study.
Amusement Park	A big park with a variety of large public leisure facilities.

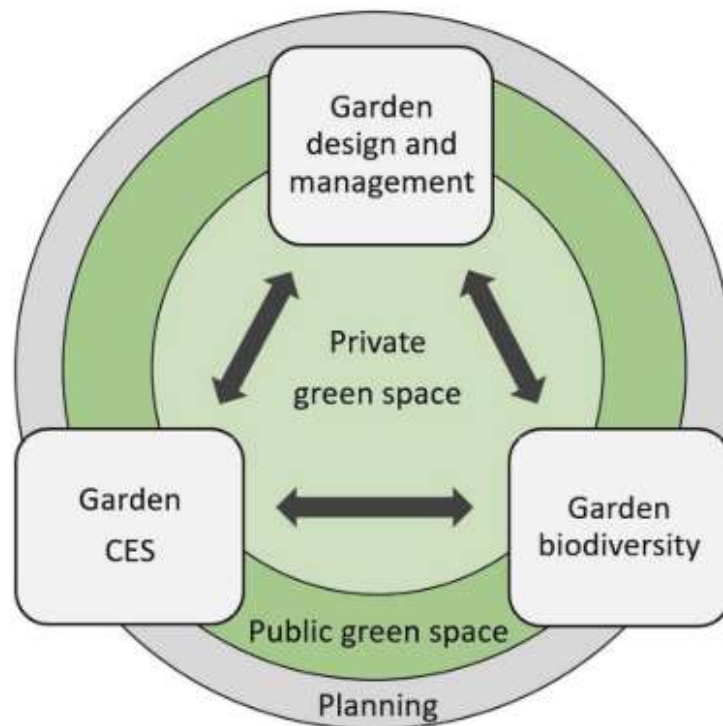
Source: (Cao et al., 2021)

Private green spaces

The private domestic garden as a context for the dwelling has received very little consideration in housing research (Sime 1993; Gross and Lane 2007). In fact, as Sime notes, the majority of this research has been concerned with occupancy as an interior environment enclosed by a house's walls. Additionally, it appears as though there is no garden when the house is contrasted with the residential area as the wider background behind the house, all cited in (Coolen & Meesters, 2012a).

Figure 13

*The Six Components Of The Garden's 'Human-Nature' Nexus Framework
(Hanson et al., 2021)*



In contrast to private green spaces like gardens, public green spaces like parks have received the majority of research attention thus far. Many research (e.g. Triguero- Mas et al., 2015; White et al., 2017) combined or omitted private or communal gardens with public green spaces within a specified radius (e.g. Mitchell & Popham, 2007; Van den Berg et al., 2010; Volker et al., 2018).

Domestic gardens, on the other hand, are common in the UK, accounting for around a third of all urban space (ONS, 2020), all cited in (Poortinga et al., 2021).

Private gardens can therefore function as multipurpose urban green spaces that benefit both garden owners personally and society at large. However, elements like garden size, design, and management have an impact on how much a garden benefits its owner and society as a whole (Home et al., 2019; Smith et al., 2005; van Heezik et al., 2013), all cited in (Hanson et al., 2021).

Private green spaces can be represented by owned gardens or by a tranquil area of green land on a private property. Dwellers typically furnish these green spaces with amenities like swimming pools, trees, seats, and other amenities

according to their needs. These private green spaces are frequently fenced in and guarded by the owners, and access is provided straight from the house or backyard (Biernacka & Kronenberg, 2018).

Figure 14

Emil Bach House Garden (Emil Bach House - Venue - Chicago, IL - WeddingWire, n.d.)



The private domestic garden as a context for the dwelling has received very little consideration in housing research. In fact, as Sime notes, this research has mainly concentrated on the home as an interior place surrounded by walls. The garden appears to be missing when the property is contrasted to the surrounding residential area in a bigger perspective (Coolen & Meesters, 2012b).

Semi-private / Semi-public green spaces

A semi-private place is a part of the urban environment that is typically private and that the general public will only access if they have a reason to. A front garden or yard, for example, or a communal garden space reserved for individual households are examples.

Semi-private On the other side, green spaces can be referred to as neighbourhood green spaces, which can support neighbourhood social cohesiveness or community members' sense of belonging and solidarity, both of which have been linked to better health. The appeal of neighbourhood common areas is increased by the presence of greenery, such as trees or plants. (Ruijsbroek et al., 2017).

Due to the fact that semi-private green spaces might be fragmented within a small scale of people and dwellings, the area is only accessible to a specific number of users within the area (Nordbø et al., 2019).

Figure 15

Ørestad Neighborhood, Copenhagen – Denmark (Ørestad_ Where Copenhagen's Urban Jungle Meets Its Savannah _ VisitCopenhagen, n.d.)



According to (Holborn, 2015), the Semi-Private / Private Green Spaces are categorized as:

1. Private patios
2. Public use easement
3. Arrival courts
4. Courtyards
5. Rooftop gardens

As another classification according to Goode & Collins, (2016), green spaces can be classified following their usage and their purpose of it as follow:

1. Green landscapes that have been cared for enjoyment
2. Tended green spaces for use
3. Un-tended green spaces
4. Water features
5. 'Natural' green spaces
6. 'Controlled' green spaces

Classification According To the Urban Scale

Towns and cities are rapidly growing both in size and population around the world; by 203, it is predicted that the urban area will have increased by a factor of four. Most urbanization takes place in biodiversity hotspots and has a significant impact on ecological patterns and processes, including habitat loss, degradation, and fragmentation; changes to biological assemblages that result in novel ecological communities; elevated pollution levels in soil, air, and water systems; and adjustments to natural disturbance regimes and ecosystem processes like water and nutrient cycling (Nilon et al., 2017).

Figure 16

Green Area Types Classified According To Hierarchy Scales (Pena-Salmon & Rojas-Caldelas, 2009)

Region	Heritage natural areas	Dams	Rivers, creeks, canyons, water bodies	Agricultural lands, Farms
City	Urban parks, Fair parks, Zoo	Channels, brooks	Green corridors, Cemeteries	Golf courses, Industrial zones, Tourist developments, Cemeteries
District	Sidewalks, Roundabout, Streets, Boulevards	Playgrounds, District park, Sport Centers	Industrial parks	Commercial centers, Corredores comerciales, Nurseries, Sport clubs
Building	Green areas surroundings governmental & educative buildings	Hotels open spaces	Green areas surroundings offices or educative centers	Residential gardens and backyards

Figure 17

Linear Green Space Types In The Spatial Planning Model At The Neighborhood And District Scales (Sanches et al., 2021)

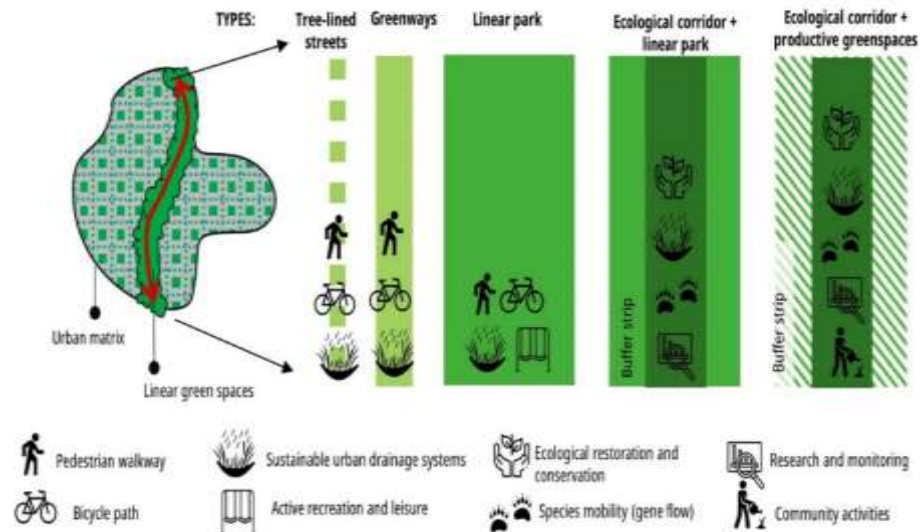
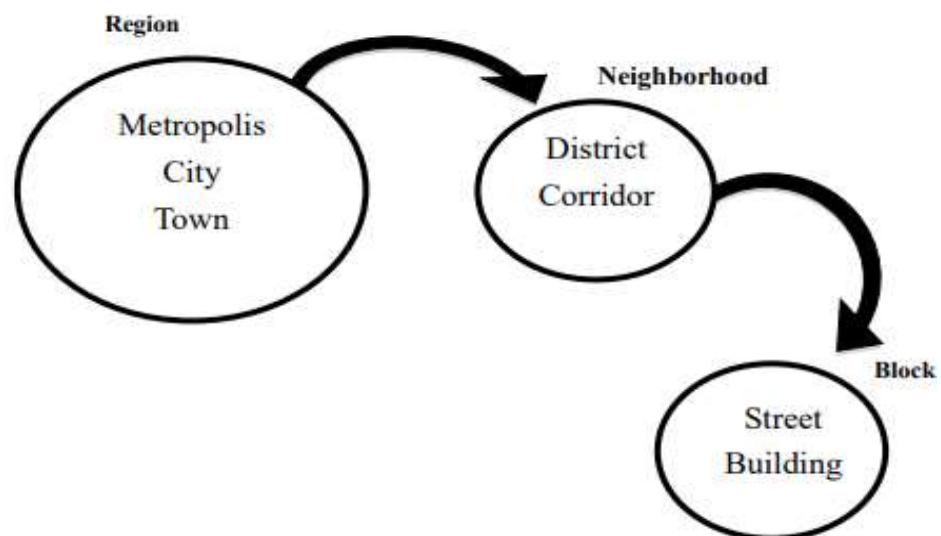


Figure 18

Urban Scale And Spaces (Furlan & AlMohannadi, 2016)



Urban parks are defined as designated open spaces that are typically dominated by vegetation and bodies of water and are accessible to the general public. Although they can occasionally take the shape of smaller "pocket parks," urban parks are frequently larger. Locally (by the government), urban parks are frequently categorized as "parks." (Konijnendijk et al., 2013).

Urban park styles can be created by combining the characteristics of urban park design in various ways. Four distinct types of urban parks that sprout from the urban park features include pocket parks, common greens, civic plazas, and recreation-focused urban parks. Urban park styles include everything from tiny "pocket parks" tucked away along a pedestrian-friendly thoroughfare to enormous civic open areas with several acres and a variety of facilities that host important local events (Sciences, 2016).

Some of the international urban Parks examples will be listed within the below figures to have an international case an international case for example is presenting the mega-scale of urban green space, the urban district, and the neighbourhood district green spaces.

Table 3.

Urban park examples

Urban Park Name	<i>Park Scale (According to Figure 16)</i>	<i>Pictures</i>
Central Park in New York City, USA	Public Urban Scale	
Flushing Meadows-Corona Park, USA	Public Urban scale	

Hofgarten, Munich, Germany	Public Urban scale	
Villette Park, France	Public Urban scale	
Piazza Della Concordia – Divisare – Italy	Neighbourhood Scale	
Drom Azatlyk Square. Naberezhnye Chelny, Russian Federation	Neighbourhood Scale	

Mexicali, Baja California, Mexico	Neighbourhood Scale	
Greencare Park, New York City	Neighbourhood Scale	
Greencare Park, New York City	Neighbourhood Scale	 <p>Project: Greencare Park Location: New York City, NY Designers: Sasaki Design Completion: 1975 Size: 6,000 square feet Cost: \$1.8 million</p>
Venice Recreational Park – Chile	Public district scale	

**Shenzhen Shenwan
Street Park, China**

Public district
scale



Pictures Sources: Central Park in New York - A Botanical Oasis in New York City - Go Guides, n.d.), (Uncover Secrets of the World's Fair with Free, Monthly Walking Tours of Flushing Meadows Corona Park _ 6sqft, n.d.). (ملف_ Hofgarten München Im Frühling, n.d.), ("Parc de La Villette," 2015), (Space for Art · A Collection Curated by Divisare, n.d.). (How To Bring Out The Best In Those You Lead, n.d.), (Venecia Recreational Park _ Jaime Alarcón Fuentes _ ArchDaily, n.d.).

Urban Parks Benefits and Role

A "benefit" is defined as something that enhances wellbeing (Merriam-Webster's, 2012). Consequently, in the case of urban park benefits, we are concerned with the park's services that enhance individual or societal well-being either directly or indirectly (Konijnendijk et al., 2013).

1. Human health and wellbeing
2. Social cohesion and identity
3. Tourism
4. Real estate pricing
5. Biodiversity
6. Air quality and carbon sequestration
7. Water management

Table 4.

Studies Including the Benefits of Green Spaces and Urban Parks

Author-Date	<i>Study – Benefits Of Urban Parks (Green Spaces)</i>
(Konijnendijk et al., 2013)	Overall, there is evidence for a variety of benefits provided by urban parks, i.e., we have solid scientific proof that parks contribute to human and social well-being. This can be done

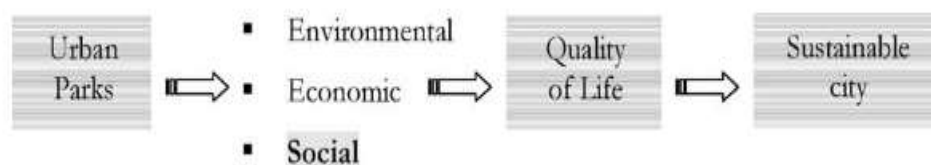
	<p>directly (for example, by increasing our physical activity) or indirectly (by increasing our mental activity) (by their high biodiversity enhancing opportunities for nature experience and recreation). Parks have been shown to have favourable effects on 1) biodiversity (as assessed by species richness), 2) property prices, 3) physical activity and obesity reduction, and 4) local cooling.</p>
<p>(Borkowsky et al., 2015)</p>	<p>Based on previous studies, it appears that there are six main categories of benefits: reduced flood and storm water damage; carbon dioxide sequestration; lower air-conditioning costs; improved citizens' health; improved citizens' psychophysical wellbeing; educational and social benefits; and increased cultural heritage of cities.</p>
<p>(Y. Zhang & Li, 2017)</p>	<p>According to a study, park users are more active than park non-users in every sort of physical activity except transportation waking. Residents' physical activity was highly associated with park accessibility and park utilization. Physical movement and engagement with nature in parks were also linked to a variety of mental health advantages.</p>
<p>(Basu & Nagendra, 2021)</p>	<p>Resource commons must be recast as urban parks. Managing urban green assets necessitates reimagining them as commons that benefit all members of society, particularly women and low-income citizens, who are frequently left out. Only then will the government's maintenance of urban green space be helpful to the entire population of a city, not just those who can afford it.</p>
<p>(Halkos et al., 2022)</p>	<p>The importance of environmental aspects for visitors is revealed by the results of the current research's application of Factor Analysis, both in terms of reasons and perceived features. Our theoretical contribution to the existing literature is based on the following assumptions. extraction of these variables, which can then be utilized in alternative</p>

	model specifications the factors that influence people's willingness to pay to visit urban parks
(Kinic & Polko, 2022)	One of the most important factors influencing the appeal of urban green spaces and the likelihood of their use for recreational purposes is safety. This is supported by the findings of this study's investigation. They reveal that the majority of the criteria covered in all four categories (mobility facilities, maintenance and cleanliness, visibility, and exterior protection) are critical for all user groups' safety.
(Lin et al., 2022)	Human-centered development lies at the heart of the city's long-term viability. Human demands are crucial indications that impact the direction of urban design in the natural-artificial composite urban ecology.

Large, biodiverse ecosystems that are yet mostly undeveloped or specific plant or animal species that are in danger of becoming extinct are the main targets of international conservation efforts. On the other hand, less scientific—and political—focus is placed on nature near where people live and work, small-scale green areas in cities, and the advantages they offer to city dwellers (Chiesura, 2004).

Figure 19

Urban Parks And The Long-Term Viability Of Cities (Sustainability)
(Chiesura, 2004)



Urban parks are frequently viewed as important assets, yet occasionally their sole measurable value is considered to be their capital and maintenance costs. The investment case is not always clear since parks, like the majority of publicly supplied services, are not directly profitable. Recreational activities in parks are

frequently challenging to characterize and accurately evaluate (Schwartz, 2016).

According to Schwartz, 2016, urban parks can play the roles in :

1. Urban planning
2. Culture
3. Recreation
4. Community Development
5. Heritage
6. Individual and Community Health and Wellness
7. Economic Development
8. Natural Environment
9. Education
10. Transportation

The numerous activities that people partake in while visiting natural areas are a reflection of the demands that people make on these settings and the expectations that they have for them. This information can help decision-makers create plans that are sensitive to the needs and expectations of the public (Chiesura, 2004).

Numerous strategies and concepts have been put out to increase urbanization's long-term viability, which has been acknowledged as a major contributor to environmental problems. Although there are conflicting and inconsistent literary definitions of sustainable urban development, it has grown to be seen as a desirable objective for urban planning. The phrase "sustainable development" is now frequently used to highlight the significance of simultaneously accomplishing goals for economic, social, and environmental growth (Lee & Kim, 2015).

Urban Parks Amenities/Facilities

Usually, from the nature and the amenities given within the park according to their types and purposes as well as the goal, urban parks are created from the combination of both natural and artificial amenities. Park facilities can be created or improved using green infrastructure. Greenery can be used to create pathways for bicycles or hikers, for instance (U.S EPA, 2017).

The elements of urban green spaces include vegetation, water, accessibility, services like restrooms, benches, playgrounds, and sports fields, events and activities, environmental quality conditions and resources like lighting, safety, litter bins, and helpful staff, artistic elements, and artifacts like sculptures, etc. (Vargas-Hernández et al., 2018). See Table5.

Table 5.

Natural and Artificial Elements in Urban Parks

<i>Natural Elements</i>	<i>Artificial Elements</i>
Vegetation	Drought Tolerant/Plant Use (Irrigation System)
Water elements	Seating Elements
Animals – Species	Security Gadgets
Natural Hardscape – Rocks – Soil - Geography	Fitness Equipment
General Climate	Pathways/Bike Paths /Service-Emergency Access Park Signage Public Access/Boundaries /Fencing Picnic Area Playgrounds Destination Amenities (The access using car parking, bicycle stations, etc., the arriving way) Park Theme (A unique design can be reasonable for the planned plot of the park such as the botanic parks for plants)

Source : (Ayala-Azcárraga et al., 2019b; Chiesura, 2004; Ciftcioglu & Aydin, 2018; Commission, 2018; Hansen, R., Rall, E., Chapman, E., Rolf, W., Pauleit, 2017; Lepczyk et al., 2017; Palliwoda et al., 2017; Vargas-Hernández et al., 2018; D. Wang et al., 2015).

Natural Elements

Urban park's natural elements consisted of water, soil, vegetation, land, and the ecological system, as well as the animals, as it depends on the availability within each park, according to the location.

In a normal park, open space areas absorb storm water and give benefits for the environment, water quality, and aesthetics. It is possible to develop or upgrade parking lots, streets, buildings, athletic fields, courts, and other man-made surfaces in order to manage storm water and direct it to more pervious surfaces. The following ideas for improving the park are provided (U.S EPA, 2017).

Ecological research has long advocated that urbanized environments could be viewed as biodiversity refuges, extending conservation concerns from pristine areas to include urban green spaces. Urban conservation is difficult despite the increased desire to preserve locations where people live and work (Muratet et al., 2015).

While the simple existence of urban green spaces is promoted as an all-encompassing solution, the importance of specialized vegetation form, composition, and management to increase the ecosystem functions of air purification and climate regulation is ignored. This prevents the development of efficient planning and management techniques for finely detailed urban green spaces with high spatial resolution. to assess the relative significance of vegetation type, composition, and management in delivering ecosystem services for air purification and climate control in urban green spaces, especially in urban parks (Vieira et al., 2018).

Figure 20

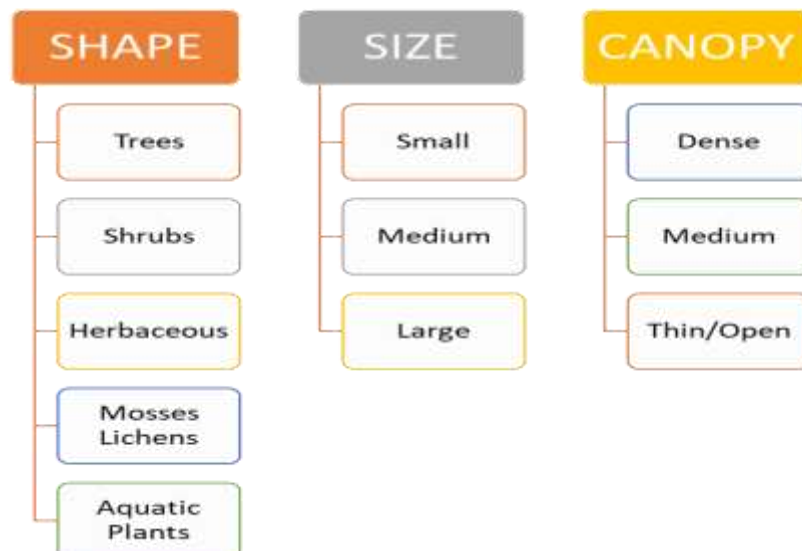
Natural Elements Within Urban Parks (U.S EPA, 2017)



Figure 21

Vegetation Physical Characteristics (Sulaiman et al., 2013)

VEGETATION PHYSICAL CHARACTERISTICS



In Table 6, a list of natural elements aimed at the urban parks has been explained within the context of the description of each element and how they can contribute to the urban green spaces.

Table 6.

Urban Park Natural Elements

Park Natural Elements	<i>Description</i>
Water elements	<p>"Water components" are an important part of the process of organizing and perceiving urban open spaces. Water is a particularly distinctive element due to its cooling and relaxing qualities, in addition to its metaphorical value in terms of life continuance. These appealing qualifications are effective on the water to become a landmark, which is defined as elements of a space that define characteristics that are distinct from their surroundings in terms of scale, location, architectural features, material, and design criteria and are easily recognized or discernible from multiple directions (Eren KÜRKÇÜOĞLU*, 2013).</p> <p>It is frequently stressed how important it is to develop top-notch sustainable urban areas. Natural components, such as water, have a significant position among the factors influencing a sustainable urban environment. Water is significant because it has a wide range of effects on both the city's physical landscape and aesthetic appeal (Nowacka-Rejzner, 2019)</p> <p>Examples: Rivers, Seafront, Waterfalls, Lakes, Streams</p>
Soil	<p>Interactions between human activities, soil, air, and plants are all part of an urban park system. Urban parks provide a diverse range of ecological niches that aid in the conservation and maintenance of biological diversity. They also serve as</p>

green havens within the city, promoting public health and recreational activities (Sarah et al., 2015).

Urban parks sustain a healthy urban environment and offer a variety of ecosystem services. The biogeochemical cycles and preservation of biodiversity in parks are directly influenced by soils. The interaction of zonal and anthropogenic elements, including the history of the park, the length of its existence, methods of soil transformation or technology of soil construction, and the composition of plantings, determines the features of park soils and the modes of their operation (Bakhmatova et al., 2022).

Examples: Red soil, White soil, Black soil, etc.

Vegetation

Landscape architects and landscape practitioners can be more aware of vegetation suitability and adaptability to a site by looking at the physical properties of vegetation. Vegetation protects the environment, including humans, against harsh microclimates, pollution, and erosion by natural means. It also contributes to the improvement and preservation of the environment for a higher quality of life (Sulaiman et al., 2013).

Popular outdoor recreation spots include urban parks (e.g., Grahn and Sorte, 1985; Bussey and Coles, 1995; Holm, 2000; Roovers et al., 2002). Vegetation density is one of the factors that has been found to affect how appealing natural landscapes are. Prior to examining the available research on vegetation density of urban parks and recreation, we will discuss key findings from environmental perception and preference studies, which provide indirect evidence on the effect of vegetation density on preferences for urban parks as recreation sites, all cited in (Bjerke et al., 2006).

Examples: Trees, Grass, Flowers, etc.

**Natural
Rocks and
surfaces**

The most beautiful gardens in history, as well as the most beautiful gardens in the world. Landscape design is generally influenced by natural landscapes, landforms, and phenomena such as beaches, riverscapes, caverns, mountains, rocks, or unusual vegetation. The site-specific reality of natural landscapes and how they are abstracted on the designer's workstation are inextricably linked (Basha et al., 2020). Popular outdoor recreation spots include urban parks (e.g., Grahn and Sorte, 1985; Bussey and Coles, 1995; Holm, 2000; Roovers et al., 2002). Vegetation density is one of the factors that has been found to affect how appealing natural landscapes are. Before examining the available research on vegetation density of urban parks and recreation, we will discuss key findings from environmental perception and preference studies, which provide indirect evidence on the effect of vegetation density on preferences for urban parks as recreation sites (Zhiqiao Li et al., 2022).
Examples: Volcanic rocks, Granite rocks, etc.

**Topography
- land**

Effective utilization of the cooling effect of green areas should be incorporated into urban plans that address the effects of land use and topography to improve the thermal environment of urban areas and the comfort levels of residents (Hamada et al., 2013).
Another factor affecting urban ecosystems, according to urban ecosystems, the topographic landscape, particularly its elements of elevation and slope of the terrain, determines the spatial interactions between green spaces and the urban built environment. In locations that are already highly urbanized but are projected to grow even more so, there is a pronounced

need for a better understanding of the connections between green space and urban form (Smiley et al., 2016).

Examples: Mountains, Hills, Valley, etc.

Species

Cities have relatively high levels of biodiversity despite, rather than because of, urbanization. This necessitates a view of cities as sites with significant biodiversity conservation and promotion potential. But there are other locations where biodiversity is threatened the most (Nielsen et al., 2014).

As hubs for biodiversity in cities, urban parks are crucial.

Parks support both biodiversity preservation and human connections to nature in urban settings (Savard et al., 2000; Alvey, 2006; Nielsen et al., 2014; Threlfall et al., 2016).

These relationships could be essential for garnering public support for laws and other measures aimed at biodiversity conservation. Urban parks can provide opportunity for frequent nature interactions, with over 55% of the world's population currently residing in cities¹ (Church, 2018).

Additionally, urban parks can house uncommon species and support the preservation of significant numbers of fragile species, cited in (Talal & Santelmann, 2019).

Examples: Animals, Insects, etc.

Others

Urban green spaces are natural or semi-natural ecosystems that have been transformed into urban places due to human impact. People will find a sense of continuity and relaxation from the pressures of living in an urban environment in urban green areas, which are sustainable and diversified (Vargas-Hernández et al., 2018)

The advantages of human-nature interactions have been repeatedly demonstrated through an empirical study on restorative environments in a variety of fields. The benefits of wilderness for psychological well-being have been studied for some time (e.g., Kaplan & Talbot, 1983). People can get away from their daily routines in wild settings, reflect on their goals from a different angle, and find tranquillity and relaxation, cited in (Scopelliti et al., 2012).

Examples: Volcanos, Hot streams, Special natural elements, etc.

Natural elements source: Kimic & Polko, 2021

Natural amenities could be beneficial to human health as well as to the well-being of mental health, as they can provide lots of benefits that have been mentioned by recent scholars, as well as the overall place quality. Within this framework park natural amenities list of this study will include the following headlines:

- Vegetation: the natural cover of the urban parks, including the trees, and the planted areas, within various types of plants involved within the park, as vegetation cover and the landscape caring of the plated items can give a potential reflection to the urban park quality, as they can provide a health green place for human beings.
- Soil and/or natural rocks and surface including topography: Natural amenities can involve the basics of the plants which need soil foundation to form and grow, as well the natural land geography can play a beautiful aspect in forming the place terrain in a natural form, such as hells, mountains, and more will be tested within the case studies.
- Natural water feature: water features can reflect the natural presence, as they can play a natural conditioner within the urban green areas, and installing the water amenities in urban parks can give a natural aspect to the place, as it can impact the presence of the species within the urban green areas.

Artificial Elements

Urban open spaces, such as parks and green areas, are crucial amenities that support the health, environment, and economic benefits of cities. They are also becoming more and more crucial to the long-term viability of cities. At this time, suitable park planning, design, and upkeep plans ought to be finished (Mohandespor & Yücel Caymaz, 2019).

Consider seats, foot traffic, and bicycle paths when designing a location that will complement people's daily routines. Parks should be attractive; trees, flowers, water features, and other amenities can give an exquisite escape from the hustle and bustle of daily life. The design of the park must have a unique theme, within the environment to speak within the surroundings and give a unique image within the designs such as colors, materials, and the place itself.

Figure 22

Eleftheria Square, Nicosia, Cyprus (The Heart of Nicosia_ Eleftheria Square_ Trem Global, 2021)



Artificial amenities can represent the physical components of the urban green spaces such as urban parks that can serve the population within the urbanized areas as they can play an important role in engaging people within the place as they use these amenities to have a level of satisfaction.

Urban park amenities relate to the natural and artificial elements, as natural elements can play an important role in the biodiversity of the green area, and the boosting the health of the place, while artificial elements can provide several services such as sports activities, seating areas, resting areas, hygiene practices, as well as art expressions within the environment as a physical unit that can be

installed in according to the urban green areas needs that can serve the population and active the release of the place.

Urban parks, as an important place to meet the needs of residents' leisure life, have gradually become one of the important contents of urban construction, as well as one of the main contents of building urban landscape and urban ecosystem, as a result of the improvement of people's living standards (Guo et al., 2019).

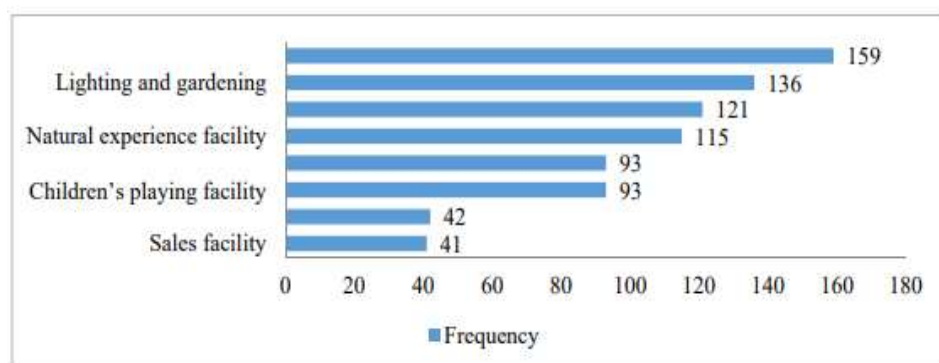
Urban parks are one of the most essential public amenities in cities, and their use efficiency has long been a key metric in urban planning. As a result, it's critical to accurately assess their service area and impacting factors (Guo et al., 2019). Urban park amenities could be categorized under the urban furniture amenities as well, as a means of installing the proper physical components of the park to suit and serve the place.

According to Lee & Kim, (2015), a study has been conducted using a survey which obtain the main results of the study about the most important park amenities preferences according to people's answers shown in figure 23.

Urban furniture items are among the basic artificial features of the parks. The public's expectations and wants are reflected in the selection of outdoor furniture and urban equipment for green spaces. Indeed, we must take into account the reasons for the space designs, as well as the equipment that the user requires.

Figure 23

The Most Important Park Amenity (Lee & Kim, 2015)



Urban furniture, such as benches, lights, garbage pens, tiles, and hardscape materials like paving, hardscape functions like shops, cafes, restaurants, toilets, open markets, playgrounds, sports areas, children's areas with play amenities, and

semi-open or semi-closed areas like gazebos and pergolas, all of these elements can be related as a physical service element that could be equipped and furnished the urban park to have artificial components of the place.

Seating, tables, public art, trails, visual components, display space, signage, water features, focal points, playgrounds, gazebos, lighting, bike racks, and transit-oriented amenities are all common characteristics in urban parks (Sciences, 2016).

According to Ayala-Azcárraga et al., (2019a), urban park artificial amenities may include:

1. Spatial amenities
 - Size
 - Distance
 - Accessibility
2. Infrastructure/Services amenities
 - Walking trails
 - Illumination
 - Graffiti
 - Exercise equipment
 - Playground equipment
 - Cleanliness
 - Seats
 - Safety

According to Kara et al., (2011), urban parks can serve a set of activities using the artificial amenities such as (see figure 24).

Figure 24

Urban Park Activities Using Artificial Amenities Sets

Types of Activities	
Bench	
Playground	
Restroom	Fountain
Cafe	Gameboard
Buffet	Artificial water fall
Tennis court	Plant container
Basketball court	Barbecue
Pond	Roller skate court
Walking trails	Mini golf court
Fitness equipment	Park for Handicapped
Picnic area	Sale office
Rock garden	Security
Bicycle trails	Telephone
Amfiteatr	Scullery

Artificial amenities can provide lots of human activities in the outside mediums of the urban patches, within the green areas, such as these facilities can have a recreational purpose, and each of the amenities has a set of unique purposes. In sum, the artificial amenities will be listed below.

Resting area

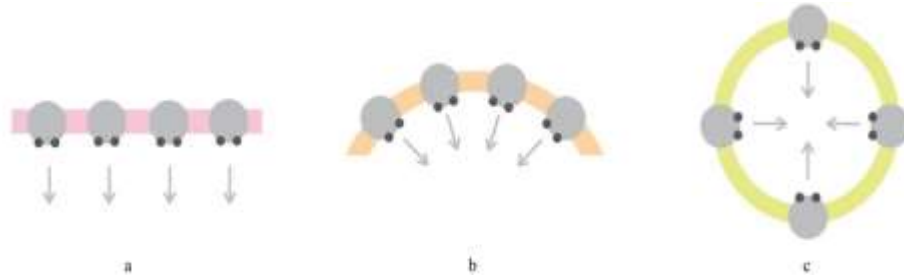
Highstreets, parks, and other public spaces all play a significant role in uniting the neighborhood; it is in these locations that people catch up with friends, grab lunch, spend time with their families, or just relax. These locations are also great for learning because you can observe the variety of cultures and identities that make up your neighborhood. For this reason, these public spaces ought to be welcoming and offer seating for individuals of all ages. Visitors can take a break with seating, whether it is for lunch, a respite, a place to wait and mingle, or just to unwind and take in the surroundings (Furniture, 2012).

Public open spaces provide a wide range of services and substantial advantages that cater to human needs. These activities can be categorized as enhancing social life, enhancing the city's reputation, enhancing the urban environment and physical environment, and assisting financially. In this study, we

will concentrate on the enhancement of social life, as well as its connection to stationary activities and seating area design.(Mumcu & Yilmaz, 2016).

Figure 25

There Are Three Typical Seating Patterns (Luximon et al., 2015)



Since picnics are usually held outdoors, a portion of the research examines picnic location characteristics. Examples of natural settings include a river, beach, lakeshore, forest edge, mountain range, and open space. In metropolitan settings, people frequently picnic in parks, historical sites, and open areas around churches (Fuad & Yatmo, 2017).

For instance, guests looking for a picnic location will enjoy Turkey's urban woods. The typical number of picnic areas in cities is 21. The average number of people using each picnic area is 45.616 (Atmiş et al., 2012). Mogan Park has been noted as the most well-liked location for picnicking out of all the green spaces in the province of Ankara (Muderrisoglu et al., 2010). The most common leisure activity in Turkey's urban open green spaces is picnicking. Additionally, the Turkish picnic has gained cultural significance (Polat & Received:, 2017).

Figure 26

Missouri State Parks- USA (Donnybrook Park, Peppercorn Hill, Donnybrook — Mamma Knows orth, n.d.)



Sports area/Outdoor fitness area

To promote more community-level physical activity, parks are increasingly being equipped with outdoor exercise or gym/fitness equipment. Outdoor exercise equipment has become more widely used in several Asian nations, including Taiwan, China, and South Korea, as well as many European nations, including Spain and Portugal, as well as the United States, according to Chow (2013).

Figure 27

A Diagram Of The Exercise Station In An Urban Park (Levinger et al., 2018)



In Australia, the number and type of this infrastructure – mostly in the form of strength and/or cardio equipment – being placed in parks has increased dramatically, notably by local governments (see, for example, City of Brisbane 2016; City of Vincent 2016; Randwick City Council 2016). All cited in (Sibson et al., 2018).

Parks' relevance as venues for physical activities has grown among people interested in encouraging aging health because their sites, which are frequently in adjacent neighborhoods, are either free or low-cost to visitors and are accessible. Parks, which are used by a large number of people in the neighborhood, are particularly appealing to older people with restricted mobility (Chow, 2013).

Figure 28

Playfield, And Play Activities Area in Nikkilän Sydän, Finland



Source: Educational Centre with Sport Park Facilities for People of All Ages, n.d.

Path

For diverse communities to enjoy parks and have recreational opportunities, park design, planning, and management are essential (Smiley et al., 2016; Wolch et al., 2014), particularly now that the COVID-19 pandemic is widespread. Urban green spaces may be among the most easily accessible outdoor spaces that support physical and mental health (Smiley et al., 2016; Wolch et al., 2014). (Shoari et al., 2020; Geng et al., 2021).

Previous research has looked into urban park visitation and access, but there is still a lack of understanding of how visitor experiences and preferences differ among different types of urban parks (Lee and Kim, 2015; Vierikko et al., 2020; Weems, 2016), all cited in (Talal & Santelmann, 2021).

Figure 29

A Concept Plan Of How The Cycle Route And Pathways At Winchester Sports And Leisure Park Might Be Set Out (Chronicle, 2018)



Parks can be reached by automobile, bicycle, or even by foot, but each of these means of transportation has a specific infrastructure that it uses to get there. In the case of urban parks, the accessibility of parking spaces, bicycle lanes, and walking paths is a crucial installation that necessitates a special distribution for various people's means of transportation to arrive, and urban parks must necessitate such crucial amenities (Abarca-Alvarez et al., 2018).

Playground

Public playgrounds and parks offer a fun and safe environment where people of all ages can enjoy recreational activities for little or no cost. The accessibility and usability of parks and playgrounds must be assessed since their layout, surroundings (both natural and artificial), and safety may prevent individuals with disabilities from using them (Ayala-Azcárraga et al., 2019b).

A physically and socially fit society requires active participation in sports and leisure pursuits. The majority of activities are concentrated in well-designed parks and playgrounds as a result of the current situation. For the park and playgrounds to be used by the public, accessibility is essential. Accessibility is one of the most important factors to consider while building any facility (Mohd Aznan et al., 2020).

Figure 30

Donnybrook Park, Peppercorn Hill, Donnybrook – Australia (Picnic Areas _ Missouri State Parks, n.d.)



Activity area (amphitheater etc.)

Urban parks are acknowledged as crucial locations for seniors living in cities to engage in physical activity (PA), (Duan et al., 2018).

As physical inactivity among urban populations has become a global epidemic over the past few decades, urban parks are becoming even more important for communities to engage in active and health-improving recreation. In particular, the global goal of "Health-Enhancing Physical Activity" (HEPA) aims to reduce non-communicable diseases in urban populations and enhance physical and mental health (Kohl, Craig, Lambert, Inoue, & Alkandari, 2012; Lee et al., 2012).

Figure 31

Erie Community Park, USA, Gathering of People Watching On Big Screen



Figure 31 Source: Erie Community Park _ Gathering Place-Colorado Landscape Architecture Firm _ Design Concepts, n.d.

Artificial water feature

Urban parks are advantageous to the urban ecology. The local community can travel to these destinations, which provide recreational activities. One of the most important parts of urban parks is water. Water can be incorporated into a design in a variety of ways. It is used in landscaping as an ornamental element or for functional functions like air cooling, sound absorption, irrigation, or recreational activities (Yilmaz & Savkli, 2014).

Grass can increase the cooling effect of waterbodies to a level that is equivalent to that of a small area of water with adequate irrigation on hot, windless summer days. The cooling effect of vegetation and water bodies can generally be influenced by factors including the kind of land cover, size, shape, and even irrigation, and the positive effect of urban parks on local climate is more obvious in the afternoon than in the morning. We urge designers and managers to pay attention to the vegetation under trees, water grass frequently, and enhance water size and air flow speed to take advantage of the cooling effect of urban parks (Amani-Beni et al., 2018).

Figure 32

Water Fountain In An Urban Park, Splash Parks Of Philadelphia, USA.



Figure 32 Source: How Safe Is the Water at Philadelphia's Splash Parks_ Action News Investigates - 6abc Philadelphia, n.d.

Semi open - (semi) closed built item

The importance of valuing recreational ecological benefits in terms of money is commonly acknowledged in various situations. Studies frequently provide the total cost of recreational activities, but they hardly ever provide a breakdown of how the value of leisure in urban environments is influenced by environmental, cultural, and commercial services (Mäntymaa et al., 2021).

The "physical environment" is a catch-all term for the built environment, the natural landscape, and human use of public spaces (Handy, 2004). More people are beginning to recognize that an individual's environment has the power to either encourage or hinder PA. In order to give additional service within the urban parks, this setting might include semi-open locations like food stores, cafés, restaurants, or other service providers that can be open for a limited or 24/7 period of time.

The following factors are widely acknowledged as PA facilitators for young people: perceived and actual access to green space; perceived and actual environment safety; independent mobility; availability of stores and services; and neighborhood walkability (Carter and Dubois, 2010; McCormack et al, 2010), cited in (Gallo et al., 2015).

Figure 33

Nakorn Ratchasima, Thailand, Cafe Amazon Beverage Shop In An Urban Park (Cafe Amazon Coffee Shop in Thailand, n.d.)



Urban furniture (signage, street lights, public art, trash bins, etc.)

As one of the most important aspects of the city's construction, urban furniture is necessary (Rezvanisanijouybari, 2021).

A polycode text, or visual media message made up of verbal, architectural, compositional, graphic (including the typeface), graphic, color, and pictorial codes, is what makes up an urban sign. One of the most urgent issues in contemporary urban planning is the design of urban signs as a component of the design of the urban environment. A multidisciplinary approach is required. In addition to having a basic understanding of architecture and graphic design, it is also necessary to have legal knowledge (for the legal regulation of design works, to distinguish between a sign and an advertising structure), as well as linguistic knowledge (for the development of the verbal component of the sign and the poll code text), (Sokolova, 2018).

The elements of urban furniture and their design standards for urban squares, according to Bolkaner et al., (2019), can be including street restrains (street defenders, metallic fences), seating elements, trash cans, signs, urban art such as sculptures and drawings, shading elements that protect from weather conditions, and light elements within the street.

Figure 34

Urban Sculpture, Beijing, China



Source: Space for Art: A Collection Curated by Divisare, n.d.

Urban parks and open spaces are critical components of the city's green infrastructure network, facilitating the city's recreational, social, and environmental purposes. Effective signage may boost customer traffic and improve the user experience.

When benches, trash cans, and phones are situated far apart, they may have the effect of separating people, however when they are placed near together with

additional amenities like a coffee cart, they tend to naturally bring people together (Achparaki et al., 2012)

The positioning and arrangement of street furniture; for instance, if benches, trash cans, and phones are placed far apart, they might have the effect of separating people, whereas if they are placed close together with other amenities like a coffee cart, they usually have the effect of bringing people together (Achparaki et al., 2012)

Figure 35

Trash Bins in New York City, USA



Source: Custom-Made Designer Trash Bins Pop Up in NYC Parks, n.d.

For place identification, place-making, and wayfinding, signage can be an effective communication tool. By highlighting user facilities/activities within the setting, offering wayfinding to elements or places, and supporting users in navigating around the areas, signage in parks and open spaces can encourage the use and active lifestyles.

Signage can help people make their way from one place to another, and it should take into account that individuals may be traveling through a location as part of a longer journey (Transport Canberra and City Services, 2019)

Figure 36

Standard Rules Signed By The New York City Department Of Parks And Recreation (Campbell et al., 2021)



The term "street furniture" was used to describe public facilities in the United Kingdom during the period. Outdoor public seats on campuses, squares, and streets are given a lot of attention in European and American countries, and diverse outdoor public seats are merged with the surrounding environment (Liu, 2022).

Figure 37

Seating Elements Align With The Landscape, The Russian Federation (Space for Art · A Collection Curated by Divisare, n.d.)



For such stationary activities, a seated area with furniture or a platform is usually required for resting, conversing, eating, reading, and playing games. However, seated furniture design does not always satisfy the needs of users for these activities and interactions (Luximon et al., 2015).

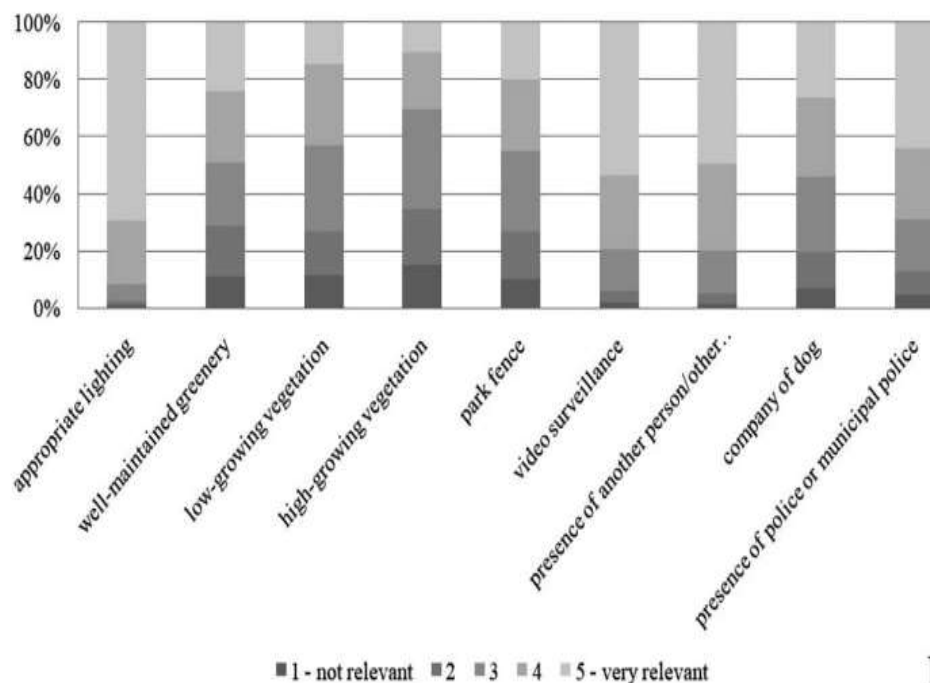
Infrastructural features

Infrastructure facilities include things like access points, irrigation systems, and restrooms. Regardless matter what they are doing, individuals should be able to spend their time safely in parks. Ample upkeep is required to enable pleasant use. Proper lighting can assist extend park hours, promote social interaction, and enhance natural surveillance (Bogacka, 2020).

A feeling of perceived security is brought on by the perception of impending threats to one's safety or security. People's judgments and actions are influenced by how secure they feel, which can cause them to avoid specific regions or services (Mahrous et al., 2018). The perception of safety is a key component that influences park visitors' approach and avoidance actions. Users' psychological and physical health benefit from visits to urban parks. When safety concerns are ignored, many potential visitors may be discouraged from visiting these public open places (Türkseven Doğrusoy & Zengel, 2017).

Figure 38

The Park's Safety And Physical And Social Environmental Aspects (Bogacka, 2020)



Surveillance technology is something that urban furniture can help with. Some lampposts have been specifically designed to support CCTV cameras (cf. the Victorian-styled security products by manufacturer English Lamp Posts),.

there are two types of public CCTV cameras: overt and semi-covert (Wirdelöv, 2020).

According to the research, people with impairments have a strong desire to discover the outdoors and engage in social activities. The fact that Danes use green spaces frequently supports the idea that easy access to parks is crucial, and it is recommended that those with mobility challenges visit green spaces at least once per week.

The ability to sit in or out of the sun at various times of the day or year draws people to locations with a variety of seating alternatives. The most crucial variables influencing their leisure activities are accessibility and availability because they choose forms of recreation that don't demand significant financial inputs, therefore visiting an urban park is something they are interested in (Wojnowska-Heciak et al., 2022).

Parking area

By controlling temperature, urban gardens and parks enhance not only the quality of life of city dwellers but also the environmental sustainability of urban areas. An earlier study found that this city had very little green spaces per resident compared to other cities.

Green space availability per person must be raised locally in order to enhance the utilization and accessibility of urban parks (Addas, 2022).

This comprises established facilities, lighting features, parking areas, and other means of access to the park within the appropriate installed amenities to have good access to the location, including signs and directions, since most urban parks contain these features to make the entry simple and safe (S. Wang et al., 2021).

Figure 39

Urban Park With Accessible Pathways And Car Parks, USA (Ramont, 2022)



Figure 40

Community Park, USA (Holmes, 2019)



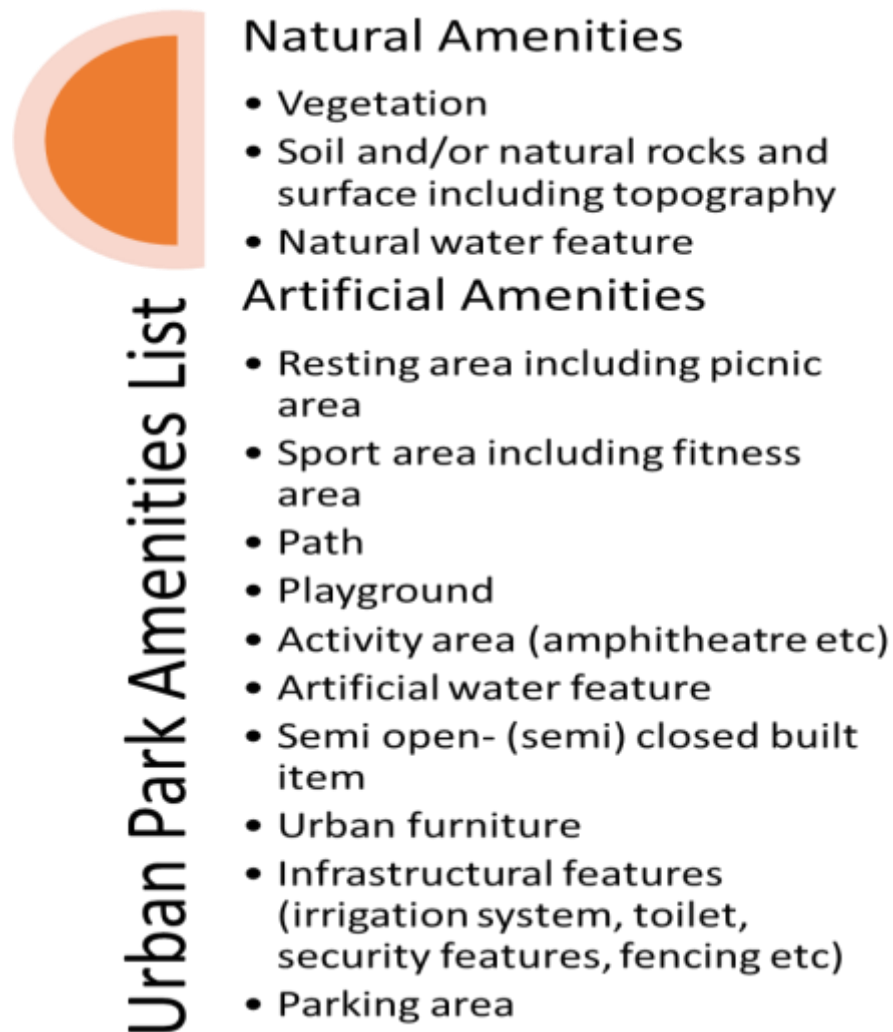
In sum, artificial amenities that are assessed within the research will include the following elements:

- Resting areas/picnic areas: resting areas can have a recreational purpose in the green spaces within the urban parks as they provide quality time within nature and the opportunity to rest and share with others within the same place.
- Sports areas including fitness areas: producing sports areas in the urban parks can enhance public health and physical promotion to the population, as they can relieve stress and provide free urban amenities.
- Paths: pathways are important in every urban park since they can provide the access to the park, such as walking or using a certain vehicle, as well as using bicycles.
- Playgrounds: this can be reflected in the kid's areas, as they can have some quality time with their parents, and enjoy the green places within the open special equipment.
- Activity area (amphitheater etc.): it can enhance the culture of the place, and the gathering can always have a purpose of education or sharing art moments, speeches, and more within the activity areas that can be found in urban areas.
- Artificial water feature: can provide another alternative to the natural water elements that can play filtration functions to the climate and beautify the place.

- Semi-open- (semi) closed built items: cafes, shops, and more commercial units can be found within the urban parks to enjoy and have some services such as coffee or buying goods, or even restaurants can be found within the urban parks.
- Urban furniture: this includes, trash bins, street lights, benches, booths, bus stops, bicycle stations, urban stairs, and more, urban furniture provides a free service that can benefit the urban parks in various ways, as each urban furniture item can provide its function, such as trash collection or segregation for trash bins.
- Infrastructural features (irrigation system, toilet, security features, fencing, etc.): sanitization such as toilets can provide hygienic features to the public, and other elements providing safety to the place can be installed within the urban parks, as they can provide a safe comfortable place to spend time in, such as fences and digital cameras, as well a monitoring system, and security guards.
- Parking area: parking can provide key access to the place, as parking areas play a role in welcoming the population who can't access by walking as they need to drive and owns vehicles.

Figure 41

Generated Urban Park Amenities That Will Be Used Within the Case Study of the Research



Both amenities types can complete each other within a definite landscaped architectural design in according to have a park theme unity, regarding the purpose of the park in an aesthetic view, and the function is related to the installed physical furniture, as urban furniture can also relate to the urban green areas such as urban parks.

CHAPTER III

Study Methodology

Research Context

Cyprus

Cyprus is the Mediterranean Sea's third-largest island. The country is divided into two parts: Cyprus in the south and the Turkish Republic of North Cyprus in the north. North Cyprus has a land mass cover of 3355 km² (36%) of the entire island area (Ziyas 2012), all cited in (Musa et al., 2019).

Nicosia has a long and illustrious history (evikel 2000). In 2011, the city's total population was 94,824 people, with 49,838 men (52.6%) and 44,986 women (47.3%) (KKTC Devlet Planlama rgütü 2013). The service industry employs the majority of the population (KKTC Devlet Planlama rgütü 2015), all cited in (Ciftcioglu & Aydin, 2018).

Figure 42

Nicosia, Which Is Divided In Two By A UN Buffer Zone, Is The Seat Of Both The Greek And Turkish Cypriot Governments. "The World's Last Divided Capital," As The City Is Known, Is A Common Description. (Divided Cyprus_ Greek and Turkish Tensions on the Rise – GIS Reports, n.d.)



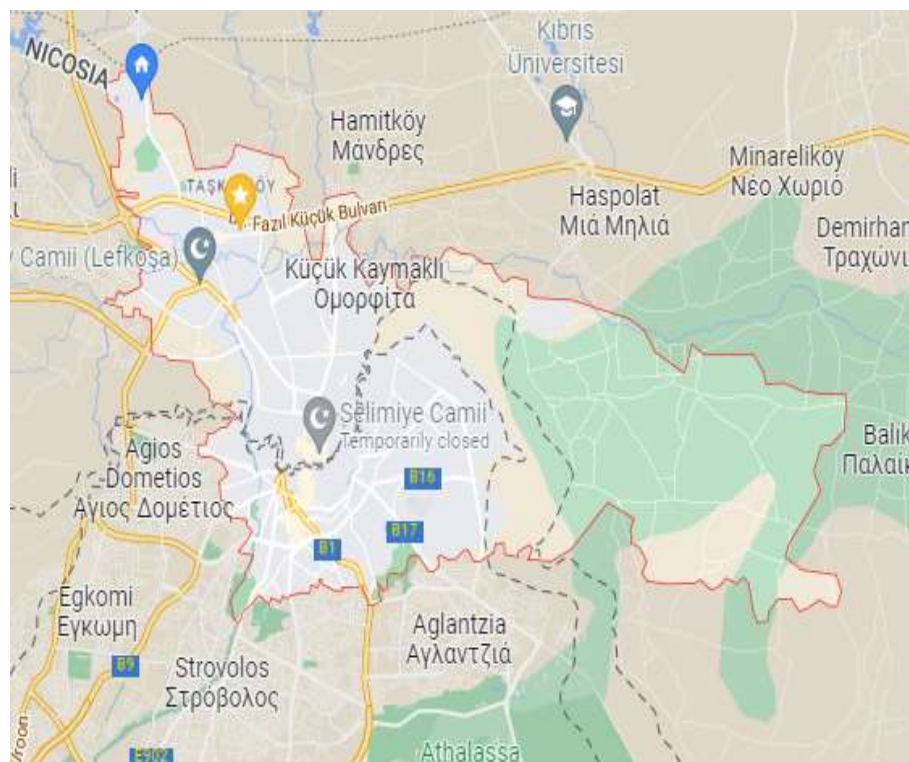
Cyprus, which was formerly a single, sovereign state, is now divided into two halves based on the ethnicity of its residents. The first outbreak of conflict-related violence between Greek and Turkish Cypriots occurred in 1958. When

intercommunal fighting erupted again in late 1963, the displaced were mostly Turkish (Luis & Moncayo, 2019).

Both South and North Cyprus have Nicosia as their capital. Nicosia has hot summers and wet winters, therefore the gap between daytime maximum temperature and night-time lowest temperature is greater than in coastal cities (Elkiran et al., 2021).

Figure 43

Nicosia City, North and South, Boundaries In Dashed Lines. (Google Maps, 2017)



North Nicosia

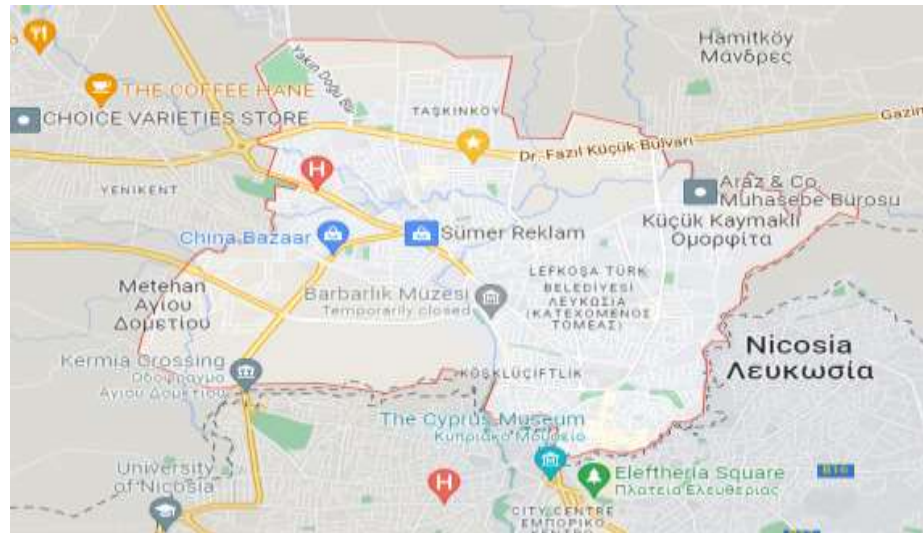
Nicosia, Famagusta, Kyrenia, Morphou, Trikomo, and Lefkada are the six districts that make up North Cyprus, which accounts for around a third of the island (Angın & Albrka Ali, 2021).

The capital of North Cyprus is LEFKOA (the northern part of what was, before 1974, Nicosia). The old town, like its southern counterpart, is surrounded by Venetian walls, with the majority of Lefkoşa's contemporary structures and administrative apparatus outside the walls and the majority of tourist attractions within the walls. Lefkoşa, in comparison to the city's southern reaches, has a palpable lack of activity, resembling more a quiet provincial town than a national

capital. While the city appears to be safe, nighttime walking in locations outside of the city center is best avoided (*Lefkoşa (North Nicosia) _ Cyprus Travel Guide _ Rough Guides, n.d.*).

Figure 44

North Nicosia City. (Google Maps, 2017)



The Turkish name for the Cypriot capital city, Lefkoşa (called Nicosia by the British - possibly a corruption of the Greek name 'Lefkosia'), has the strange distinction of being the world's last split capital city (International, 2014). It is managed by the Nicosia Turkish Municipality and is located in the northern section of the split city of Nicosia. North Nicosia had a population of 61,378 people in 2011 and an 82,539-person metropolitan area.

Selected Urban Parks

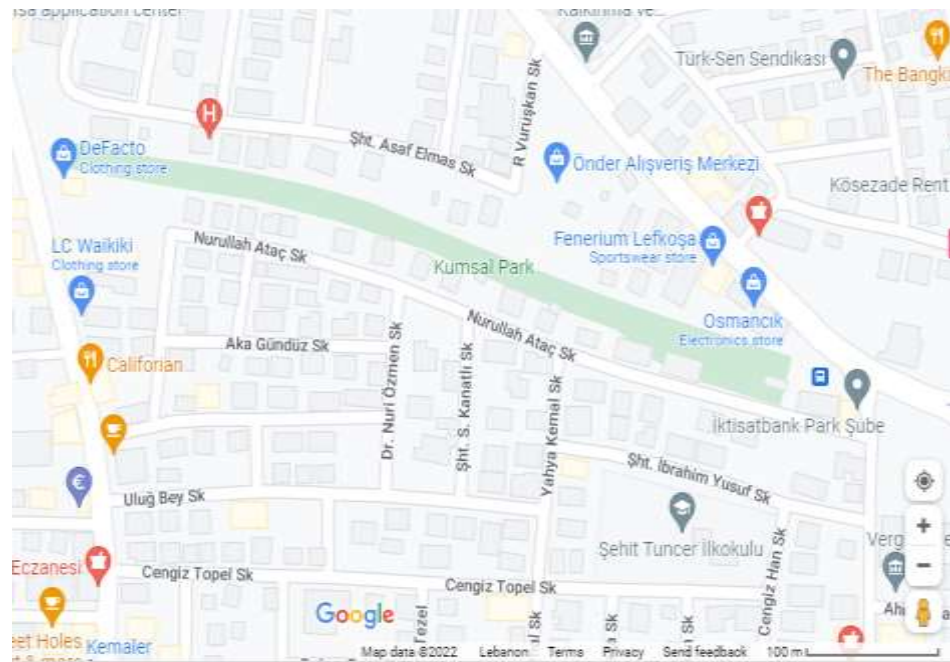
A set of three urban parks has been selected for the study to investigate the existed amenities and collect points for each to have a clear assessment of the study cases, the parks are as follows:

Kumsal Park: The park is located in the northwest of the old town of Nicosia, within a street address of Mehmet Ertuğruloğlu Sk, Lefkoşa 99010. This park has been supported and opened by Vodafone (Turkish – north Cypriot) section, which includes playgrounds for kids, plants, benches, and three entrances and exits.

From beginning to end, it stretches over 400 meters. It has four entrances and is surrounded by a fence. It's a vibrant park with slides, swings, seesaws, and even fitness equipment strategically placed throughout. The park has a not-so-nice lawn and a lovely pathway that runs through it. It's a nice spot to take the kids and pets. Rental bikes are available near the entrance, and the location is particularly convenient.

Figure 45

Kumsal Park Location, Northern Nicosia



Çağlayan Park: The Ankara Çağlayan Park, which was inaugurated at the end of March 2008, is the newest of Nicosia's park sections. It is located in the moat area, beneath the Cevizli (Loredano) Bastion's city walls, and will eventually be twice its current size.

In an otherwise hectic city, the park provides a haven of peace. The first thing you see when you go in is a giant cage full of peacocks. (It remains to be seen whether they will remain in this cage or be permitted to roam freely.) Because the park arcs around the bastion, it is impossible to see the entire length from any one location. Indeed, you can walk around the park on several winding paths.

There are various play spaces where children can be securely left to their own devices, and they are properly supplied. There are numerous seating spaces where they may rest while keeping an eye on their youngsters.

Figure 46

Ankara Çağlayan Park Location, northern Nicosia

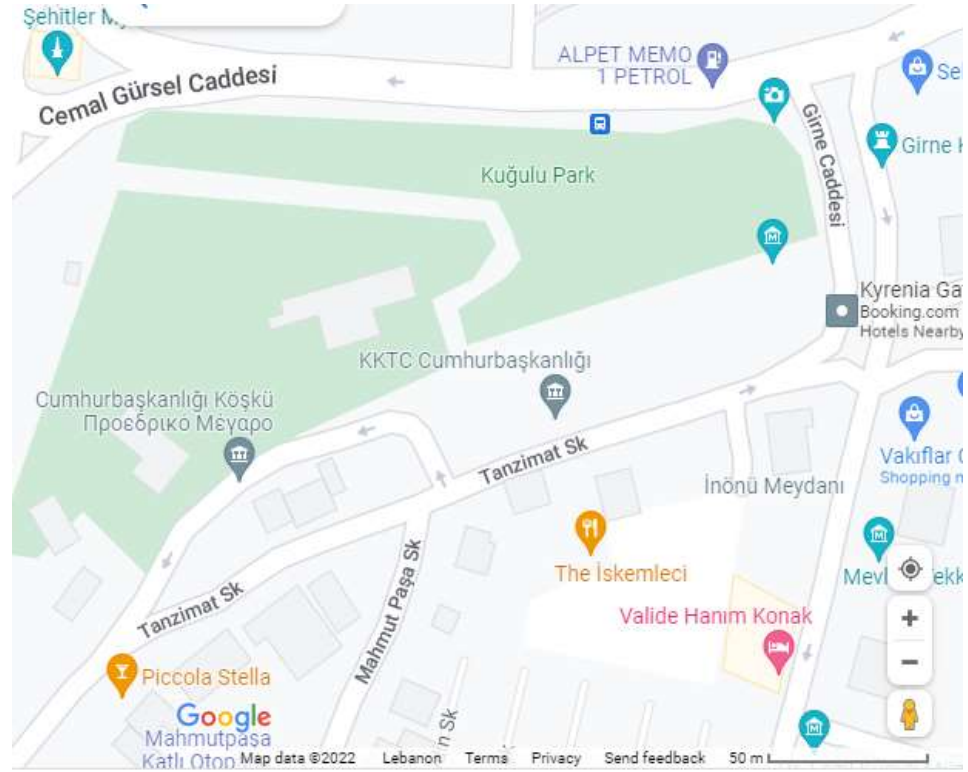


The park, on the other hand, is not brand new. It's been there for a while and is simply known as "Çağlayan Park." The area, which was once semi-derelict and an unpleasant place to visit, has been renovated thanks to 1.7 million Turkish Lira in funding from the Ankara Municipality. The Nicosia authorities renamed the park "Ankara Çağlayan Park" as a gesture of gratitude to Ankara, despite fierce objections (*Ankara Çağlayan Park, Nicosia, North Cyprus, n.d.*).

Kuğulu Park: This park is located within the moat area on the west side of the Kyrenia Gate. It has typically been used as a green recreational space for the past 40 years.

Originally, the park included a pool with swans swimming in it. The Kuğulu (swan) park was named after this. It was a popular hangout spot for Nicosians looking to unwind and socialize.

Figure 47

Kuğulu Park Location, northern Nicosia

In 1993, the park was rebuilt, and it has since been updated twice more. It contains locations for holding meetings, concerts, and other social gatherings, as well as children's playgrounds (*Kuğulu Park, Nicosia, North Cyprus, n.d.*).

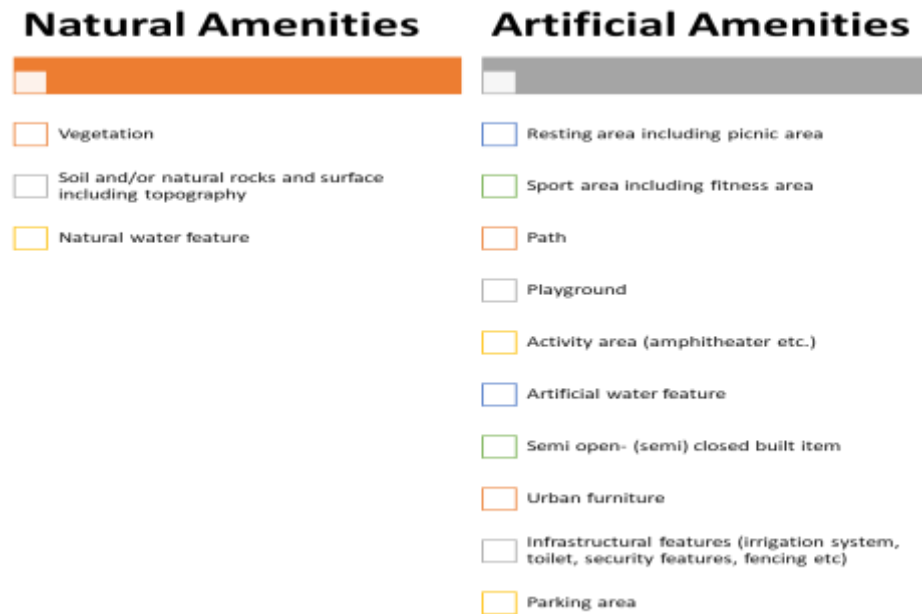
This study is based on observation of the place, while a survey is recommended for a future study, as the plans of the parks are not available within the study which needs to be obtained in the future in surveying and drawings.

The presence of the amenities has been conducted within the study as a real element that has been placed and equipped within the park, but also a study needed to figure the status of these elements and condition of use and rehabilitation in the aspects of design and material used within the location of each park.

Research Design

This research will be conducted in the northern Nicosia city district, in a sample of three urban parks distributed across the city. The chosen urban parks will be located in Nicosia's northern district (Lefkoşa).

Figure 48

Park Amenities Used In the Study Assessment

Within the selected cases, the study's metrics will focus on urban park amenities, such as an assessment of the existence of artificial and natural features/amenities. The amenities that will be evaluated according to the study scale will be presented in the study, as:

- Low
- Average
- High

The collection of the data regarded the issue of investigation within the selected urban green areas (Urban Parks) amenities, within the city will be applied within captured images to have a recent review of the places and to capture the elements and the statues of the place within the eye of observation.

The tools used are the phone camera, or normal digital camera as a set of images will proceed and capture the selected locations, later then will be included within the analysis procedures according to a set of criteria.

The amenities undergoing the evaluation scale according to the physical appearances of the amenities and the presence of the items within the selected parks, this will have a brief explanation of each set of amenities artificial and natural. As physical appearance (structure). Having an evaluation of the physical

structure of amenities requires having a good condition regarding the material, shape, colors, and function of the item.

Table 7.

Assessment Criteria for the Selected Urban Parks

Urban Park Amenities	Evaluation	Grade Low-Average-High
<i>Natural Amenities</i>		
Vegetation	The density of the vegetation, diversity of species type, maintenance of the vegetation	
Soil and/or natural rocks and surface including topography and flora and fauna	Amount, maintenance, and diversity	
Natural water feature	Amount, maintenance, and physical appearance in terms of design criteria	
<i>Artificial Amenities</i>		
All artificial items	Amount, maintenance, and physical appearance in terms of design criteria	

CHAPTER IV

Findings and Discussion

The study findings have been represented within the table of assets to show the results and the pictures that have been taken, as each of the elements will be taking one point, as the tables of the results show the artificial and natural amenities of the urban park, this includes the park scale and the graph below representing the results and the difference between each park.

The Case of Kumsal Park

Kumsal Park showed a strong presence of the artificial amenities located within the park, which makes the park more applicable to serve the users, while picnic areas and security elements such as guards and cameras were not replaced within the park, as there was no water natural element within the park, and the species was only represented by the insects and the local birds. The park shows an excellent scale at the level of an urban park with necessary amenities.

Table 8.

Kumsal Park Amenities in Pictures





Artificial Amenities









Table 9.

Assessment for Kumsal Park

Urban Park Amenities	Evaluation	Grade (Low-Average-High)
<i>Natural Amenities</i>		
Vegetation	Vegetation has been observed in the park in high amounts and varies from trees, and shrubs, to herbaceous, as the size ranges from small to large, and the coverage area of the vegetation can be listed as dense since the left and the right sides of the park is planted. Some plants are shaped and taking some maintenance and the others are not	Average
Soil and/or natural rocks and surface including topography and flora and fauna	<p>Birds, insects such as butterflies, and more have been observed within the park, as there was a sign explaining the available species within the park such as insects, birds, and plants</p> <p>The land of the park has no specific terrain, only a flat earthed park. within its green natural areas, and most of it has been planted and formed</p>	High
Natural water feature	No water elements were detected in the park	---
<i>Artificial Amenities</i>		
Resting area or a picnic area	Resting areas in the park are located within the walking bath side, within a portion of grass that can be used for resting, while no picnic area available in the park	Average
Sport area or fitness area	There is a big portion of outdoor equipment has been installed in the park with a variety of sports equipment.	High

	A pathway has been used for running and walking as a kind of sport	
Path	The pathway of the park is designed for walking, as it includes special tiles for disabled people, and it is planted from both sides	High
Playground	The design included a children's playground equipped with a kid's play area tools, such as a sweeper and swings	High
Activity area (amphitheatre etc.)	Not available	----
Artificial water feature	Not available	---
Semi open- (semi) closed built item	A café has been detected within the park with a little restaurant including benches and shading elements	Average
Urban furniture	The seating area has consisted of two types of benches, one within a standard wooden bench with steel, and the other have a half-circle shape with shading elements (wood, and steel), Light elements and trash bins have been replaced within the park, and a park sign has been installed within the park name, a bicycle station as well a bust stop and a trash cans has been installed within the park, even there was a paved area within the park entrance and exist	High
Infrastructural features (access point, irrigation system, toilet, security features, fencing, etc.)	An artificial watering pipe has been installed within the park used for watering the plants, as most of the trees can hold the drought season such as palm trees, and eucalyptus trees. Public toilets have not been detected within the park amenities. The access to the park has 3 gates within a metallic barrier and a small flip door,	High

also a sign was placed to have a guidance

The outside metallic fence of the park has been installed within the entrance and the existence of the park as well, within small pavement barriers placed formed from concrete, no other security features have been detected

The park can be accessed by walking, also taking public transportation, as there was a bus stop leading to the parking area, as well a bicycle station has been installed at the entrance

A paved pathway leads to the end of the park, as well as the existence and entrance within a stone material, also with a special need walking tile

No Bicycle routes can access the Park

Two types of light elements have been installed which is a column light shape, within a flask and a curved metallic design in the other one, giving the place a good coverage of illumination

Parking area

Not available

The Case of Çağlayan Park

The park showed moderate results, as the artificial elements showed no picnic areas and outdoor fitness equipment was not safe, as some of the other elements were limited, also the seating elements were not sufficient within the park, as the natural elements consisted of trees and some planted trees and a one adopted animal was observed, as a huge football field was located aligned beside the park.

Table 10.
Assessment for Kumsal Park

Natural Amenities



Artificial Amenities







Table 11.

Assessment of Çağlayan Park

Urban Park Amenities	Evaluation	Grade (Low-Average-High)
<i>Natural Amenities</i>		
Vegetation	A presence of a good number of trees detected within a grass area, also some kind of shaped plants, a part has been not well-organized according to a landscape of the plants was weak, and needs more trees shaping and planting for the entry areas. The vegetation shape ranged from trees, shrubs, and herbaceous plants, as the size ranged from small to large, and the vegetation cover was medium to open thin	Average
Soil and/or natural rocks and surface including topography and flora and fauna	There was an observation of the birds such as doves, and a peacock has been placed within a cage, also the insects have been observed, The park is laid on a flat surface within red soil, as a heel was observed aligned within the old walls of Nicosia's old city	Average
Natural water feature	No water elements have been detected in the park	Low

<i>Artificial Amenities</i>		
Resting area or picnic area	Not detected within the park	Low
Sports area, and fitness area	A set of fitness areas has been installed within the park on asphalt ground which makes it no safe in case of an accident, as there was a small basketball yard fenced with metallic bars and mesh, and there was a colored running pathway for sports	Average
Path	The pathway of the park is designed for walking, as there was another pathway for the running purposes	High
Playground	A set of the playground has been placed within the park for kids with safety tiles as a base ground	High
Activity area (amphitheatre etc.)	Not available	Low
Artificial water feature	Not available	Low
Semi open- (semi) closed built item	One outdoor café (small restaurant shop), has been detected within the park with a placed outdoor chairs and tables	Average
Urban furniture	Seating elements were rarely detected within the park which consisted of polygon shape, and a set of benched around the playfield, also a sculpture art has been placed, also trash cans and light columns, light projectors have been placed in a no safe way, a sign within the park name has been installed, a parking lot as well one single ramp has been installed within an urban stair	Average
Infrastructural features (irrigation)	No other irrigation system has been detected in the park	Low

**system, toilet,
security features,
fencing, etc.)**

The access to the park can be done using two stairs attached to the old walls of the old town, as the walls can play an existing barrier to the park since the walls are about 5 meters higher than the park, there was no fencing installed within each stair that access the park

There was no bicycle station, only one-car parking attached to the park, and a car parking sideways was placed along the main street

Light elements have consisted of two types, ground-mounted ones, and column ones, and they are not enough for illuminating the park at night

Parking area

One small parking area has been included within the park, also the car can park at a public street (main street), of the park Average

The case of Kuğulu Park

The park was in a bad condition at the level of the artificial elements, as these elements needed replacement and fixation, such as benched and water fountain, as the kid's playground was not made of safe material, and the natural elements were meeting the other parks elements. The park showed no high-grade amenities within both types reflecting the weakness of these amenities as they can repel people from using the park well, in a satisfying way.

Table 12.
Kuğulu Park Amenities in Pictures

Natural Amenities



Artificial Amenities







Table 13.

Assessment of Kuğulu Park

Urban Park Amenities	Evaluation	Grade (Low-Average-High)
<i>Natural Amenities</i>		
Vegetation	Conifers have been detected within a grass area, also eucalyptus trees, there was no other plant landscape –designed only a set of trees, as the shape of the trees ranged from trees, shrubs, and herbaceous, and the size was from large to medium, and the coverage was medium to thin open	Average
Soil and/or natural rocks and surface including topography and flora and fauna	There was an observation of the birds such as doves, and a peacock has been placed within a gage, also the insects have been observed A flat area was observed within a levelled land and red soil	Average
Natural water feature	No natural water elements are available	Low
<i>Artificial Amenities</i>		
Resting area, or picnic area	No picnic areas and the resting areas only use the seating elements	Low
Sports area, and fitness area	Not detected	--
Path	A one-path way was designed for the walking purpose only	Average
Playground	A kid playground has been detected within the park (Not safe), and a limited number of items was placed, also looks old and rusty	Average

Activity area (amphitheatre etc.)	Not available	--
Artificial water feature	A nonworking fountain has been detected in the park	Average
Semi open- (semi) closed built item	One café (mini restaurant), was detected in the park for selling goods	Average
Urban furniture	<p>A set of two benches types was detected within the park which makes the place confusing and not coherent in placing the seating elements and using different materials such as cast concrete and metal.</p> <p>Public art was placed within the park such as a statue, there were two sets of trash cans and one type of light element, there was a sign for the park name, public transportation bus stop, has been installed on the main road along the park, as well there were street signs and out trash cans made of plastic and hanged in a non-proper way</p>	Average
Infrastructural features (irrigation system, toilet, security features, fencing, etc.)	<p>No irrigation system has been installed within the park</p> <p>A metallic fence is only detected within the park as a safety element</p> <p>The access to the park can be done from the Gine Gate of the old town also from the middle way of the park near the bus stop and wooden stairs near the roundabout of Deraboyu street, as there's a metallic fence, and the walled city walls play a stone fence role</p> <p>The park can be accessed by walking and using public transportation, no car parking or bicycle routes placed</p> <p>Light elements consisted of one old-fashioned one within a low illumination cover to the park</p>	Average
Parking area	No parking lots are designed for the park	Low

Kumsal Park and Çağlayan Park showed the most high grade of natural amenities, while Kumsal Park had more landscaped vegetation within the park, and there was a water irrigation system installed, rather than Çağlayan Park, which has no irrigation system and non-planted areas, as Kumsal Park showed several good species along within the park due to a high vegetation cover rather than the others, neither of the parks showed other natural elements such as more natural landscape (mountains, hills, or a nonflat topography). Water element was only observed as a set of the fountain in Kuğulu Park, which was not functioning.

According to the artificial amenities findings, Kumsal Park was the most graded one, since the amenities had been reflected a good state in structure and design as well as a coherent design, and access to the park was allowed in three ways (bicycles, car, public transportation), the other two parks showed a more than one set of amenities in two different kinds, such as the seating elements, lighting columns, and more, while the park of Çağlayan Park, had more physical activities that can be done more than the rest of the park, as Kuğulu Park showed a fewer amenities regarded the physical activities and security elements.

All of the case study parks showed good access using public transportation which reflects the sustainable side of the parks, as the artificial amenities such as picnic areas were not available, also the themes of the park are demonstrated within the place and the surroundings, all aligned to a specific set of constructed elements such as the walls of old Nicosia town, and residential buildings.

In the term of safety, Çağlayan Park, and Kuğulu Park, showed allow security borders such as metallic fences, and relying on walls was a risky and nonsafe way, in the other hand Kumsal Park, showed a high entry-level of safety and segregation from the traffic, as there was a barrier within the entrance gates.

Sports amenities were presented within the Kumsal Park and Çağlayan Park (nonsafe base tiles – using asphalt), while it was missing in Kuğulu Park, as it reflects the less equipment within the park and a chaotic design within assets of different material regarded the amenities types also.

Urban furniture was placed within the parks in a moderate state to a high grade in Kumsal Park only. While Kumsal Park had no urban sculpture placed within the park, rather than the other two parks had placed urban sculptures made of cast iron, presenting in the parks.

All of the parks involved in the case study had a friendly idea regarding the artificial elements such as the sharing of books boxes, as well as a good amount of signage defining the parks and their names, while Kumsal Park had educational signage regarding the natural elements (species guide), installed within the park.

Accessing Çağlayan Park, and Kuğulu Park, was highly using stairs, as the whole of the park amenities don't use a special needs people design such as ramps, as the parks have no public toilets, which makes the staying within the park less likely in the term of time.

Urban furniture showed a strong appearance within the three selected parks in the city, as there was almost a good set of access, and illumination street lights, as well the trash cans, and signs, while the affected urban furniture was observed physically in material and shape using different styles were observed.

The case study showed no presence of natural elements, as well there were no picnic areas, as well resting areas were not installed in the parks, as well there were no activity areas designed within the selected case studies, which makes the place less applicable to visit and includes activities. Commercial kiosks were installed within the parks as providing activities and access to the need for food and other edible materials, this makes the parks have good service areas access.

There was no waste segregation within the artificial amenities regarding the case studies which makes the parks not responsible for such an important practice towards urban life. One round metallic cage box only was observed in Kumsal Park for collecting the plastic bottles.

CHAPTER V

Conclusion and Recommendations

Conclusion

Urban green spaces, such as urban parks can have a variety of amenities, natural and artificial amenities, these amenities can play an important role in the level of safety, security, activity, health, enjoyment, etc. Urban parks can provide a set of amenities that can serve the place, as each set of amenities can provide a good function reflected in the user usage and experience in the urban green spaces.

Natural amenities need more landscape design progress and caring in terms of irrigation, and design of the plants within the place, as well as maintenance, can provide a better green cover, as the introduction of the species using signs can be reflecting the educational purpose of the place and what the green urban batch have, as the geographical pattern of the park earth can play a role in shaping the theme of the terrain, which it was not exposed within the case studies. Expecting an animal to use a cage in urban parks may not help the biodiversity of the park itself since the animal is not engaged within the surrounding.

Providing and flourishing the natural amenities could have a better species number and a more healthy place with better air quality as the urban park may include a set of sports activities. Artificial amenities can't be enough in case of not maintaining it well or taking care of their statues, since they will be used as public amenities to serve the park's visitors, and the local population, the artificial amenities can be very important in providing a safe comfortable place.

Using the same material within making the artificial amenities can be more applicable to have a coherent set of amenities in the urban park, since it may lose the strong physical structure of the amenities, as some amenities can provide eco-friendly habits that can be adapted within the population such as providing bicycle stations, and a public transportation bus stop can help and provide a kind of equality to access the park and benefit from the installed amenities.

In the case of Northern Nicosia (Lefkoşa city), urban parks tend to need more design improvement in the mean of coherent ones, and more landscape design is needed for the urban parks, as a technical issue of irrigation system must be considered within the parks, and the installation of more security amenities is a must to have safer public green spaces.

Recommendations

- Landscaping of the urban parks can help in decorating the place vegetation for aesthetic physical and natural appearance
- Security amenities are needed to provide a more safe place
- Using one type of urban furniture (one unique trash bin) can provide a more aesthetic place
- Improving the outdoor public sports area for more safety experience as sport areas are needed more within the city
- Installation of bicycle routes and stations for easy and eco-friendly access
- Segregation trash bins are more required within the parks
- More educational signage about the biodiversity of the park
- Resting areas can be increased within the parks
- Installing more shade elements within the parks can provide shading during the hot summers
- Installing public sanitation infrastructure

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