

**ANALYZING THE LIVABILITY OF URBAN
OPEN SPACE; THE CASE OF MESKEL
SQUARE, ADDIS ABABA**

**A THESIS SUBMITTED TO THE GRADUATE
SCHOOL OF APPLIED SCIENCES
OF
NEAR EAST UNIVERSITY**

**By
FEVEN HAILU TADESSE**

**In Partial Fulfillment of the Requirements
for the Degree of Master of Science
in
Architecture**

NICOSIA, 2021

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TADESSE**

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ACKNOWLEDGEMENTS

My thanks goes to my God for giving me the chance to accomplish my well-awaited research. I would like to thank Assist. Prof. Dr. Çilen Erçin for her guidance, support, and inspiration. She always encouraged me in carrying out this thesis. I have highly benefitted and have gained a lot of knowledge and wisdom. To my parents Pharmacist Hailu Tadesse Tesfay and Pharmacist Almaz Amare Kassa which have been my unconditional support system from day one which is, to say the least, but words can't express my gratitude and love, I am forever grateful to their constant love and involvement. I also want to thank all my teachers in the department of Architecture here at Near East University who enlightened me with the knowledge I now carry. My fellow class mate, friends such as Robel Siltan Seyoum and Mukhtar Sabiu Yahuza, and my beloved sister Soliana Hailu Tadesse who have constructively influenced me helping me with everything I needed, I would like to express my gratitude for my current accomplishment.

To my beloved parents who worked day and night in difficult situations to support me and my dreams, I would like to dedicate my research to them.

To my family...

ABSTRACT

For many years urban open spaces have been utilized all over the world for multiple functions, such as for market purposes, for political declarations, for social events and gatherings. In recent years these spaces have been used for recreational purposes and help enhance the social life of a city, which created a livable area for the public. Livable public spaces are an urban open space that has the ability or capability to inhabit or utilize the area, and summation of various features that improve the community life quality.

The thesis focuses on the notion of the livability of Meskel square. The square has a long history, has been occupied ever since the 1950s but throughout the recent years the usage has declined, it has been isolated throughout the day and night except in the mornings. The open space is located at the center of Addis Ababa and has a spacious area but due to different reasons, the area is slowly declining numbers of users and visitors where once was a tourist attraction place.

The method used for this research is post-occupancy evaluation (POE), which evaluates open space after it has been utilized or used for many years and how it is functioning, to do so questionnaire was sent out to the public that is in closer radius to the Meskel Square and second-hand data analysis took place to identify the major reasons for decreased number of visitors.

The analysis of Meskel Square shined a light on the problem of the square from the user's perspective and the publics' suggestion, and personal observation for a better livable square that can be used to renovate the area and have an elevated city image.

Keywords: Open space, Urban open spaces, Livability, Meskel Square, Addis Ababa

ÖZET

Uzun yıllardır tüm dünyada kentsel açık alanlar, pazar amaçları, siyasi bildiriler, sosyal etkinlikler ve toplanmalar gibi birçok işlev için kullanılmaktadır. Son yıllarda rekreasyon amaçlı kullanılan bu mekanlar, bir şehrin sosyal yaşamının gelişmesine yardımcı olmakta ve halka yaşanabilir bir alan yaratmaktadır. Yaşanabilir kamusal alanlar, alanı yaşama veya kullanma kabiliyetine veya kabiliyetine sahip olan ve toplum yaşam kalitesini iyileştiren çeşitli özelliklerin toplamı olan kentsel açık alanlardır.

Tez, Meskel meydanının yaşanabilirliği kavramına odaklanmaktadır. Uzun bir geçmişe sahip olan meydan, 1950'lerden beri işgal altında ancak son yıllarda kullanımı azalmış, sabahları hariç gündüz ve gece boyunca tecrit edilmiş durumda. Açık alan, Addis Ababa'nın merkezinde yer alır ve geniş bir alana sahiptir, ancak farklı nedenlerle, bir zamanlar turistik bir yer olan alan, kullanıcı ve ziyaretçi sayıları yavaş yavaş azalmaktadır.

Bu araştırma için kullanılan yöntem, açık alanı uzun yıllar kullanıldıktan veya kullanıldıktan sonra ve nasıl işlediğini değerlendiren doluluk sonrası değerlendirme (POE), bunu yapmak için daha yakın yarıçaptaki halka anket gönderildi. Meskel Meydanı'na gidildi ve ziyaretçi sayısının azalmasının başlıca nedenlerini belirlemek için ikinci el veri analizi yapıldı.

Meskel Meydanı'nın analizi, meydanın sorununa kullanıcı ve halkın önerisi ile ışık tuttu ve alanı yenilemek ve yüksek bir şehir imajına sahip olmak için kullanılacak daha yaşanabilir bir meydan için kişisel gözlemler yaptı.

Anahtar Kelimeler: Açık alan, Kentsel açık alanlar, Yaşanabilirlik, Meskel Meydanı, Addis Ababa

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CHAPTER 1

INTRODUCTION

1.1 Overview

Urban open spaces (UOS) are the respiratory system of a city that allows us to breathe oxygen by interchange it with carbon dioxide through the trees positioned within a given domain (Nicol & Blake, 2000). They had been in existence for numerous years, where they are illustrated in profuse ways. Even so, they are practically explained as a land space stationed in a city consisting of multiple access despite having no shading buildings covering the zone. Open spaces have been great involvement in our day-to-day use as individuals and communities (Nikšič & Watson, 2018; Stanley, Stark, Johnston, & Smith, 2012).

It is substantial to recognize open spaces as a quality station selected by people, developing the opportunity to gather by consisting communal dynamic events. Open spaces are usually designated by government officials although they create an eloquent space for individuals having limited courtyards for further alternatives (Nikšič & Watson, 2018; Stanley et al., 2012). It is insistently strategically designed which subsidizes the collective welfare of urban residents (Stanley et al., 2012).

The public urban zone is utilized using different changeable events which stimulates the perception of inclusion and the sensitivity of spiritual peace by just taking part. The purpose of such places can be categorized based on the benefit they hold for the community in economic, political, and social features for many years where they are incorporated into the present cultures. But at the same time, even with the suitability, they are being denuded of their worth in diverse developing and developed metropolitans. As human beings, we are born to socialize with one another thus giving rise to Urban Open Spaces (UOS) existence and in the world of the internet many of our lives have changed in favor of us, but as much as it is beneficial it also has caused problems where there is decreasing the activity-filled open areas.

Nowadays it is hard to find lively or full-of-life open spaces within cities, even though they are described as the highlight of one city life, and this has greatly affected the community

surrounding it and will continue to do so. The livability and activity of such areas have been decreasing at an alarming rate due to various reasons and their necessity has been fading as years go by.

As a capital city, Addis Ababa is a city full of differentiating values and culture, it is unvaryingly a vast socially supportive city with abundant exceptional legacies, traditions, and norms arranged as one community while valuing each other. Nevertheless, the city at the present is affected by the lack of apposite planning and design urban open spaces, it is suspected that these essentials are not given vital consideration.

There is insignificant inspection presented to open space in the city from the administration division which participates in eradicating the lingering open spaces also letting them become extinct. For the reason that having scarce and unkept open spaces remaining all over the city, the public is now complaining in contradiction of the existence of such spaces due to the destruction it has carried out and the wrongdoings rates increasing.

By extricating the matter at hand, the urban dwellers can profit in uncountable aspects in a cultural, economic, social, and educational aspect, by corresponding the conception it has on the world, in the sense of publicizing its amusing morals and more notably design up to the users' requirement.

1.2 Thesis Problem

This prospective study was designed to investigate the livability of Meskel Square, Addis Ababa, Ethiopia. Meskel Square is an open space located at the heart of Addis Ababa with a rich historical background dating decades of years back to where it was the main meet point of the city and where the key trading took place for economical purposes and where political announcements, but the human activity of the domain has been decreasing and is not applied to its potential which is now being left alone to be almost a quite space consisting of wide meter square area coverage.

Given the concern, the community is now heading towards the termination of such spaces because there has been an increasing amount of crime rate happening and are being an accumulation of trash from nearby places. However, the main use of Meskel Square is being lost when transitioning from generation to generation.

1.3 The Aim of The Study

This project aims in providing an important opportunity to advance the understanding of Urban Open Space (UOS) and the relevance of the spaces with livability by analyzing the selected area. Also, the list of barriers in the Square for a more usable place and collecting the user's perspective on the matter.

1.4 The Importance of the Study

It is expected that this research it contributes a deeper understanding of the livability subject of Meskel Square. There are distinct explanations for the livability of urban open space is becoming a primacy situation of this research. This research can partake in its offerings, intellectually as well as communally. In the theoretical background, it describes the notional and circumstantial ideas of livability. It sightsees the capacities of the Likert-scale evaluation system in examining livability difficulties, which is an operational involvement.

It branches in improvement to the known data of the livability difficulties beyond the lack of involvement and mobility in the area. It elevates the users' feature of zoning and exposes the favored characteristics of the upcoming open area users. It differentiates the cause of isolation that is precise to the research, and by which the Meskel Square can be reviewed to convert further approachable to users' likings.

In the public condition, this area of research sets an immense event for the community in discovering their complications with the livability of their location and in constructing their areas depending on their preferences. This is a significant advantage, which sets worth for the marked community, and which is able to shape a sense of self-importance and proprietorship within the public. Supplementary, this area of research delivers the forthcoming livability perception of the Square that may persuade responsiveness between resident designers and societies to do additional in pleasing the eye also the livability of the city. Alternatively, the research correspondingly unlocks new zones for supplementary research.

1.5 Scope of the Study

The scope of the study focuses on users' perception of urban open spaces within Addis Ababa, in the area of Meskel square to determine the cause of declined livability. With the given time, this research tried to analyze the reasons for the abandonment of such places and

the compulsory values to gain supportable urban open spaces for societies. By reviewing researches, the research looks at the wide-ranging characteristics and profits of the psychological and physical well-being of the community.

1.6 Research Outline

This thesis inspects the livability of Urban Open Space (UOS) within the city of Addis Ababa. Within this context, the investigation of livability is carried out by studying the relationship between image and comfort, activity and use, linkage and access, and communicativeness of a community directly connected with the Meskel square. In doing so a questionnaire is supervised for the resident of Addis Ababa, Ethiopia for cultivated consideration of the public conceptions about the idea of a livable square. Hence, Six chapters explain every step of the analysis and discussions, where Chapter one is the introduction of the study, Chapter two is the Historical Background of the notion of Urban Open Space, Chapter three is the reasoning of the research which is the understanding of Livable Urban Open Space in different cities, Chapter four is the Methodology for the research to carry out where different methods are implemented, Chapter five is the study of case analysis of Meskel Square, and Chapter six is Conclusion and Recommendation conducted from the idea of Livable Square.

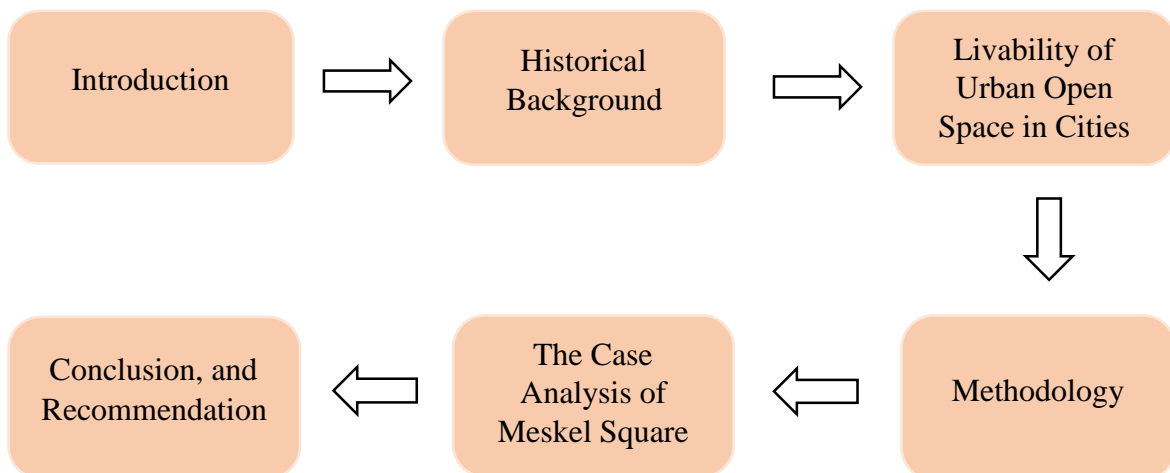


Figure 1.1: Diagram of the research arrangement (Author, 2021)

1.7 Limitation of the Study

The research limitations are the participant's unwillingness to cooperate in questionnaire analysis via email due to feeling unease in sharing information, lack of pictures due to Covid-19 the site is not being available, thus the difficulty of obtaining private observation. Fewer researches have been done regarding Addis Ababa urban open spaces or public spaces creating the difficulty of gathering previous data.

CHAPTER 2

HISTORICAL BACKGROUND

2.1 What is Urban Open Space (UOS)?

Public space definite explanation does not exist but it is described in different ways by numerous researchers. One of the most well-known public space scholars explained communal area as a “platform acquainted that the performance of shared life reveals”. On the contrary, others explain communal spaces as individual zones within cities, settlements, and rural areas which are bodily reachable to everybody, where outsiders and residents can pass in with limited boundaries. Several descriptions of civic space with diverse methods resultant from unlike viewpoints of ideas. Some describe the civic area as “any space that public utilizes when not at home or work”. “A communal area of high worth will constantly be familiarized by the public interposing their trek or day-to-day occupation so they can take a break, appreciate the urban, the communal area and communicate with individuals” (Burcu Akinci, 2010).

A diversity of writers and philosophers have implemented a variety of descriptions concerning open spaces. Open space is open in being distinct as water and terrestrial in a communal space that is not enclosed by vehicles or houses, or as somewhat not constructed property in an open space. At the same time, researchers proposed that communal area is not individual terrestrial, or the water on the land in and around urban areas, which is not enclosed by structures but is also the space and the light above the land. Others reasoned that public open spaces are spaces which is flowy to the degree that metropolitan can stream into open spaces and the open spaces can move into the metropolitan (Uzakgoren, 2010).

A communal gathering area is a communal area such as a square that is usually accessible and exposed. It has similarly developed somewhat of a benchmark for a fundamental concept regarding philosophy, city geography, graphic art, social studies, public studies, and city plan. The term 'Public Space' is also habitually misinterpreted to define other things such as an area to get together, which is a component of the bigger perception of communal area. As an explanation of open space, researchers refer to exposed space as a place that permits the

public to exercise diverse forms of events, as well as optional social doings (Garcia-almirall, 2019).

Analysis of the Scottish Executive Central Research Unit explains the open space and recommended a mutual classification that was missing previously.

- OPEN SPACE - Any undeveloped area inside a city, village, or town that offers, or has the potential to give, direct or indirect environmental, social, and/or economic advantages to societies (Burcu Akinci, 2010).
- GREEN SPACE - Within urban areas, any vegetated land or building, water, or physical feature is a subset of open space. Greenspace for amenity playgrounds facilities for sports corridors of greenery, another useful greenspace is natural/semi-natural greenspace (Burcu Akinci, 2010).
- CIVIC SPACE - A subsection of open space that includes market places, city squares, and hard landscaped or other surfaced civic spaces. Civic plazas Locations of Markets Streets for pedestrians Seafronts and promenades (Burcu Akinci, 2010).

2.2 Historical Background of Urban Open Space

Urban open spaces have been important in almost every era of human history. It is any ground that is not covered by an architectural structure. If you look at the history of architecture, the characteristics of alleyways and impasses have changed drastically, regardless of the setting. Although there is a lot of research on the use of buildings and open spaces, open spaces serve a double purpose to balance commerce and residential uses in cities.

It is through modern and cultural studies that we begin to transcend the urbanists' fixation on the 19th and 20th centuries. We use open space as compared to institutional spaces as our way of bridging the gap between antiquity and modernity. Open spaces are held in high regard by scholars because they contribute to the social, political, and even physical wellbeing of the societies that they are located. Some believe that high-quality, friendly pedestrian areas will help foster community interactions (Wendt, 2009; Whyte, 1980). For others, the theory of a "public sphere" derives from theorists like Habermas, who view urban space as a source of democratic power that makes people interdependent and amenable to compromise (Stanley et al., 2012).

Social spheric interaction promotes psychological, social, and political growth. As the number of public parks has increased, environmental justice is now recognized as a key factor in access to public space, particularly for lower-income residents. Recent work on urban history shows that open space has taken a diverse set of characteristics, from advantages to costs. Open spaces can be designed to serve as ways of communicating hierarchical relationships through the show and encourage grassroots “empowering up” through 'organically.' Intrinsic and extrinsic forces within cities like states or empires have received growing scholarly attention (e.g., for a theoretical stance) (Stanley et al., 2012).

Opposing general populations and central structures (at various levels) afford transdisciplinary examination of urban spaces. To plan for and manage and manipulate open spaces, the state is always involved, as well as low-level governance entities, but on the lower stages of the scale, people often supply numerous social, economic, and cultural activities (Stanley et al., 2012).

The term public space is meant “open, accessible locations that help people get involved.” A few social scientists who are skeptical of more challenging privatization and control of public space have been seen from a social perspective, stress the complex commercialization and social stratification, and assert that public space simply cannot exist as it did before modern capitalism. Narrowly described, public space is open to the public to use or anyone who has free access to public space and space and/or the built and natural environments (Stanley et al., 2012).

As stated in Stanley (2012), It includes all public spaces, many of the public open areas and places, as well as all of the private ones where public access is provided Many types of open spaces have public access, but that does not mean all types of the public would have equal access. Many people have postulated that the existence of causative relationships between open space and sociopolitical problems such as urban planning, architecture, and archaeology, but we use a temporal/spatial methodology to bring the two into harmony.

Following this principle, open space could be described as a vegetated field, as opposed to a hard surface (e.g., paved or packed dirt). Many recent developments in planning and architecture are inherent in this definition. "progressive city planning incorporates the idea

of transect as well as" using transect-design in the sense of ecological infrastructures (Lyster, n.d.).

The correspondence between ancient Greek cities and the public squares or places like the agora in literature, represents the starting point for those historians who write about urban spaces. Other frequently mentioned ancient and/classical structures that people have are forums and plazas (Madanipour, 2003).

The story often shifts unexpectedly from Classical to Medieval Europe, where venues, ranging from marketplaces to plazas to sacred sites, often served several purposes. In the Renaissance and Enlightenment, as the city became more accessible and secular, rural and personal ideals grew in prominence. Public squares built with neighborhoods in mind include such places as the Place des Vosges in Paris, the Camden Marketplace in London, and Philadelphia's downtown plazas centos, Savannah. There are more and more of these today since they were first established as places of leisure in the 19th century. History has taken a less prevalent role in current debates about open and public space than except for (Madanipour, 2003), which has focused on Middle Eastern, Islamic, and Chinese urban traditions.

Site distinguished and classed urban squares, while Zucker refined the work, labeling them as follows: closed, morphic, structural, amorphous, atrophic, and combined. street spaces: Krier distinguished all open spaces into two categories—landscape and Platz. Equated them with geometric forms, and then placed them in a cross-referenced position more modern forms of space theory. Researcher Carmona goes into great depth on the subject of morphology. Highlights new perspectives that originate from disciplines such as sociology and political science that concentrate on issues like social networks, cultural norms, class formation, and power and politics-based spatiality in addition to the focus on architecture. Concluding that the presentation, the researcher attempts to unify the disparate views on issues of management and privatization in a public classifiable typology (Stanley et al., 2012).

The physical scale of open space is linked to the size, function, and overall significance of an organization's community, but it is also characterized by the cultural context. Similarly,

mansion-maintained gardens can be incredibly large but only provide for one family of people. when looked at cities over long periods, it's not an issue of scale, but rather of the degree of density and the social impact of open spaces (Stanley et al., 2012).

For small towns and rural areas, they are non-existent. Newer approaches have centered on community gardens in urban areas, natural foods, as well as urban development, as well as organically-grown vegetables. Agriculture was an important source of nutrition for households in low-density communities, such as Nairobi. In the city settings where low-density food production prevails, an urban farm may be the intermediate stage (Stanley et al., 2012).

It has been proposed that Maya lowland cities, for example, are generally poorly laid out, whereas highland cities, including Tikal, have clusters of residences interspersed between which aids the Maya people in their mobility. Analyses of the soil have shown that it was farmed previously (Isendahl & Smith, 2013). People were attracted to these urban parks because they could put them in their yards, but they were large enough to go hand in hand with homes. Several strikingly similar patterns may have characterized early Angkor and other tropical cities in the region of Southeast Asia (Stanley et al., 2012).

Modern Western cities also have a less diverse food distribution network due to the industrial-based economies relying on fossil fuels. Yet during the mid-1990s and early years of World War II, vegetable gardens were adopted to provide supplementary food for cities, and they became known as "victory gardens". Without household food processing, there would be no cities. The ancient system of one-acre community farms found in Kerala, India has resulted in a semi-rural landscape where farms are scattered across neighborhoods with diverse production. Citrus juice for homeowners in this common, numerous cases may have originated in Pompeii, first century C.E., where everyone, regardless of the building type or size, had an open area with a kitchen garden orchard to supply fresh fruit for the residents (Stanley et al., 2012).

Various local landlords in the late Middle Ages supported orcharding, fruit orchards, and livestock rearing. Researchers are improving the house-level garden methods even in less-f Low-preserved tropical areas. open (expansive) fields both farming and producing food in

cities are nothing new in general, but urban agriculture is a recent trend. Although many places of leisure, such as parks and gardens have served a cultural, social, and/symbolic function, others have also evolved organically as unstructured gathering spaces down-to-earth Gardens, parklands, even sacred areas, have been important pieces of social activity in urban history, from those secluded even from public access in the middle of the city (Stanley et al., 2012).

of Tokyo's Imperial Palace is known for its stunning gardens, as metaphors for metaphysics because they have never been available to commoners. Only after the Meiji Restoration did gardens provide other amenities, including play areas, become accessible to the general public. a similar change happened in China with the arrival of the Europeans, where conventional or private gardens were privatized before becoming open spaces. A broad public park on the grounds of Mexico City was created when the state took over a formerly elite or royal property (Stanley et al., 2012).

Larger cities, including Babylon, and Ctesiphon, started an age-long tradition of flower arrangement for temples and palaces (Foster, 2004). As in the period between 915 and 1692, when the city of Marrakech was deliberately designed around green spaces and gardens and orchards, all of which were publicly open to use for public benefit. Yoruba is prevalent in Nigeria in the 19th century and also. Sometimes, the palace of the Oba (king) is situated in the heart of a metropolis and offers much public land for recreation to his subjects. Such burial grounds are also served as city-sized parks and are found in American cities, such as Woodlawn Cemetery in New York as well as ancient ones, such as Brook Green-Wood Cemetery in Brooklyn. In Birke, Sweden, there are over 1600 graves that are positioned close to the settlement with surrounding garden space (Stanley et al., 2012).

In predominantly Christian Europe and North America, a church can normally be found on the property with a large garden around its Mosques often serves as neighborhood meeting places as well as outdoor places of worship, due to the requirements of custom and faith. Another relatively recent development is the emergence of government-designated public parks. Due to reformist movements, specialized parks first emerged in 19th-century North American and European cities in the quest of improving health and cultural well-being (Stanley et al., 2012).

Park management can make it easier for people to find social things to do. Places where middle-class and upper-class citizens could get acquainted. Crop gardens, condiments, and medicine gardens have long been used by many different cultures, all over the world. Open (expansive) fields today, the majority of large urban parks and gardens are created by municipal or state planning or landholder planning coupled with zoning for the public, semi-public, and/corporate use. There are parks and gardens which have been created for aesthetic and social purposes, such as looking at nature or meeting other people. To reflect these ends, “bottom-up” and “top-down” planning is typically needed. Sprawling gardens and parklands were normally provided by sovereigns, or better yet by the very wealthy, and they could be all out of bounds to anyone (e.g., to upper classes) (Stanley et al., 2012).

Residential properties have been regularly taken over by government officials and turned into commercial properties over the years. The complete opening of some city parks and gardens, including the ones in Rome, indicates how much time it has taken to change the policy means of the general population. In markets in capitalist economies, a greater or lesser amount of garden space is always determined by socioeconomic factors, and the extent to which this represents the desires of the public is open to interpretation. Useful Unrestrained Space Leisure spaces can be looked at as functionally specialized, such as grassy playing fields, jogging, cycling, or swimming areas. In the majority of cases, those which originated only in recent times were described in terms of recreation, in many cases down-to-to-earth (Stanley et al., 2012).

In cities like New York, Paris, Rio, London, and Sydney, beaches are regarded as exclusive spaces that everyone should be able to enjoy. Stadiums are commonly found in cities that host festivals or memorial services. Resorts are delineated from parks or town squares because they serve as places for recreational activities as well as they do as settings for views and environmental preservation. During the empire, coliseums and theatres were important locations where significant works of art were created. In Mesoamerica ball courts, cultural, mythological, and recreational activities are intertwined (Stanley et al., 2012).

In the last century, cities all over the world have developed sports stadiums, music halls, and conference centers for entertainment and leisure. In addition to the traditional venues, many

sports stadiums now have open parking areas for use as well, for example, farmers' markets, car shows, swap meets, fairs, and restaurants (Stanley et al., 2012).

2.3 Types of Urban Open Space

Of course, open spaces can be described in terms of their legal ownership and where they are located. Even if you have no interest in gardening, you could appreciate a nice backyard, which could be classified as a 'private open space' for many reasons. A public space can be identified as well as the venue for such locations as parks and plazas. Seemingly public areas contain those where a small number of individuals utilize the area, where others would normally not be welcome, which would be known as semi-public spaces. Some examples of open spaces that might include courtyards or garden squares may include courtyards. It may be characterized as a semi-public space with hours that are restricted to members of the public, but it often includes places where many different people are welcome such as parks and university campuses (Uzakgoren, 2010).

Public spaces fall into two general categories: single-minded and accessible. For example, the use of office space located in a central business district will serve as an example for the above. As opposed to specified space, on the other hand, places like plazas and palazzos provide a background of varied usage and where time is spent more likely to be spent casually, such as chatting, wandering, eating, and walking instead of hurriedness. Focused and flexible analogies define, to some degree. The types of open spaces include: Parks are squares, plazas, and market places; play spaces and squares; streets and playgrounds; outdoor and indoor parks. According to the criteria listed, three unique features describe an urban land-use area as a public park, waterways, plazas (Uzakgoren, 2010).

The street has traditionally been seen as a public thoroughfare open to all. Open-air town squares, parks, and government buildings including government offices and courthouses are open to the public. Marcus and Francis (1998) categories open space as semi-public, semi-public, and semi-private places such as public parks. In addition, companies and universities that are owned by or privately run but open to the general public, as well as those that are owned privately and exclusive to only one group of people such as elderly housing, fall into this category. We believe everybody has the right to enjoy the public domain as opposed to the private domain where it might be reserved synergy alliance (Garcia-almirall, 2019).

2.4 The Function of Urban Open Space

Three primary needs identified being openness, freedom, and fulfillment of purpose. Good public spaces must respond to their users, be accessible to the majority, and serve society. A great deal of architecture today rests on scientific innovations in the public realm. Customers will also consider each other to be members of the creative class. Additionally, they may arise amongst enjoyers and planners, or among diverse segments of the class. Many of these stresses are constructive and important in city environments, but unfortunately, it also hampers urban dwellers from finding ways to enjoy them (Uzakgoren, 2010).

And almost essential doings include going to institute, going to work, and commuting. Voluntary activities are defined as taking place "when there is a desire and the time." When the weather or location is suitable, these things can be done outside. In particular, these behaviors are very strongly affected by the surrounding climate (Uzakgoren, 2010).

It is impossible to understand a city's identity without understanding its open space. The typical forms of city development put forward by Heckscher and Robinson (1977) illustrate that a city is made up of its public space, from which businesses, communities, and institutions are supported by this model. Space is where it all begins. Recognizing that well-working, nice-looking, well-maintained, and active public spaces can transform a neighborhood into a bustling metropolis. For as long as anyone can remember, streets have been central to the public realm, serving as a meeting and retail spots for vendors, as well as playgrounds for children. The increasing prevalence of cars has lessened the value of these purposes. It helps the city in several ways: the environment and the economy, but most importantly, it supports people when they have a place to meet (Garcia-almirall, 2019).

Without public parks, no good city is possible. They encourage a sense of community, culture, and identity creation. Shops and restaurants allow people to socialize, grow culture, and create an economic pulse in urban areas. This is as true in other parts of the world as it is in the Arab and Middle East countries. The provision of diverse public spaces is a must for city dwellers. Parks, sidewalks, and open spaces represent the character of a city's personality. In recent years, both the social and recreational areas and the physical well-being of public users have greatly improved (Chapman & Lynch, 1962).

2.4.1 The mental wellness effects

It is stated that the findings of the theory of focus restoration and stress reduction apply to natural settings. A significant portion of mental well-being and physical health is contingent on creating space for everything that comes along with it. The correlation between Western researchers' study of open spaces and low mental well-being has been demonstrated time and time again to be weak, particularly in dry and hot countries like Saudi Arabia (Parsons & Ulrich, 1990).

The impact of green space on mental health is reached through the influences of activity, sensory stimulation, and sunlight, as well as the relaxing effect of natural light. Since being in the open spaces help pull in and restore mental and physical energy, people are most comfortable when they are being serene and undisturbed (Garcia-almirall, 2019).

Sex, socioeconomic, and age are unrelated to stress levels in open spaces. According to researches, people respond immediately in response to their circumstances, which helps them cope with stress. They are social capital because they are open for the use of the whole community, like a plaza or garden. Regular physical activities fostered greater connections with other women who didn't come for the same reasons, which pleased the women who took part in the study (Garcia-almirall, 2019).

As several studies have investigated, improving public spaces can contribute to the community and social well-being. research conducted by Chiesura (2004) and Macnagh and Urry has found that people generally enjoy being in woodland settings, especially people with children. Open and welcoming events can also facilitate meeting new people and fostering new connections. Now improved quality of life, as well as greater social interaction, could be a possible outcome of being accessible and participatory, lead to increased happiness (Garcia-almirall, 2019).

2.4.2 Thermal effect of Urban Open Space

We use city parks since they're there are public squares in urban areas. Hence, human and social factors are essential to research thermal comfort. Several studies have investigated how to improve the outdoor thermal quality of cities, particularly those using hot open

spaces. Indirect influences on comfort include physiological, physical, and psychological aspects. Physiological and psychological influences have an indirect impact on thermal comfort levels. Body temperature was a reasonable measure of the degree of comfort. Indoor rooms, particularly outdoors, exhibited rapid variations in skin temperature (Lai et al., 2020).

2.5 Need for Urban Open Space

The study examines human needs in a vast multilayered structure, with the most important and least urgent desires at the bottom, and Maslow's hierarchy stages on a worldwide scale. It considers the role on the lives of the public in its design decisions past analysis and case studies on this gives us an understanding of what citizens and customers want in public spaces include: calmness, relaxation, and action (Burcu Akinci, 2010).

Comfort is fundamental. It is impossible to hope for anything if one doesn't already have it. Comfort, not only needs to be provided but must also be observed in order for the freedom to grow. There are two kinds of accessibility to be considered: physical and symbolic. Additionally, this encompasses infants, elderly, disabled, and handicapped individuals, as well as ethnic minorities. Where people sit to get relief from the sun or have admittance to it, sunlight is also playing a significant role. The past investigations note the importance of getting away from the sun, as well as the need for some kind of shelter. Comfortable and well-placed seating is a must in any good open-spaced setting (Whyte, 1980).

Furthermore, seating should promote social and emotional well-being. Public spaces around the world are generally unsafe places for women because women face various threats. The majority of public plazas appear to be used mostly by males. When women know other women and people around them, they feel more secure. Women have a more discerning taste for where they can sit, they are far more alert to the bothersome qualities of their surroundings. When there are more women than men, the public space is usually fine (Burcu Akinci, 2010).

The meaning of "mental ease" in regards to being able to relax can be represented by the word "comfort". It is found that people also visit public spaces when they want to take a break from the stress of daily life. This place can be had by natural elements such as water or plants. It can have health benefits as well as reducing stress and lower blood pressure. In

significant measure, observational research has shown the importance of landscapes in healing (Ulrich & Addoms, 1981).

Though passive engagement tends to dominate in open spaces, aggressive engagement may be possible depending on the circumstances. Having an opportunity to stimulate the body and mind can be enthralling; although it requires a temporary involvement, it leaves room for imagination. The list of passive hobbies includes sitting, reading, daydreaming, sleeping, and being still. This sort of practice is easily and commonly promoted by public appearances. Combining traditional training methods with modern ones to offer a faster, more efficient education is very challenging, as there is not much training common ground between cultures of the world today (Burcu Akinci, 2010).

2.5.1 Environmental aspect

Planners and people who care about city parks have argued about the significance and allure of city parks. Many people advocate for the importance of open spaces, but it is difficult to assign a specific value statement. Where land is most highly demanded, open spaces are especially vulnerable to redevelopment. Gleaming spaces in the city centers also highlight and add to the look of the cities (Tajima, 2003).

2.5.2 Cultural and educational aspect

Nonetheless, little research has been done on the influence of social influences, and no results were discovered. A model used of social factors and thermal sensation, it is described social factors as the place where you find yourself in the academic and non-academic hierarchy, whether it be your rank or how your interpersonal status and companion ranking has an effect, found a statistically significant association (Lai et al., 2020).

An examination of the important implications of culture on thermal comfort examines the function of the natural factors. It is also possible that cultural differences among subjects could have resulted in different feelings of thermal stimuli because people who experienced a similar environment would respond differently to it. The arts can also affect people's actions in their attire choices of clothing (Lai et al., 2020).

2.5.3 Economical aspect

One of the city's main responsibilities is to be the locus of economic and cultural developments as well as a motivator for the city's civility. Modernization is greatly facilitated by modern cities, stimulates social life, economy, and the arts, and science, and aids the modernization of the people. But because of their modern economic-development features, these cities held the seeds of the type of economic systems found in Europe and North America. Technological change was, along with, or directly resulted from, the agricultural, transportation, and manufacturing revolutions that occurred in England and elsewhere around the world (Kashef, 2016).

2.5.4 Political aspect

The idea of open space finds its manifestation in many professions. It can be found in the workplace, school, information, conflict, and workspace planning, as well as in social management and political change activities. In particular, it has been associated with recent social and political developments like horizontality and networking, thanks to the effect they've had on the World Social Forum (WSF) (Sen, 2010).

When explaining the notion, Chico Whitaker compares a "square" in a city and a "practice" in the original Portuguese, "sign, saying that "another world is possible!" This definition and ideas have gained broad popularity, as a result of the amazing World Social Forum increases over the years. From the onset, this has proven to be a thorn in the side of neoliberalism. The first World Social Forum, held in Davos, Switzerland at the same time as the World Economic Forum, was emblematic of. The World Social Forum has taken hold of people all over the world because of the exciting feel of celebration and the need for it to be in the air that comes along with it, which includes an air of liberation (Sen, 2010).

A lot of people like the concept of "open space" due to the demonstrated impotence of traditional politics and group management. Some political ideologies, such as liberalism, the far-left, and as representing more than it actually does to the latter. It is often thought of as an escape from traditional movements. The aim of most science fiction authors, on the face of it, seems to be to entertain and criticize our time, while the aim of more scholarly novelists, such as Michael Crichton, is to challenge it (Sen, 2010).

2.6 Livability

"Livability" is a nebulous concept that is interpreted differently by different people. However, as more academics and professionals join the ranks, the need for livability and urban livability, in particular, become more obvious (Kashef, 2016).

There are different opinions on what quality of life means in any given situation. The definition has to do with personal improvement and human well-being. Where a strong community integrates physical and social well-being in order to sustain long and maximize their success; productivity in the social context offers better returns than total productivity, and fulfillment because humans naturally need to be involved in effective and healthy systems (Kashef, 2016).

The word "Livable" describes an uncommon state of well-being in a generalized manner, non-specific way, whereas the word "urbanity" has close relationships to "livability." The expressions "urbanity" and "refers to the characteristics of city residents" have been used in parallel in their descriptions by historians, urban experts, and planners alike. The American Heritage Dictionary defines "culture" as a set of behavioral habits, literature, values, and everything else we have learned through human experience and thinking as being included in the definition of "social inheritance." Culture connects us to others. Cultural groups have pride in their organizations, in their attitudes, and they feel comfortable with their routines. Cities are the culmination of all of their society's civilization and culture in a tangible way (Kashef, 2016).

The concept of "freedom in the city" emerged with the development of social, political, and physical arrangements that affect the urban structures of the medieval age. It's not unusual to see the ways cities of the Middle Ages react to various conditions in order to prosper, including climate, economy, and society. The two things that distinguish cities from the countryside, namely, "house" and "market". The Renaissance City is considered the first example of urbanization. The Renaissance city was built on feelings of the community but was different from a clan, or family relations, and most important of all, property. This civic responsibility came about because of the city's socio-economic and political condition. Therefore, the city of the Renaissance was dominated by logic (Kashef, 2016).

Among the city's most significant accomplishments were the development of a new class of urbanites. In contrast to one's position in society and trajectory; while one's place in the caste system and one's ultimate goal will always be determined by birth, one's position in the city, which could be altered, one's goal within the urban class is potentially was completely up to chance. It was by his hard work in creating a better life for himself and those around him that he acquired a higher socioeconomic status, rather than provided to him by society. One who was able to do well in trade and industry would become a lower-, and upper-, and middle-class resident of the area. It can be said that private and public spheres were harmoniously organized through various systems, including trade unions, vocational schools, and professional societies, building blocks of normative, values, and civilization (Kashef, 2016).

The forces of modernity have restructured the social and spatial organization in cities the link between the public and private has been severed in the Renaissance City. Cityscape is no longer an ingredient of social interaction; streets and public spaces have lost their use as social components in cities. zoning has divided the city into a number of distinct districts We separated Kashif's distinct functional and socioeconomic classifications. Culture has become polarized between the public and private sectors, creating metropolises lacking in connection with cities. For example, in 1800, 6% of the population was in cities; in 1930, the number was up to 56% in the cities had doubled. In addition, between 1950 and 1990, the urban population grew from 64% to 75% (Sullivan, 1996). almost three-quarters of the people in Europe now reside in cities (Kashef, 2016).

Such a large percentage of the population residing in cities makes city livability an even more crucial problem, especially in regards to urban livability. He argued that urban legibility (path, node, edge, and district) could influence and help improve the everyday life of city residents. He said that moderns isolated city functions and decoupled them, causing many problems by eliminating the interconnections which were vital for producing life (Alexander, 2019). when describing in his book, "The Death and Life of Great American Cities," he provided a set of guidelines for urban design for the maintenance of the urban quality of life. she pointed out the fine-grained city grid ironing, dense city-building, and a balance of commercial and residential locations (Wendt, 2009). The importance of form in

cities was acknowledged by Stirling (and others) and Koetter (1978) who suggested the “using the existing fabric of a city” and “creating a new form” to fabricate a “collage.” one the urban-planning approach, which has recently reentered to prominence through New Urbanism, represents a combination of conventional and contemporary design and planning approaches, and includes strictures in addition to consistency (Kashef, 2016).

placing structures and neighborhoods that facilitate easy access to work, school, the park, and one's home is a key component of modern urbanism. Boulevards that were arranged with small retail shops, cafes, parks, and other entertainment venues form the spinal cord of urban areas. in terms of sustainability and economic vitality, social cohesion and civility are granted as secondary by-products of urban systems Smart growth, transit, smart growth, and urban transect architecture, among others, have been presented to help make more sustainable cities (Kashef, 2016).

Topics at the international making cities livable conference (IMCL) are about the importance of public transit, bike networks, for people to be able to bicycle comfortably, and having a positive impact on youth, and for fabric-oriented cities. New urbanism is, focused on maintaining the downtown area, creating pedestrian-scaled areas, and creating open spaces where people can engage in farmers' markets, festivals, and human-scaled public places where people and life thrive. In order to get back to our ideals of urbanism, our cities should be rebuilt so that they are ecologically sound, and to recapture the community that was lost because of this (Kashef, 2016).

The modernist approach of making buildings (conceptual structures) has been criticized for making urban spaces seem sculptural. not all cities seek to revive urban vernacular practices, nor attempt to understand humanity in public spaces (Kashef, 2016).

2.7 Urban Open Space Principles

Some design and redevelopment concepts can be implemented throughout the board, but others are specific to each location, a good urban open place is distinguished by:

- **Dynamism:** Locations should have their own identity, adapting to distinct cultures and with significant fluctuations.

- There should be clear distinctions between public and private space, and consistency of buildings should be encouraged.
- Places with various demographics like the disabled and elderly should have quality grounds that are appealing and successful for all users.
- to make the process of movement simple A priority should be given to places, rather than automobiles, which should be integrated with land use and transportation modes.
- Location: A picture that's good to look at, simple to recognize, and meaningful to visitors should be included. They should put visible signposts along their roads so people can know how to get where they're going.
- flexibility: The organization should be able to change along with changing trends in the economy, society, and the technologies it employs.

Those places can have a wide variety of choices. The availability of local activities and resources must be well planned to meet the varied needs of all segments of society. These fundamentals of creative urban design are presented. links, connectedness, and accessibility, Usefulness, activities, period of these four primary design elements, protection, beauty, and cleanliness are critical, while convenience and order can be simply ignored. In terms of friendliness, interactivity, and assortment of people, sociability, are "real dimensions of life.". The methods of great public spaces develop underlying ideas. The world knows more about this issue than we do. The work you are doing is not a development, it is a rebirth. We still hear it said that you can only do it on your own. incorporating the interactive process. You can see a lot simply by observing; having a vision is important in Interpreting thoughts into action. In the absence of form, the aim doesn't mean much (Burcu Akinci, 2010).

Eleven important elements have been established that will help turn public spaces into lively ones, such as parks, plazas, highways, and indoor areas into popular neighborhood destinations that use common attributes in the creative process in order to produce a successful public space. When speaking of the consistency of the landscape for pedestrians, one refers to the fact that keywords are utilized (Burcu Akinci, 2010).

2.7.1 Evaluation necessity of Urban Open Space

Since they note that a design is never complete, they also claim that it is “always evolving.” The results of past studies show that assessment and re-design of public spaces are essential to their long-term health. There is a significant difference between short-term and long-term planning. Additionally, environments need to be reviewed and redesigned to stay current with the ever-changing needs of the public. In a changing world, one can be anchored to his or her personal history by means of a continually used public space. Combining traditional training methods with modern ones to offer a faster, more efficient education is very challenging for educators, as there is not much training common ground between cultures of the world today (Burcu Akinci, 2010).

2.7.2 Indicators of Livable Urban Open Space

Project for public space studied about the community uses open spaces, they have expressed the quality of a space or an area as: “image and comfort”, “activity and use”, “connectivity and access”, and “socializing”. This indicates Livable spaces are calm spaces having an exceptional image. Having a connection with each other can lead a user to have different activities in every direction. They partake in numerous routines and are available- where people are involved in events. After all, livable spaces are friendly places where people meet each other and take people when they come to visit (Sara Amare, 2014). Based on the indicators it is efficient to evaluate used Urban Open Space for a better understanding of its current situation which leads one step closer for enhanced future renovation.

CHAPTER 3

LIVABILITY OF URBAN OPEN SPACE IN CITIES

3.1 Urban Open Space in a Global Context

The city's shape and function are more or less universal. Most cities have the core characteristics of a Renaissance city, such as roads, squares, blocks, and community structures. The urban form has evolved with time; it is now less rigid than earlier metropolises, nevertheless, it is still a substance of the equivalent materials grouped in an area, though with minor differences. The cities are not solitary about building; it is correspondingly, as Jane Jacobs distinguished 55 years ago, about communal life and communal matter, the link amongst the community as well as among persons and the outer building, and the necessity of public areas for events and communication. The cities also serve as a means of managing a public life and harmonizing private and public benefits. The universal shape of urban, predominantly in its tighter Renaissance construction, has drawn a lot of interest in wide-ranging, and an urban area as a social gathering particular space.

Local factors like geography and climate have received less consideration. Of course, road life and communal area events diverge depending on resident factors such as height, temperature, and population density. Buildings can be outfitted differently depending on the weather. Despite their adaptability to local circumstances, towns all over the world share a lot supplementary than they don't. Their fundamental form, as well as the interplay between public and private urban areas, is the same. A Mediterranean climate, it seems evident, allows for a sociable street life that is not conceivable in other northern European climates.

Local versions exist, such as in Kiruna, northern Sweden, which is situated on a mountain gradient, has slighter winter temperatures, and a road outline that trails a landscape (bent and curved roads) which provides windshield and diversity. Nonetheless, the northern city's core areas frequently give attention back to the Renaissance era, with a regular road layout and communal spaces that are, to some degree, poorly suited to the town's environment and site (Arvanitidis & Papagiannitsis, 2020).

3.2 Barriers of Livable Urban Open Space in Cities

One of the main challenges that contribute to the under-utilized or unused area is the separation of architectural, architecture, and community development. These anti-spaces are known by a variety of names, like vacant city, lifeless, or overlooked areas, and have no distinct form or measurement. As a result, they lose their sense of equilibrium, well-being, and environmental cues, or they lose their memory and meanings. This language is used on the ground to describe "leftover areas," "highway vacant," "void properties," "declined waterfront," and "sunk squares," and "huge parking spaces". These contain parks, sidewalks, and civic green places that previously acted as a communal gathering area for a city on a social basis. Recent inclinations aim to leverage and improve those vacant spaces in the public domain through unconcealed citizen interaction, despite the fact that public participation is critical to any project's progress (Tajima, 2003).

3.3 Case Studies of Developing Country Livable Urban Open Spaces

3.3.1 Case one Tapis Rouge public space (Public Space)

It is located in Haiti, designed by Emergent Vernacular Architecture (EVA Studio) in 2016. It is one of the numerous open spaces in Haiti and was constructed within a program named LAMIKA, which is "A healthier life in my neighborhood". The arrangement, sponsored by the American Red Cross and applied by Global Communities, with the objectives of building a multipurpose area that enable and encourage communal unity using an all-encompassing method (Archdaily, 2021).s

The project is integrally society-based and comprehends the community area as an anthropological space where its character and public associations raise. Through a partaking a method and introduction of communal assignation at the center of the building progression, this open space intends on giving reframing power to a resident and to deliver the inhabitants with a feeling of possession, uniqueness, and importance. The aim was to generate a secured and clean atmosphere, that helps in decreasing violence, crime, and isolation behavior (Archdaily, 2021).

The arrangement and the artistic planning have remained made by the public. An outdoor amphitheater proposed intended for a communal meeting, defines the middle point of the area. Scattered from place to place the boundaries of the seating steps are numerous Flamboyant when completely grownup, shade the community as of sunlight rays. Circular loops outside describe parts inside the square. The area is engaged by open-air workout gear and seating places. On the other hand, nearby the divider, the locally-made blue pavements give way to verandas of plants, which are diverse vegetation. Through the upper point, a line of palm plants hides storing containers next to the water supply position. The well that provides the containers and place transports water from 100 m underneath place. The income produced after the sales of water will be into upholding the open space.



Figure 3. 1: Tapis Rouge public space (Stefani G., 2016)

Table 3.1: Evaluation of urban open space based on livability space attributes (Author, 21)

Name	Tapis Rouge public space	Haiti	2016		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)			✓	
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)		✓		
Activities and Usage					
1	Embrace all types of people and activities			✓	
2	Encompass services that support the open space	✓			
3	Specified area for mass gatherings			✓	
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities		✓		
Socializing					
1	Sitting positioning that activates for group discussions	✓			
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.3.2 Case Two National War Memorial (Open Space)

It is located in New Delhi, India, designed by WeBe Design Lab in 2019. The dedicatory is development is based on the renaissance of the individuals' unacknowledged heroes through their history, voyage, and wars interpreted as space expression. A conclusion to a historic Rajpath spreading over the India Gate, the Countrywide War Honoring is an outdoor designed area above 42 acres. Regularly undistinguishable although sturdily existing, it is a half underground project residual of a peoples' place but with a diverse depth of demonstrative mass. Advancing acts of the guard, loss, courage, and being memorable interpret as circular planning that is 'Thyag Chakra' grasps the designation of every deceased fighter that becomes added element in the nation's protective wall (Archdaily, 2021).

The historic India Gate ridges around 50,000 people per day. Insertion inside C Hexagon, grasslands remained reserved to stay lively open spaces to be enjoyed, gather, rest, and other activities. This legislative hall compound has a chief axis, the Rajpath- Ritualistic track starting at the President's house, that rounds crossways and stops at the India Gate. An intersect-relation at the center of the New Memorial: The Yudhpath- is a symbolic settlement of the Rajpath (Path of life) with the Yudhpath (Path of war).

The illumination in the chief court about the everlasting flare commanders sidelong and top the structure feeling of infinity also it weakens. The Thyag chakra looks detached by a sequence of minor lights that look a lot like the oil lamps which are bright in recollection of the adored ones in all Indians. Strips of light within the stages generate a logic of evolution over the circular arrangement. The development does not have somewhat ambient light. As abundant as the light carried in appeal and importance, the dark completed the essential expression absorbing and deeper (Archdaily, 2021).



Figure 3. 2: National War Memorial (Madhumitha M., 2019)

Table 3. 1: Evaluation of urban open space based on livable space attributes (Author, 2021).

Name	National War Memorial	India	2019		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)	✓			
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)		✓		
4	Aesthetically pleasing (attractive hard and soft landscape plan)		✓		
Activities and Usage					
1	Embrace all types of people and activities	✓			
2	Encompass services that support the open space				✓
3	Specified area for mass gatherings		✓		
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities	✓			
Socializing					
1	Sitting positioning that activates for group discussions			✓	
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.4 Case Studies of Developed Country Livable Urban Open Spaces

3.4.1 Case three Khokhlovskaya Square (Square)

It is located in Moscow, Russia, designed by Djao-Rakutine, Strelka KB in 2017. The Square got established through Strelka KB in partnership by means of landscape architecture studio Djao-Rakutine. Writers within development sought to make an original kind of communal open space for Moscow that can drastically alter the method of cultural inheritance. Location of a building pit which stayed for about 20 years, minor archeological park unraveled: the new amphitheater forms, conserved portion of a White City wall part. In accumulation, plants stayed implanted within open space, and data attitudes, seats, and road lamps were mounted (Archdaily, 2021).

The important ideologies of Strelka KB are where capitals are not solely constructed nonetheless are likewise adjusted. Renovation development of Khokhlovskaya Square reproduces the main standards. It is essential to modify the associations among citizens city and societies, amongst city services and protestors, counting with the antique tradition. It is an exact combined effort that permits to brand of such fruitful developments.

The alteration of a prehistory discovery into the fundamental component of urban open space developed an outstanding case of the cautious and considerate method to the protection of social inheritance. Khokhlovskaya Square has turned out to be a new city focus which appeals altogether to the present public as well as vacationers and had been prearranged an increase to resident productions. Khokhlovskaya Square was similar success for the urban in contradiction of a continuing building location. In the first years of the 2000s, subversive vehicle parks were designed for the area, but the work was cut short in 2007 after the finding of a piece of a 16th-century White City fortress wall that pronounced an edge of medieval Moscow. The isolated building pit had an extended problem for walkers trekking along the Boulevard Ring. The innovative communal city space was applied in the ‘Moscow Street’ development presented by ISOCARP and Qatar Sustainability Award 2018 (Archdaily, 2021).

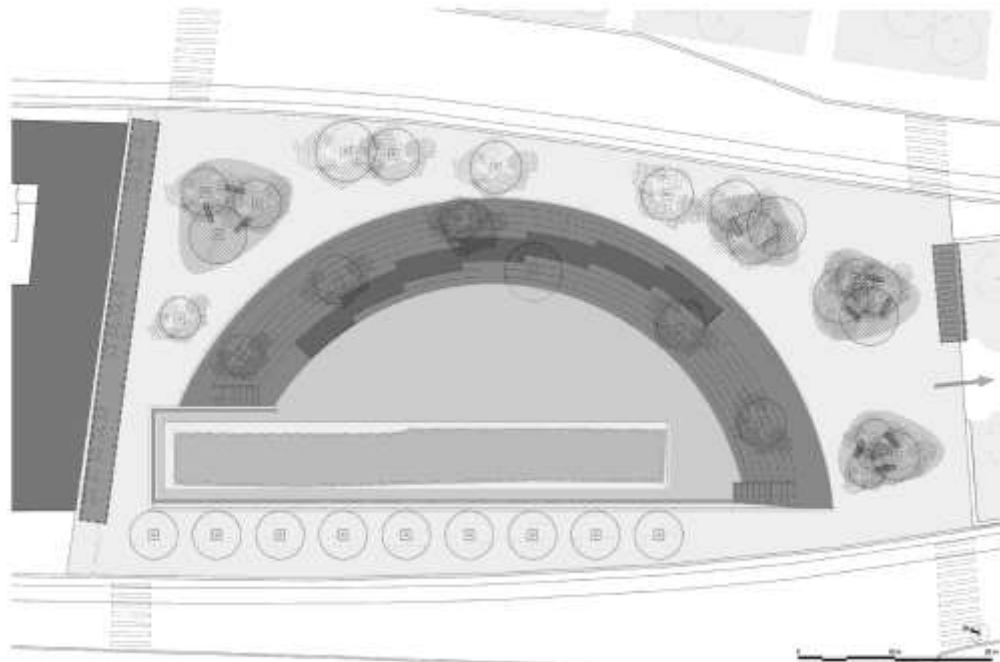


Figure 3. 3: Khokhlovskaya Square (Nazarov A., 2017)

Table 3.2: Evaluation of urban open space based on livable space attributes (Author, 2021).

Name	Khokhlovskaya Square	Russia	2017		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)			✓	
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities			✓	
2	Encompass services that support the open space			✓	
3	Specified area for mass gatherings	✓			
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition		✓		
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities			✓	
Socializing					
1	Sitting positioning that activates for group discussions			✓	
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.4.2 Case four Poljana Square (Square)

It is located at Šibenik, Croatia, designed Atelier Minerva, department of Architecture, University of Zagreb, School of Architecture in 2020. The new Šibenik square with an archeological park and a garage center beneath is planned as a combined city, communal and infrastructural ground location an open interchange amongst the medieval, contemporary, and modern city, generating a massive communal of astounding possibility that grasps the sky-high (Archdaily, 2021).

In the present-day urban construction, Poljana square is an unfenced lively area, interconnected with diverse paths and networks, an essential linking way for the capital's communal space. The location development mixes archeological park with the communal district and infrastructural logistic midpoint beneath. Spatial doublings system sets of communal meetings: exposed tribunes and steps, fountain, bridge, and shelter. Urban outlines form stiffnesses and dynamics in the stand while pebble grids with infrastructural cases allow a flexible group of the ground (Archdaily, 2021).

The exterior of the square overlays two links, a typical net and a flexible square ground of ideas with spatial intonations in angles that present the nearby landscapes into the area of the Poljana. The exterior is stimulated by motion guidelines documented in average life and antiquity and gathering area within them. Communicating interconnecting zones, space folds form prolonged, elevated exteriors on the rooftops of the domes. The covering, a detached active piece, offers a connection and describes the space borderline of the square, thus forming a discussion and continuousness of shapes in the present day (Archdaily, 2021).

The passively prearranged infrastructural ground noticeable in the square location, collection of linking places for the response of city furniture, permits for the relaxed conception of numerous occasion situations and creative presentations.

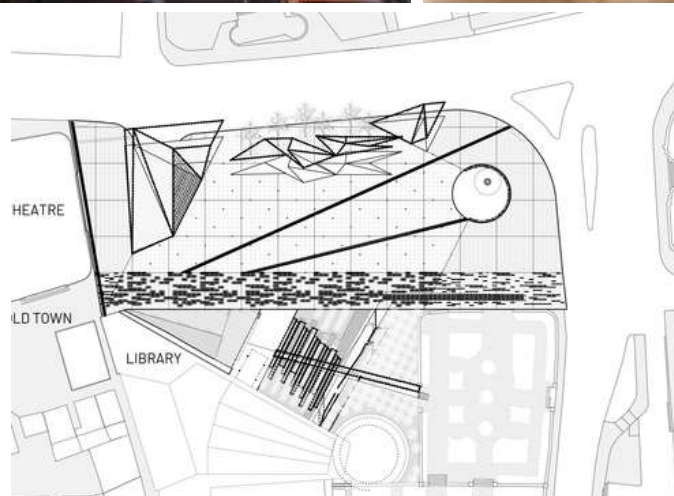
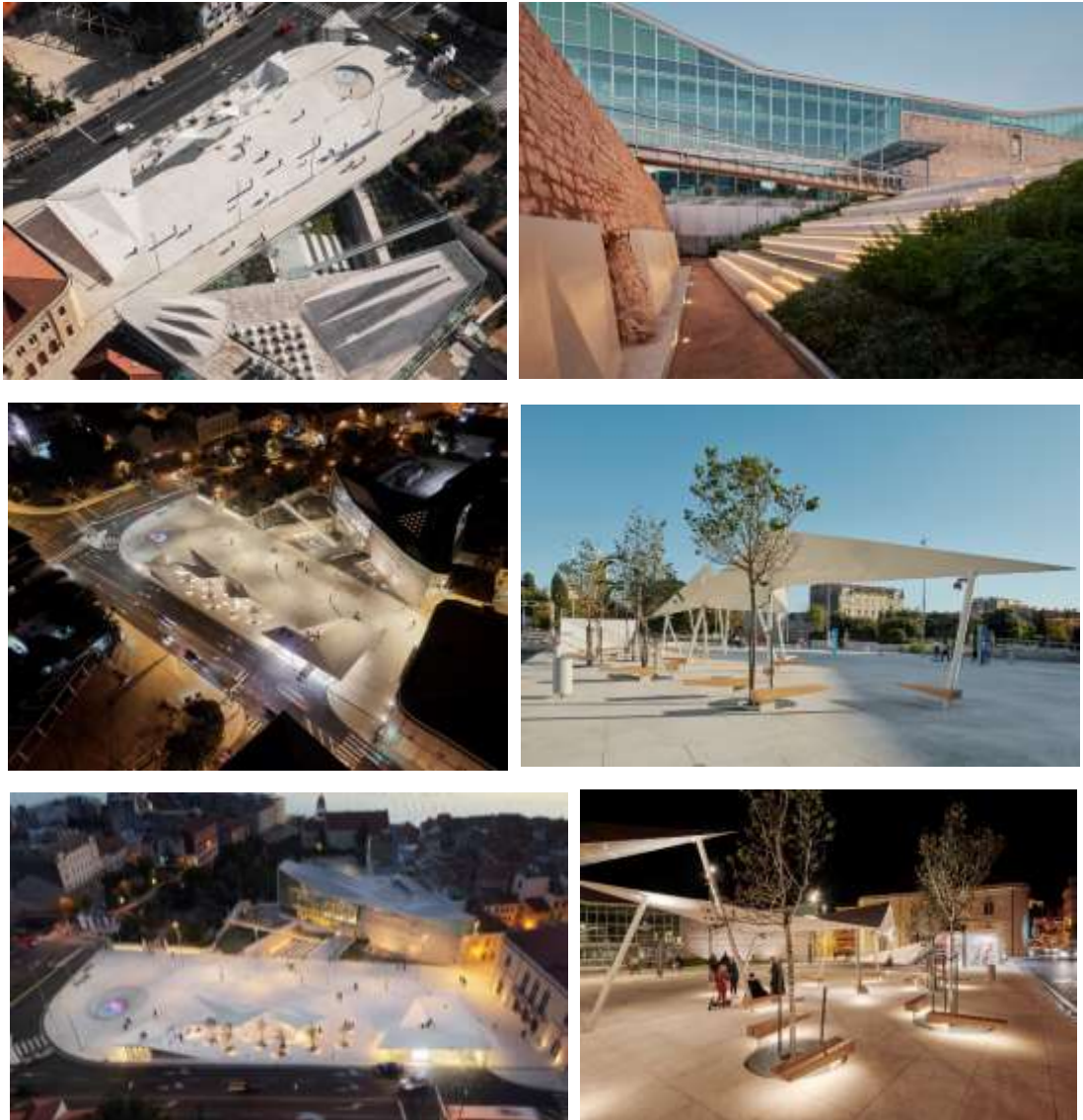


Figure 3. 4: Poljana Square (Husedzinovic E., 2020)

Table 3. 3: Evaluation of urban open space based on livable space attributes (Author, 2021).

Name	Poljana Square	Croatia	2020		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)	✓			
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)	✓			
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities		✓		
2	Encompass services that support the open space		✓		
3	Specified area for mass gatherings			✓	
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints		✓		
4	Provides an opportunity for walking, jogging, and other activities			✓	
Socializing					
1	Sitting positioning that activates for group discussions				✓
2	Allowance for cultural, religious celebrations or other gatherings			✓	

3.4.3 Case five Henri Dunant Place (Public Space)

It is located at Mantes-La-Jolie, France, designed by Espace Librein 2019. In Mantes-la-Jolie (Yvelines), the interference zone of the process is situated neighboring main district shops (fast food, supermarket, and cinema) but also a current development that is altered the presence of the area. The last, in the continuousness of the superstore, expand the viewpoint of the location Henri Dunant and nowadays highpoints the home of the half-prefect. Currently, the parking is in the core of the square and is distinct (Archdaily, 2021).

The plan, which is a portion of the Action Coeur de Ville development, thus contains making Place Henri Dunant a mainly pedestrian-covered area and improved linking to urban area through adjacent Cours des Dames. The sports also the road equipment will remain fixed and encouraged through city guidelines of the Cours des Dames.

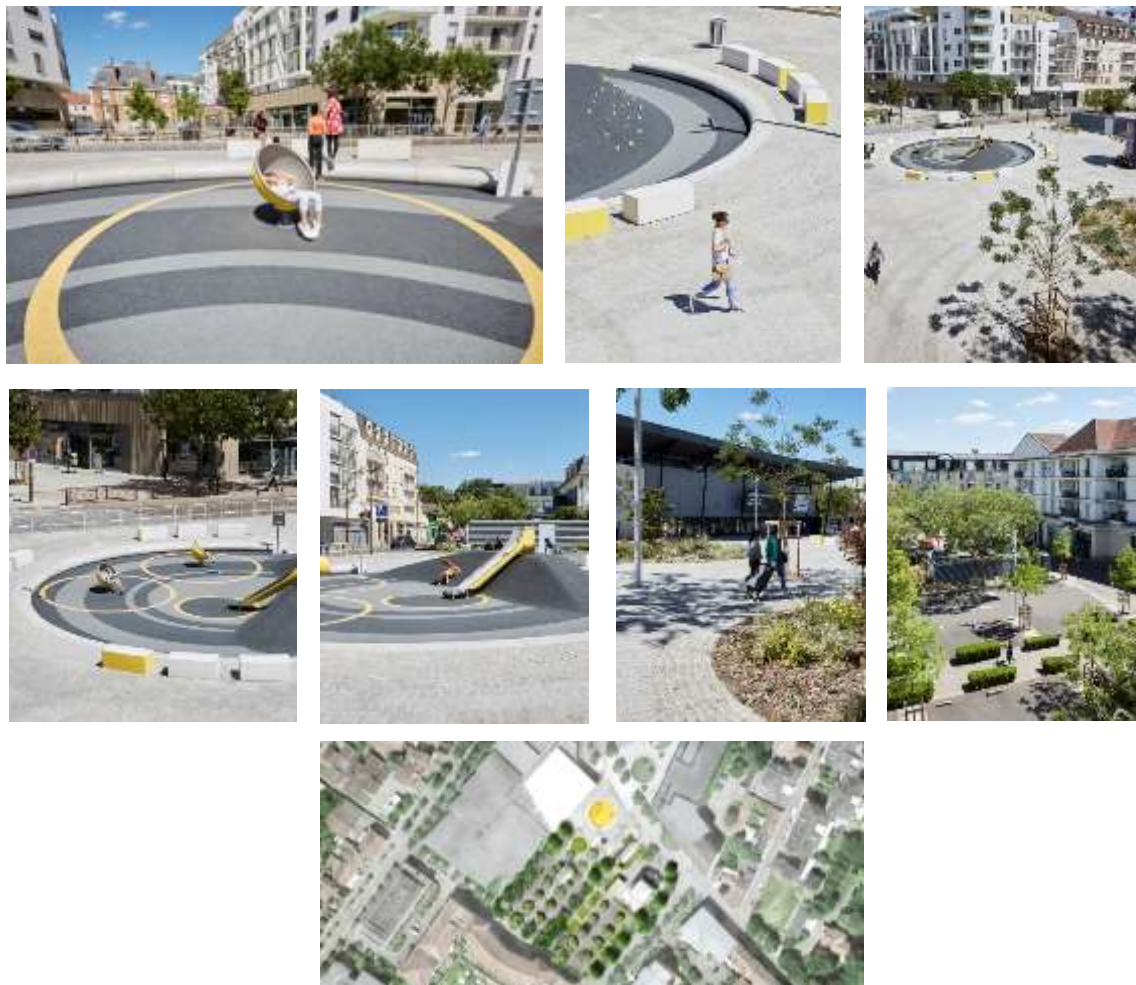


Figure 3. 5: Henri Dunant Place (Falsimagne J., 2019)

Table 3. 4: Evaluation of urban open space based on livable space attributes. (Author, 2021)

Name	Henri Dunant Place	France	2019		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)			✓	
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)			✓	
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities		✓		
2	Encompass services that support the open space		✓		
3	Specified area for mass gatherings			✓	
Connectivity and Access					
1	Incorporates eye-catching or interesting scene		✓		
2	Distinct space composition	✓			
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities			✓	
Socializing					
1	Sitting positioning that activates for group discussions				✓
2	Allowance for cultural, religious celebrations or other gatherings				✓

3.4.4 Case six Magok Central Plaza (Square)

It is located at Gangseo-Gu, South Korea, planned by Architects Wooridongin, 2019. The place is situated at the core of Magok New City and key place of circulation flow linking Magoknaru Station, Magok Station, and Magoknaru Station on the Airport Route. The location is positioned next to Magok Central Route going in the north-south route and Magok Central Route going in the east-west path. There is vegetation to the south-western of the location and Seoul Botanical Garden to the northeastern. Furthermore, it is enclosed by clinics, clothes shopping, workplaces, and examination hubs that support nearby housing developments (Archdaily, 2021).

The public space is a ductile urban space that can house these facilities, by replying to the movement of the public in the environments relative to bringing an immobile project. The 60-meter width recessed square is constructed at the intersection of the 3 places, intertwining the external and underground stages along the exits of the place, making a good space understanding. The exposed public space can house several events such as occasions, acts, and shows (Archdaily, 2021).

The modernized form of the underground entryway resembles the nearby site and gives a feeling of harmony in the square. The method was shaped by uplifting the area so that it assists as the background for the adjacent city. Shade plants are lightly set along movement pathways to deliver the essential vegetation while leaving as much area as probable for social events (Archdaily, 2021).

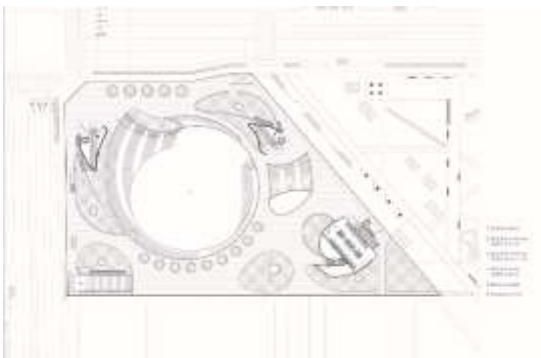


Figure 3. 6: Magok Central Plaza (Kim J., 2019)

Table 3. 5: Evaluation of urban open space based on livable space attributes (Author, 2021)

Name	Magok Central Plaza	South Korea	2019		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)	✓			
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)			✓	
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)				✓
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities			✓	
2	Encompass services that support the open space		✓		
3	Specified area for mass gatherings			✓	
Connectivity and Access					
1	Incorporates eye-catching or interesting scene		✓		
2	Distinct space composition			✓	
3	Clear linkage and joints			✓	
4	Provides an opportunity for walking, jogging, and other activities			✓	
Socializing					
1	Sitting positioning that activates for group discussions			✓	
2	Allowance for cultural, religious celebrations or other gatherings				✓

3.5 Case Study of Renowned Urban Open Spaces

3.5.1 Case seven Gardens by the Bay (Park)

It is located in Bedok South, Singapore, designed by Grant Associates in 2012. Gardens by the Bay is one of the major greenery programs in the world. The location has a total of 101 hectares including 3 separate parks – Bay South, Bay East, and Bay Central. Situated on cultivated property in Singapore’s new downtown at Marina Bay, the area delivers an exclusive leisure site for local and global guests (Archdaily, 2021).

The program is an important share of Singapore’s “City in a Garden” image, is planned in promoting the shape of urban internationally whereas exhibiting top agriculture also garden creativity. Using the innovation from a shape of an orchid, the architects’ main design is a various combination of landscape, environmental management, and technology. Spectacular architectural buildings are shared with an extensive variability of gardening exhibitions, sound shows and daylight, forests, lakes, occasion areas, and a host of feasting and retail contributions. The entire proposal has a bright ecological infrastructure, permitting scarce vegetation, that could not typically be raised in Singapore to ornament, giving ease and edification to the country (Archdaily, 2021).

Two massive biomes planned by Wilkinson Eyre Architects the Flower Dome and the Cloud Forest Dome show flowers and plants from the Mediterranean climatical areas and Tropical Montane surroundings and offer a year-round amusement space within the Parks. In the collection of form flowering and tinted greenery scenery, they produce a display of color and surface, and scent within the Gardens, giving a fascinating experience for visitors (Archdaily, 2021).



Figure 3. 7: Gardens by the Bay (G. A., 2012)

Table 3. 6: Evaluation of urban open space based on livable space attributes (Author 2021)

Name	Gardens by the Bay	Singapore	2012		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)	✓			
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)			✓	
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities	✓			
2	Encompass services that support the open space	✓			
3	Specified area for mass gatherings	✓			
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints		✓		
4	Provides an opportunity for walking, jogging, and other activities	✓			
Socializing					
1	Sitting positioning that activates for group discussions		✓		
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.5.2 Case eight St. Peter's Square (Square)

It is located in Rome, Italy planned by Donato Bramante, Michelangelo, Carlo Maderno, and Gian Lorenzo in 1667. Expanding just in the outdoors St. Peter's Basilica, St. Peter's Square is a big, oval Square enfolded by a Doric gallery about 4 pillars deep. The method of the Square from the Basilica is a trapezoidal square that gathers the Basilica into its central viewpoint. Settled in the amusing, holy, and significant Vatican City, the Basilica and the Square are surrounded by numerous travelers from everywhere in the world. Saint Peter, the supporter of Jesus considered by Catholics to be the initial pope, is the namesake of both the Basilica and the Square. Gian Lorenzo Bernini planned the Square about an ancient Egyptian Pillar that was created in the 1500s. Fontana del Bernini, a stonework fountain planned by Bernini in 1675 is a mockery of Fontana del Maderno, a stonework fountain planned by Carlo Maderno in 1613. Both these fountains act as the 2 attention grabbers of the Oval Square while the Pillar grows from the ground in the midpoint (Archdaily, 2021).

Bernini planned the arcades neighboring the Square to appear passive in the attendance of the noble decoration of the Basilica. The humble Doric pillars produce a visual impression as one transfers through the Piazza. The pillars also look to change as a spectator's viewpoint moves, making an exciting practice for the people. Rome and Vatican City have had a big impact on the Classical types of Architecture even in the recent world. St. Peter's Square is as busy today as it used to be at its outset and is a classic instance of effective community space (Archdaily, 2021).



Figure 3.8: St. Peter's Square (Mark M., 2019)

Table 3. 7: Evaluation of urban open space based on livable space attributes (Author, 2021).

Name	St.Peter's Square	Italy	1667		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)			✓	
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities	✓			
2	Encompass services that support the open space			✓	
3	Specified area for mass gatherings	✓			
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities	✓			
Socializing					
1	Sitting positioning that activates for group discussions				✓
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.6 Case Study of Most Recent Urban Open Spaces

3.6.1 Case nine Yujidao Park (Public Space, Park)

It is located in Nanchong, China designed by BLVD International in 2021. Nanbu County, Nanchong has been identified as the "Subsequent City of Chengdu-Chongqing Circle" in Sichuan.". A past of the south, the attraction of the water over the years", for thousands of years, aquatic of the Jialing River has been remaining, benefiting all, and the individuals of northern Sichuan has prospered here and composed a magnificent part. In a belief of regarding wildlife and proceeding into forthcoming, project places forward a notion of "Jialing Pearl, Brilliant Riverside". Introducing the Jialing River aquatic into a place to create Nanbu Shuicheng that the urban is on the aquatic and the aquatic is in an urban, forming a nearer and innate involvement for public's water events (Archdaily, 2021).

The building of the river system in the region, which serves as a visual link between the ancient and modern cities, completely mixes water sources with the interior of the location, achieving the urban growth aim at linking the city and curving water, intertwining green and blue, and synchronized naturally. It attempts to construct a gorgeous image roll of Nanbu in a daze by combing the terrain environment and adding greenery to improve the natural setting. The building of contemporary landscape venues increases the city's quality and, as a result, produces a unique area in Nanbu for the public's relaxation, picture presentation, and public festivities (Archdaily, 2021).

The scarcity of evolution from inland to riverfront plants have resulted in the creation of significant dashes of design belts lengthways the river, as well as a lack of attention on landscape ecology, in the image of the present waterfront scenic belts that concentrates on swamp creation, the Yujidao Park development finished the conversion region design ingeniously with primary forests, reforestation, artificial plantations, and distinctive landscape woods, fully accomplishing the shift from natural to mock landscape (Archdaily, 2021).

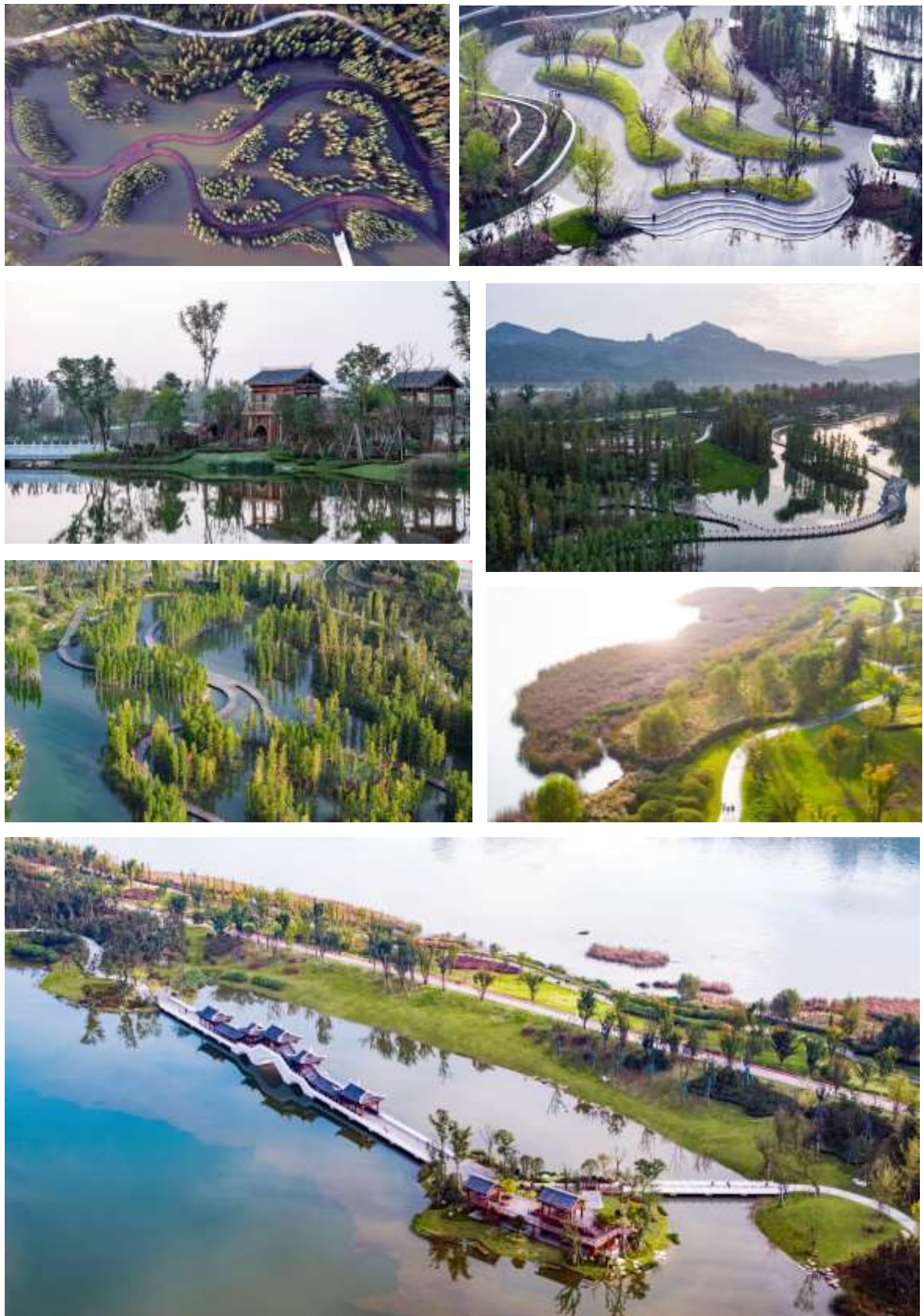


Figure 3.9: Yujidao Park (S., 2021)

Table 3. 8: Evaluation of urban open space based on livable space attributes (Author, 2021)

Name	Yujidao Park	China	2021		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)		✓		
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)			✓	
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)		✓		
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities	✓			
2	Encompass services that support the open space		✓		
3	Specified area for mass gatherings			✓	
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints	✓			
4	Provides an opportunity for walking, jogging, and other activities	✓			
Socializing					
1	Sitting positioning that activates for group discussions			✓	
2	Allowance for cultural, religious celebrations or other gatherings			✓	

3.6.2 Case ten Al Fay Park (Public Park)

It is located in Abu Dhabi, United Arab Emirates designed by SLA in 2021. Al Fay Park is a model change in how to plan and execute nature in the Middle East's congested megacities, with its novel biodiversity, microclimate, and social activities. SLA, a Danish nature-design duo, created the park. In Abu Dhabi, a new type of urban nature park has opened its doors. The water-guzzling, lifeless 'Las Vegas landscapes' of the past are no longer. Enter Al Fay Park, a new 27,500-square-meter public park in central Abu Dhabi that heralds a new era in Middle Eastern city planning, one guided by nature rather than famous structures (Archdaily, 2021).

SLA's in-house biologists and planting specialists conducted extensive study studies of the region's unique ecosystem and animals to create the park concept. SLA's own internal plant book contains research on all of the UAE's natural plant species, their ideal rising and existing circumstances, and how to incorporate them into the plan. "In Abu Dhabi, Al Fay Park is a new form of forest park. We build a new paradigm for how to think about and build the public domain in the Middle East based on our vast study into the region's flora and wildlife. "Al Fay Park is a celebration of Abu Dhabi's natural and cultural heritage, as well as a perfect illustration of how to optimize climate action, enhance life-quality, and significantly boost the biodiversity of a whole city – all on a previous sand location," says Rasmus Astrup, Design Principal and Partner at SLA (Archdaily, 2021).

Al Fay Park, the UAE's first biodiversity park, comprises over 2,000 native trees and shrubs, including the national Ghaf trees, which were replanted from desert nurseries into the park. All of the trees and shrubs were specially picked to enhance biodiversity for both plants and wildlife, as well as to promote natural cooling throughout the park. The resultant microclimate minimizes road noise and warmth while evoking a forest-like atmosphere. The park's sloping entrances funnel the cooler southern wind down into the park, while native grasses and plants keep the sand out (Archdaily, 2021).

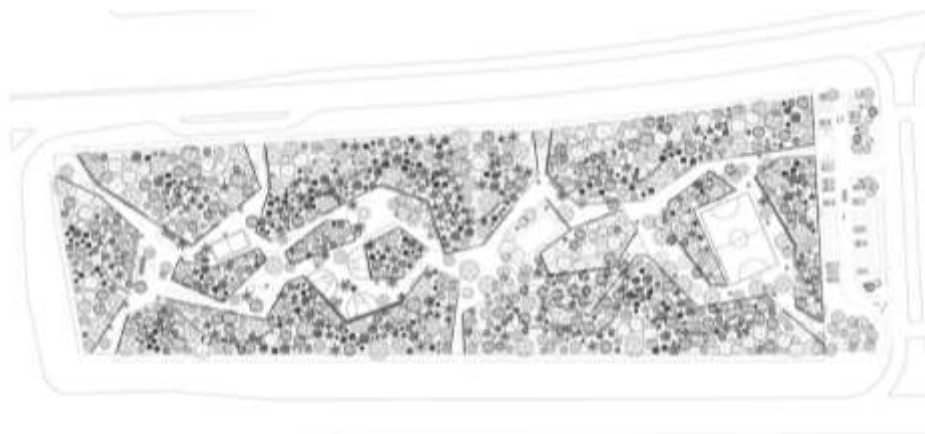


Figure 3.10: Al Fay Park (Handforth P., 2021)

Table 3. 9: Evaluation of urban open space based on livable space attributes (Author, 2021)

Name	Al Fay Park	U.A.E	2021		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)	✓			
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)	✓			
3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)	✓			
4	Aesthetically pleasing (attractive hard and soft landscape plan)	✓			
Activities and Usage					
1	Embrace all types of people and activities		✓		
2	Encompass services that support the open space		✓		
3	Specified area for mass gatherings	✓			
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition	✓			
3	Clear linkage and joints		✓		
4	Provides an opportunity for walking, jogging, and other activities	✓			
Socializing					
1	Sitting positioning that activates for group discussions	✓			
2	Allowance for cultural, religious celebrations or other gatherings	✓			

3.7 Evaluation of all Case Studies

The urban open spaces were chosen from diverse portions of the world for better understanding and utilization of the spaces. In doing so the urban open spaces give various development concepts that contribute to the current conditions of public spaces. In order to gain the data needed the case studies are evaluated individually and all together.

- Case study one, Tapis Rouge public space, Haiti – it is an open plan with a good source of lighting which influences the safety aspect, but it lacks a proper shading that can protect the users from unwanted weather. The sitting arrangement paves the way for group gatherings which helps in making it socially inclusive. Also, the Square consists of workout equipment that is providing a service to the neighborhood.
- Case study two, National War Memorial, India – the memorial has a museum with access which can be used by mobility-impaired, in addition, it has a spacious area that is great for cultural events and social gatherings while consisting a peaceful space for individuals but lack shaders that can shield the users from all types of unwanted climate. The public space however does not provide an additional service that caters to the needs of the society.
- Case study three, Khokhlovskaya Square, Russia – the square has accessible walkways that are inclusive to most of the social group and incorporates a museum that educates the history of the site and country although it lacks weather shelter.
- Case study four, Poljana Square, Croatia – the square embraces numerous people through its unique architectural design, proper shade for different seasons, distinct space composition, and safety but is in shortage of communal sitting space.
- Case study five, Henri Dunant Place, France - the site encompasses fun playing ground for children to enjoy which is safe and creative, and have a clear link between the walkways but there is the scarcity of sitting area for individuals and groups.
- Case study six, Magok Central Plaza, South Korea – the plaza occupies different services that help the society in utility and good lighting for better security but the absence of shading system from undesired weather conditions is the pitfall of the public space.

- Case study seven, Gardens by the Bay, Singapore – the urban open space contains an interesting architectural form that is functional and aesthetically pleasing, vast space for a social gathering is also encompassed within, and good lighting system that enhances night safety.
- Case study eight, Peter's Square, Italy – the square has an eye-catching design that has been designed many years ago and is still active as the day it was opened and is preserved as history but the downside of the square is the lack of adequate sitting area also protection against various weather changes.
- Case study nine, Yujidao Park, China – it is a brand-new park located in China which have a layout that is perfect for jogging and other similar activities with long integrated sidewalks that have a view of the forest and the water body found nearby with sitting spaces at specific intervals although it does not encourage for group gatherings.
- Case study ten, Al Fay Park, U.A.E – the park incorporates sports playing field that encourages the youth of that city and sitting arrangements for viewers and walking paths for other activities and shading for protection of sun glare.

3.7.1 Comparisons of case studies and the livability

As shown in Table 3.11, the case studies were all taken for comparisons for a better understanding of which cases are preferable, up to date, and proper for planners to consider and learn from.

A lot can be taken into consideration when urban open space is being designed for the public and the purpose of the comparison is for a better understanding of how spaces are utilized all over the world and to have a better grasp of the necessity, and continuity to future generations.

Based on the comparison made between the case studies it indicates that case study seven and ten have an improved understanding of the physical design of the urban open space concerning the society need but can be also developed as time goes by to be up to date and cater the requirement of various generation.

Table 3. 10: Comparisons of livable urban open space between the case studies (Author, 2021)

No	Name	Year	Livable space Attributes			
			Image and Comfort	Activities and Usage	Connectivity and Access	Socializing
1	Tapis Rouge public space, Haiti	2016	Fair	Fair	Excellent	Excellent
2	National War Memorial, India	2019	Good	Good	Excellent	Fair
3	Khokhlovskaya Square, Russia	2017	Fair	Fair	Good	Fair
4	Poljana Square, Croatia	2020	Excellent	Good	Good	Fair
5	Henri Dunant Place, France	2019	Fair	Good	Good	Poor
6	Magok Central Plaza, South Korea	2019	Fair	Fair	Fair	Poor
7	Gardens by the Bay, Singapore	2012	Excellent	Excellent	Good	Excellent
8	Peter's Square, Italy	1667	Fair	Good	Excellent	Fair
9	Yujidao Park, China	2021	Good	Good	Excellent	Fair
10	Al Fay Park, U.A.E	2021	Excellent	Excellent	Good	Excellent

CHAPTER 4

METHODOLOGY

4.1 Research Approach

This research is proposed to regulate the responsiveness and awareness of Urban Open Space within Addis Ababa, the Meskel Square on the characteristic of Liveable space. Currently, a few remaining open spaces are fully functioning in the city from which one Square of these urban open spaces will be picked and examined using post-occupancy evaluation (POE).

The Post-Occupancy Evaluation (POE) process is a mode to evaluate if the plan is operative. Post occupancy evaluation is explained as “a method of analytically assessing the endurance of structures later they have been built and used for some period. It is mainly emphasizing indoor environments and buildings, though the implementation of outdoor areas or parks is comparatively restricted.

Outline of POE procedure can be approached through participant observation, a preliminary location opinion, practical subareas of the area, communications from management, performance suggestions, motion recording, interviews, information summary, and use investigation, and the difficulty description and reform and concluded statement, according to Cooper Marcus and Francis (1998). The POE has the potential to administering plan services more productively, improve appointing development, enhancing user necessities, advancing administration procedures, supplying information for plan guides, and directing of renovation (Burcu Akinci, 2010).

This research highlights the issues faced by the architect and users when designing open spaces and an appropriate solution will be recommended. This research methodology also discourses the data sources that is used in this research, sample frame, the procedure of sampling that this study approves, likewise analysis, and presentation of data is conducted to evaluate the Meskel Square.

4.2 Research Design

This study carries out the Qualitative and Quantitative research method for a good consideration of a notion on the livability of Urban Open Space with the context chosen. The

Qualitative method elaborates the concept of livability and in relation to public spaces by reviewing numerous works of literature. A qualitative approach was applied to inspect the case area. The implementations stated beneath are applied to clarify the magnitudes of the case area are:

- **Site Investigation:** It is typically implemented to get a primary figure of first-hand data, both qualitative and quantitative. The procedures applied in a site investigation, which includes social remarks of the site, taking pictures, vivid documents, and particular surveys, demand for direct interaction with the individuals and therefore offer the chance for insight-based narratives and direct pieces of knowledge. It is tremendously beneficial due to the delivery of a wider and more combined image of the landscape to the investigator; the value of the built environment and structures; the combination of people- ages, races, genders-and a sign of their financial place. Most significantly, site visit offers responses to inquiries about the standard of living in the location.
- **Visuals:** Pictures of Meskel Square taken at various angles showing the variations helps visually to explain the inscribed material.
- **Questionnaires:** questionnaires are operative to collect qualitative data. In this study, various types of the questionnaire were used from open-ended to closed-ended questions. The questions are subdivided in to 4 catagories, the first subsection is personal information which askes about the general information about the participant individual life, second is the social information which asks about the socializing character of the individual, third is the data about Urban Open Space which evaluates the respondents knowledge on public open spaces, and the fourth subsection is about Meskel Square user experience and how they rate the square. The questions are subdivided for enhanced understanding of the selected case area and the view point of the users where 230 respondents participated.

4.3 Source of Data

In this study, the combination of primary and secondary information sources concerning this research is compulsory. Internet sources and administration offices are the Secondary information bases applied. While personal site condition inspection and questionnaires are

the primary information used in this study.

- **Primary Data**

In this investigation, prime data was accomplished using questionnaire management to the public associated with this study collected with site surveys such as tangible surveillance. Thus far, individual interviews of the public are applied in this investigation to gather the suitable information desirable.

- **Secondary Data**

This information was collected from the basis of past works, publications, and internet websites which stretch lighter in evaluating the present state of the Square in Addis Ababa.

- ✓ **Devices applied**

This research encompasses many devices which were activated in information gathering for both prime and secondary data. The devices applied are; questionnaire is used as the chief tool, site surveillance, governmental offices, Global Proxy System (GPS), telephone conversation, and picture-taking devices.

4.4 Sampling Procedure

The sampling procedure used in this research is applying the standard questionnaire number that is 230 participants. Numerous features were engaged into thought in defining the proper selection method that drives to produce an optimal outcome in this research. Beginning with Questionnaire administration using Random Sampling Techniques in the study zone that are directly involved with the Square. This is the best technique to obtain the target objective and purposes of this study.

4.5 Data Analysis

Descriptive statistical data examination was implemented for the reason that it is the appropriate technique for accomplishing the purposes of the research. Numerous internet applications are applied also in the research due to its consistency to carry out the investigation and complete it within the specified period. This software system includes google form, Microsoft Excel and Word and PowerPoint, editing pictures, and presentation slide preparations.

4.6 Data Presentation

The information examined is demonstrated employing tables, diagrams, maps, and photographs. The clarifications of each information obtained are beneath it.

CHAPTER 5

THE CASE ANALYSIS OF MESKEL SQUARE

5.1 Overview of Meskel Square

Meskel Square is found in the city of Addis Ababa, Ethiopia. Ethiopia is non-coastal situated in the horn of Africa having a multilingual nation, with more than 80 ethnolinguistic groups. The country partakes in the maximum UNESCO World Heritage Sites in Africa. The culture of the country is various and mostly organized along with ethnolinguistic positions (Wikipedia, n.d.).

Addis Ababa lay at an elevation of 2,355 meters (7,726 ft), sited at $9^{\circ}1'48''N$ $38^{\circ}44'24''E$. The city is placed at the end of Mountain Entoto and is a portion of an area of land that separates water flowing to different rivers for the Awash. Beginning at the bottom place, about International Ethiopian Airport, 2,326 meters overhead sea level in the southern border, Addis Ababa increases to 3,000 meters or more in Mountain Entoto (GNS: Country Files, 2013).

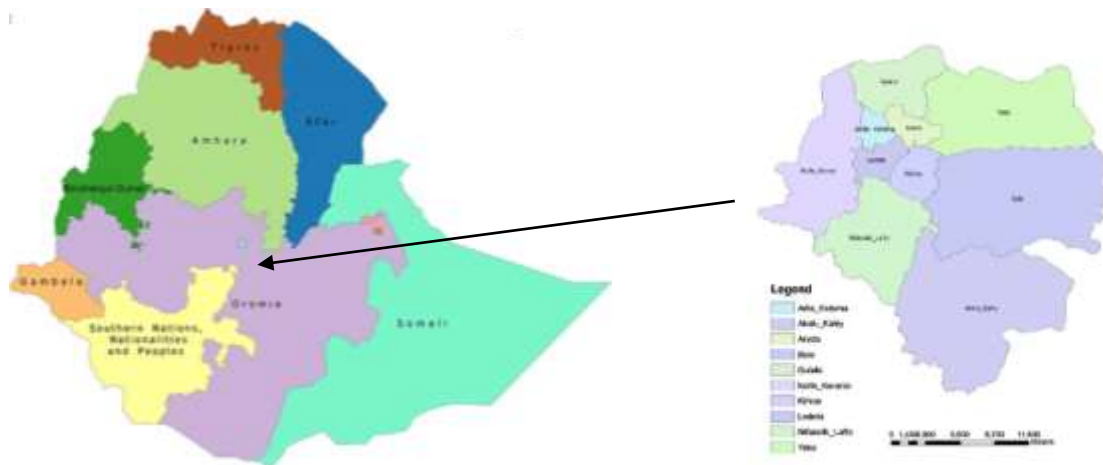


Figure 5. 1: Map of Ethiopia and Addis Ababa (Mappr, 2021; Mazhindu et al., 2012)

The background of the square is St. George church was a religious place that has a big open space of its own outside the church where peoples gather to worship. In the Christian faith, the founding of the true cross was one of the main religious 4 holidays celebrated in the open space and the name of the holiday is “Meskel”. The Meskel square is alongside St. George church where the open urban area needs improvement (Aragaw, 2011).

It is developed at three diverse centers and the function of the spaces varied as well where spaces overlapped used by the peoples. The square is an enormous exposed space located at the center of the metropolitan. Recognized as a huge exposed space and was utilized as a shop in the history of Addis Ababa and was the only public space at that time because other spaces were taken by the government officers and religious places, all the land had an owner so public activities mainly took place on the market (Aragaw, 2011).

5.2 Meskel Square Site Inventory

Meskel Square is shown and is its location at the center of the crowded city Addis Ababa having a square meter of 41,245 and a perimeter of 934 meters. With the frontage area used as the parking lot for cross country buses, the area is now used as a bus terminal and sitting spaces used for working out.



Figure 5. 2: Meskel Square (Google Earth, 2020)

5.2.1 Seating arrangements

The current condition of the square can be observed in the below pictures, there are two types of arrangement, the first is the cube-like structure found at the bottom level of the square that is used by the athletes for their daily exercise.



Figure 5. 3: Sitting arrangement and usage (Boethling, 2017; Shimnik, 2020)

The second description is it can be described as steps that are spacious and are original to the site. The steps are filled with soil which can be seen on the image beneath which has cracked edges and dust.



Figure 5. 4: Steps used for exercise and sitting place (Shimnik, 2020)

5.2.2 Walkways / Access

The paths and routes within the site have different characters and different entrances to the square, as shown in the pictures there is a slopy ramp at one end, stair (step), car entrance, and flat surface path at another end.



Figure 5. 5: Access to the square (Shimnik, 2020)



Figure 5. 6: Walkways found within the square (Shimnik, 2020)

5.2.3 Parking space

The parking lot is located beside the busy road of Meskel round-about, where they usually park cross countries buses serving as terminal, the area is also a parking lot for city taxis, and personal vehicles.



Figure 5. 7: Parking areas in Addis Ababa (February 29, 2020)



Figure 5. 8: Parking space for the cross country buses (Shimnik, 2020)

5.2.4 Gathering space

Public gatherings event is held on the square specifically on the parking lot zone which is used for religious celebrations, cultural events, and political announcement.



Figure 5. 9: Gathering of Meskel celebration and political announcement (Peteropaliu, 2013; Security, 2018)



Figure 5. 10: Cultural and religious celebration (Yadeta Berhanu and Amensisa Negera, 2019; yamralafrica, 2019)

5.2.5 The strength, weakness, opportunity, and threat (S.W.O.T) analysis of the Square

5.2.5.1 Strength

The urban open space is a historical heritage site to the city which is visited by numerous tourists every year during the cross celebration, and early in the morning, various people gather to work out together promoting health. Meskel square has a wide radius that is suitable for many events such as concerts, political protests, yearly athletic activity (the great run), and parking space.

5.2.5.2 Weakness

The location weakness can be pointed out on the condition or state of the built seating structure that is in poor condition, get chipped away when they face rainy season, the unpaved pathways and in between the seats creating uncomfortable dusty area, lack of shades that protect from unwanted weather change, scarcity of service or catering place that serve the public and lack of appropriate lighting for better security and safety during night times.

5.2.5.3 Opportunity

An opportunity of the square is the location it is situated at. Meskel Square is found at the center of Addis Ababa having different governmental offices as neighboring buildings and historical museums.

5.2.5.4 Threat

The main street in the front of the urban open space acts as a threat due to its being busy at every hour of the day which is not safe for children to use the square.

5.3 Questionnaire Analysis

The information-gathering of this investigation was mainly completed using a questionnaire analysis within this chapter, the 230 respondents are offered and examined on the ground of an expressive method. Almost all of the questions had a matching number of replies from the public. The data gathered is from individuals that have or have been using the square and neighbors of the site.

5.3.1 Personal Information

Age Range

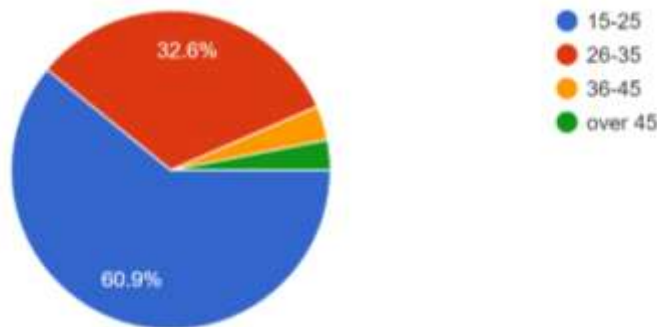


Figure 5. 11: Age range of different groups of people

Group 15-25 of the respondents were 60.9 %, 26-35 has 32.6%, 36-45 has 3.5% and over 45 has 3% responses. This percentage demonstrates that most of the respondents were between 15 to 25 years of age. The record shows people over the of 45 are the least among all the age groups which participated in the questionnaire that shows their interest level on the square.

Gender

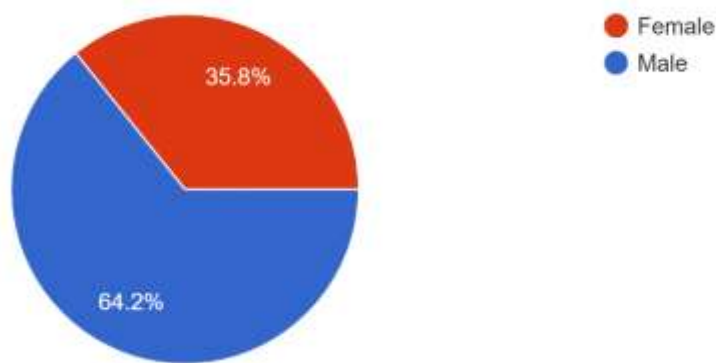


Figure 5.12: Gender of the respondents

Figure 5.12 indicates 64.2 % of the participants were male and 35.8% of them were female, this indicates the majority of the users are male. This is because it is believed to be the square is mainly dominated.

Education Level

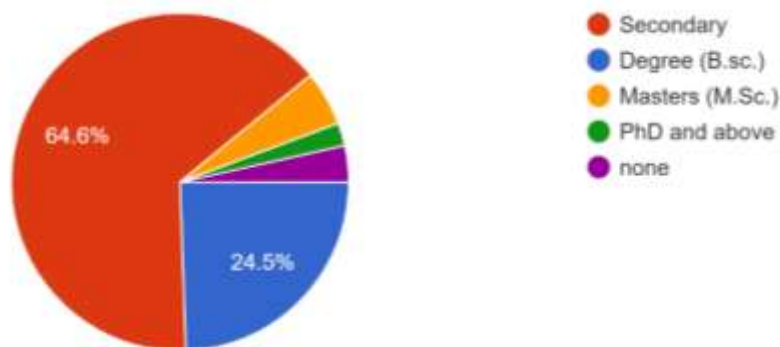


Figure 5.13: Education level of the respondents

More than half of the respondents have an education level of secondary level (84.6%), 24.5% have a degree level, and 7.4% have a higher education rate. This shows the literacy level of the participants is secondary.

Occupation Status

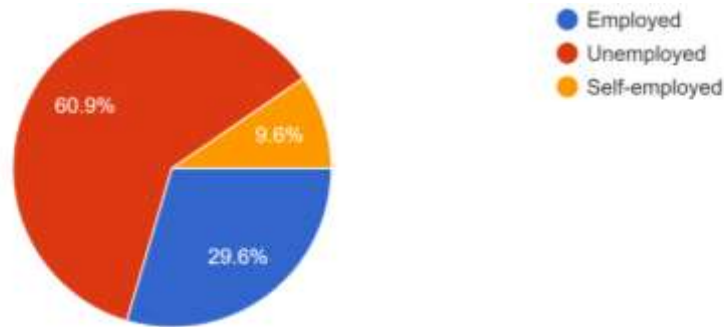


Figure 5. 14: Occupation status level of the public

60.9% of the respondents were unemployed, employed participants are 29.6%, and self-employed has 9.6% out of 230 responses. This percentage demonstrates the visitors of the urban open space are mainly unemployed.

Income Range

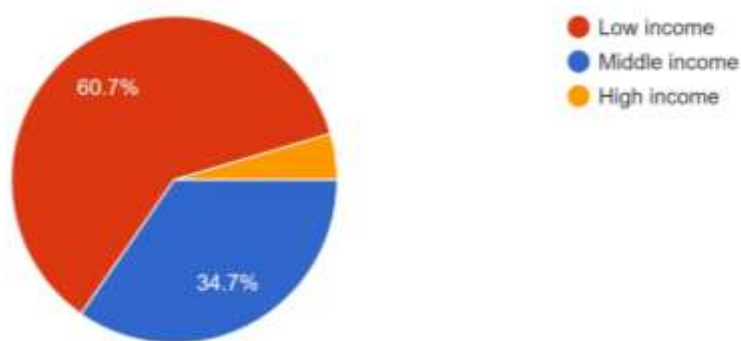


Figure 5. 15: Income range of the respondents

The income range has 60.7% low income, 34.7% have middle income, and 4.6% high income. This indicates the respondents are mainly in the category of low-income and unemployed.

5.3.2 Urban Open Space

Where do you go to interact with family and friends?

Out of the 230 participants, all have answered the question given and the result are seen in the chart.

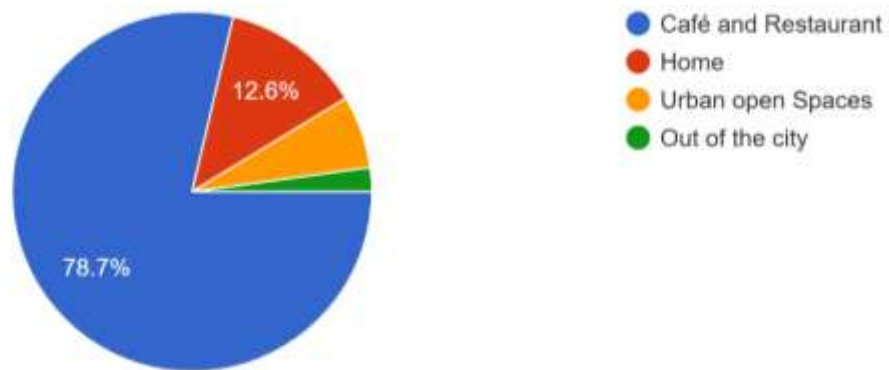


Figure 5.16: The respondent choice of enjoyment place

In this section of the analysis as seen in Figure 5.16 question about the place where the respondents interact was asked and 78.7% of them responded that they interact in café and restaurants, 12.6% of them responded home, 6.5% of them responded to open spaces and 2.2% said they interact by going out of the city. From this analysis, we can understand that the majority of the respondent didn't go to the open spaces(park) to interact with others.

Do you have the concept of urban open space?

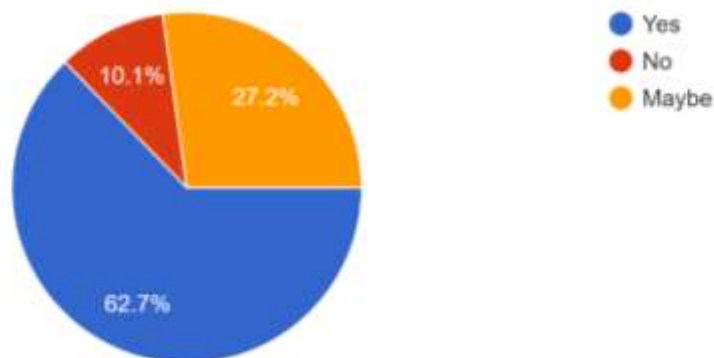


Figure 5.17: The respondent grasp of urban open space

The Figure above (Figure 5.17) shows the percentage for the question asked if they have any concept about urban open spaces and 62.7% the respondents have awareness about urban open spaces, 27.2% didn't know about the concept of urban open spaces and 10.1% of them answered maybe because they didn't understand the concept. This shows the majority of the respondents have an idea about the concept of urban open spaces.

Do you visit urban open spaces found near to you?

All participants answered the question where the results are shown in the figure below.

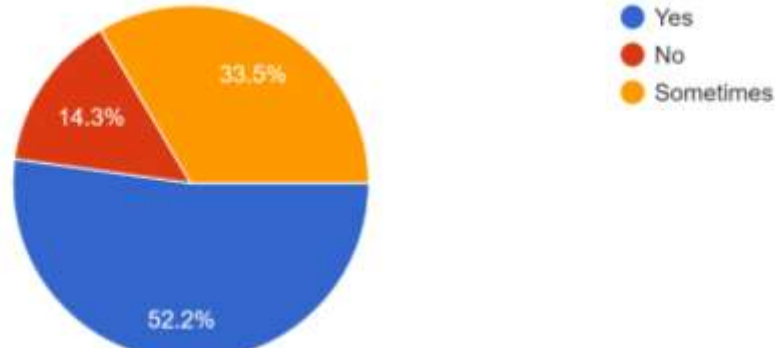


Figure 5. 18: Respondents visit to their neighboring urban open space

On Figure 5.18 it shows 52.2% of the respondents answered that they visited urban open spaces that are found near them whereas 14.3% of them answered they don't visit urban open spaces at all and 33.5% responded they visit open spaces near them sometimes so from this analysis we can understand most of the respondents visit open spaces found near their neighborhood.

How often do you visit urban open spaces?

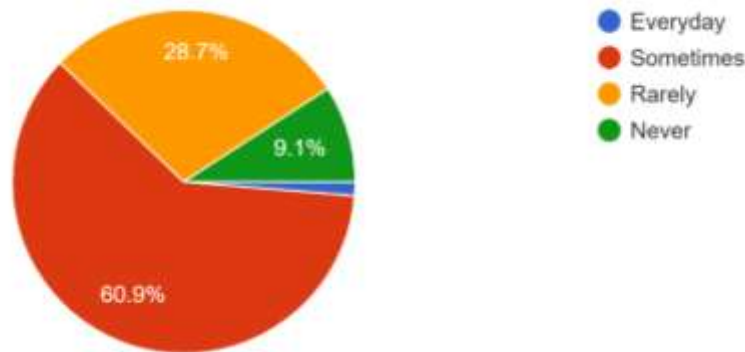


Figure 5. 19: How many times the respondents visit urban open space

In the above Figure 5.19, the research tried to examine how often the respondents visit the open spaces found near their neighborhood and 60.9% of the respondents visit sometimes and 28.7% of the respondents visit rarely so as we can understand from this analysis even if the majority of the respondents on Figure 5.17 answered that they visit open spaces this shows us that the respondents don't visit the open spaces regularly.

Do you think urban open space necessary?

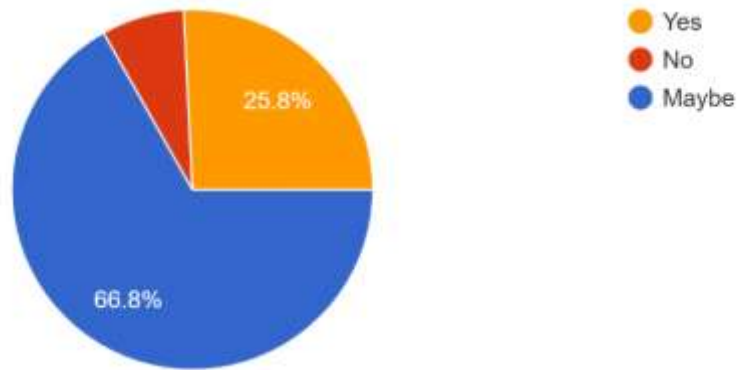


Figure 5.20: The necessity of urban open spaces

This question on the above pie chart (Figure 5.20) shows what the respondents think about the necessity of urban open spaces is and 66.8% think that it may or may not be necessary, 7.3% don't think it's necessary and 25.8% think that it is necessary. On average most of the respondents replied "maybe" which implies that they don't understand the necessity of urban open spaces for the city so even though the majority of respondents responded that they have the awareness of what open space is as shown in Figure 5.17 this analysis clearly shows that the respondents didn't understand the necessities of these spaces.

Do you feel safe when visiting?

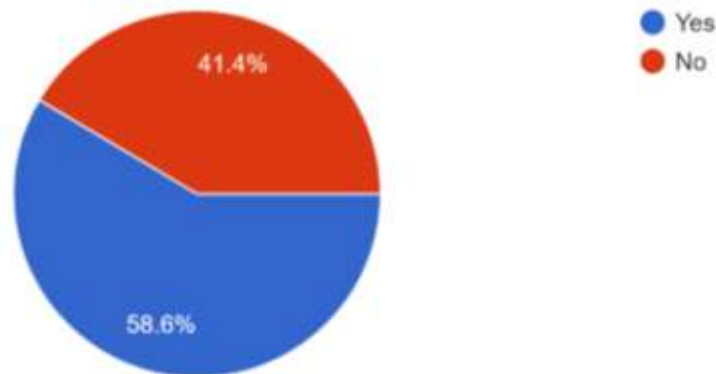


Figure 5.21: How safe the respondents feel

In this Figure 5.21, the question tried to examine how safe these urban open spaces are safe and 58.6% of the respondents replied by saying they feel safe while visiting the urban open spaces whereas 41.1% of them responded that they don't feel safe on the open spaces. From this analysis, it shows the majority of the respondents feel safe in the open spaces but when we compare it to the gender analysis, we can understand that most of the females don't feel safe and even some males don't feel safe too.

Do you enjoy the urban open spaces?

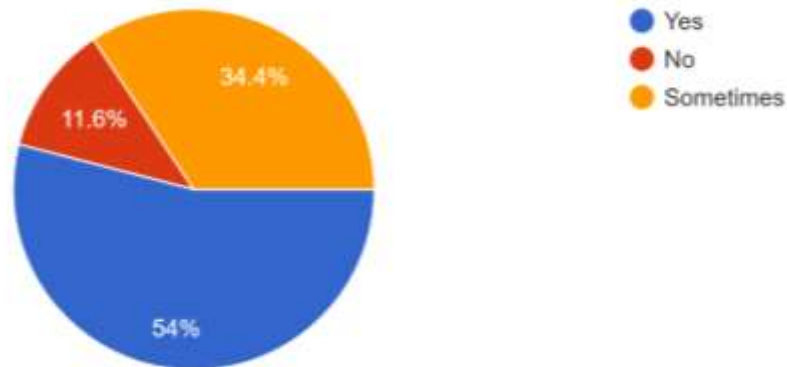


Figure 5.22: The enjoyment level of the participants

Figure 5.22, tries to examine if the respondents enjoy the open spaces when they visit and 54% of the respondents replied that they enjoy the spaces when they go, 34.4% replied they sometimes enjoyed and 11.6% of the respondents didn't enjoy when they visit. The figure below will show us why 46% of the respondents didn't enjoy the spaces.

What do you enjoy about urban open spaces?

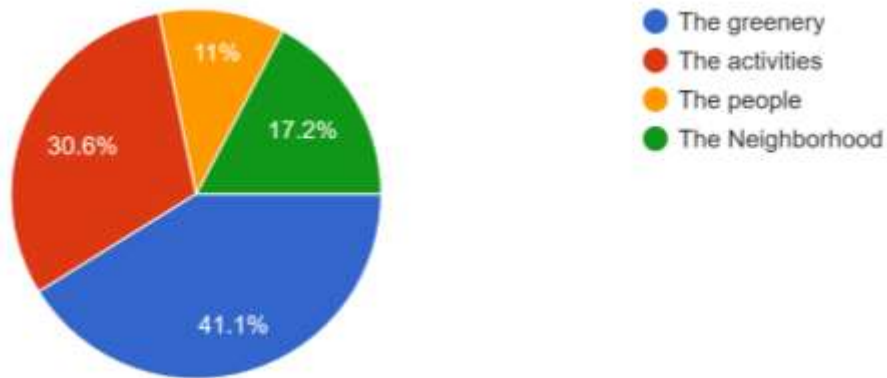


Figure 5.23: What the participants enjoy

The above question tries to examine what do the respondents enjoy about urban open spaces and 41.1% enjoy the greenery of the open spaces, 30.6% enjoy the activity, 17.2% enjoy the neighborhood and 11% enjoy the people. From this analysis, we can understand the people enjoy every aspect when they visit the urban open spaces.

What do you think is the use of Urban open space in a city?

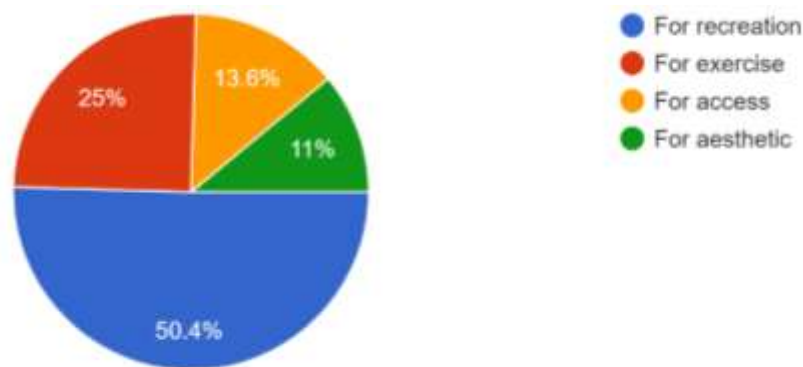


Figure 5. 24: The respondent’s opinion on the function of urban open spaces

In the above figure (Figure 5.24) tried to examine what the respondents think is the use of open space and 50.4% think the use of the open spaces is for recreational purposes, 25% thinks it’s for exercise purpose, 13.6% think it’s for access and 11% of the respondents think it’s for aesthetical purpose and this indicates more than half the respondent thinks the use of open spaces is for recreation.

5.3.3 Meskel Square

This section of the analysis specifically analyzes the specific topic of how the users rate Meskel square.

How will you rate Meskel Square?

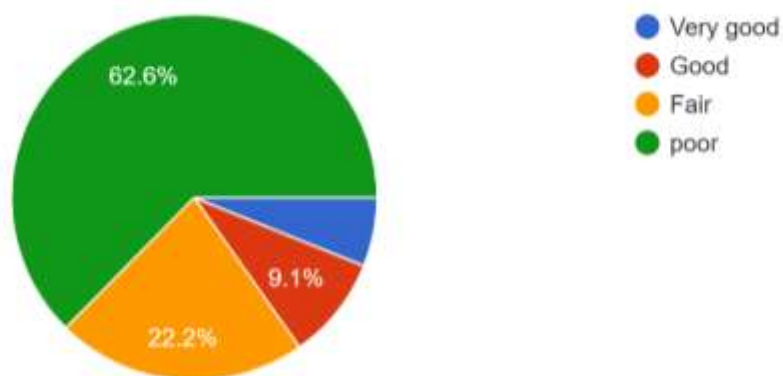


Figure 5.25: Participants view of Meskel Square

The above chart (Figure 5.25) presents how the respondents rate the Meskel square regarding the urban furniture, design, and pavement of the square from very good to poor, and 62.2%

rate it bad, 22.2% fair, 9.1% good, and 8.5% very good so this indicates Meskel square is not a very good square space which it occupies.

Do you think Meskel Square is usable?

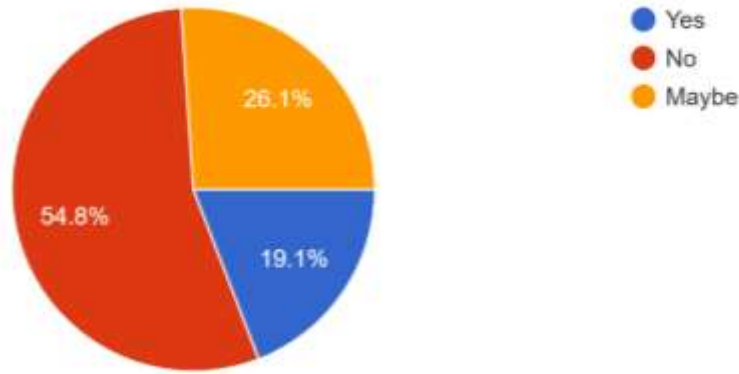


Figure 5.26: The usability of Meskel Square

The above chart tries to examine if Meskel Square is usable and 54.8% responded no, 26.1% responded maybe and 19.1% responded yes. This means that more than half of the respondents think the square is not usable and we can analyze that the open space needs to be designed by professionals.

What means of transportation do you use to visit the Square?

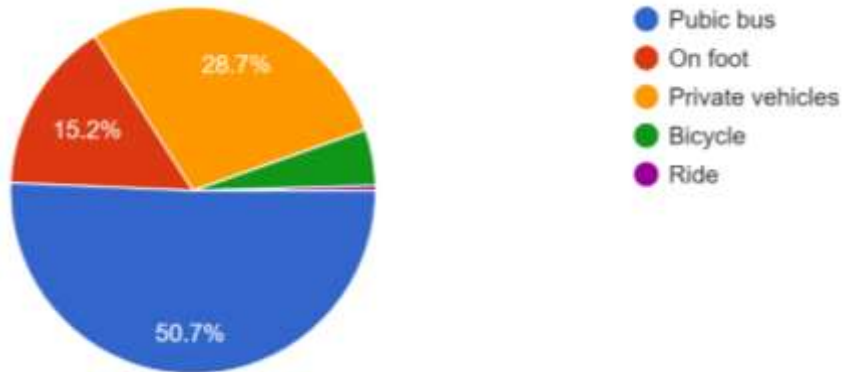


Figure 5.27: Means of transportation used

The means of transportation was asked to the respondents and the response was 50.7% of the respondent use the public bus, 15.2% on foot, 28.7% with private vehicle and 4.9% bicycle and 0.4% use a private taxi(ride). This indicates the open space is accessible for different modes of transportation so if the open space is designed and well-furnished it can be the centerpiece of the city. People from different parts of the city also visit the square.

What is the convenient time to visit the Square?

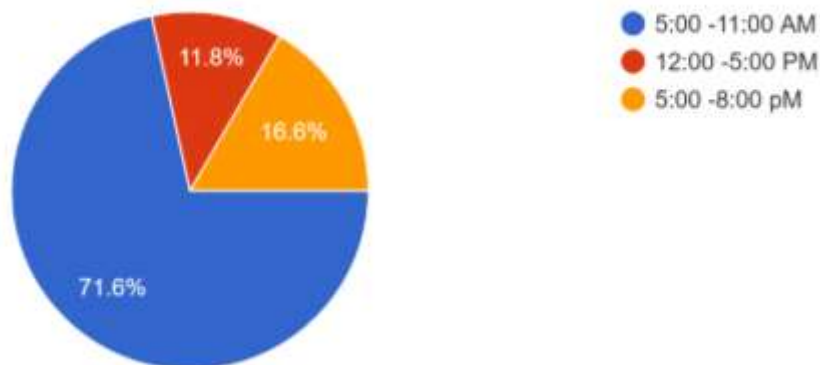


Figure 5.28: Convenient time to visit the Square

The question (Figure 5.28) is linked to what the convenient time is to visit the open space is and 71.6% responded 5:00 - 11:00 am, 16.6% responded 5:00 - 8:00 pm and 11.8% responded 12:00 - 05:00 pm. From this chart, we can understand most of the respondents visit the open space early in the morning and they don't visit the space in the middle of the day and this is because the space didn't have any type of shading elements for the users.

How lively is the square during the day?

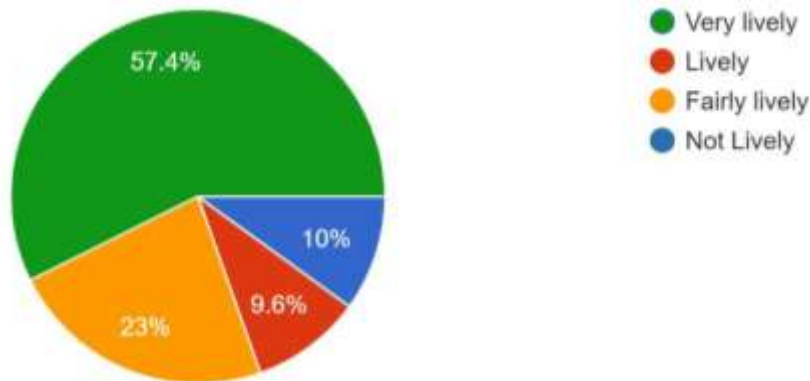


Figure 5.29: The livability of the Square during the day

This section of the analysis specifically analyzes the specific topic of how lively Meskel square is at day time. The users responded 57.4% is very lively 23%, lively, 9.6% fairly lively, and 10% not lively. This implies that the square is lively in the daytime early in the morning.

How lively is the square during the night?

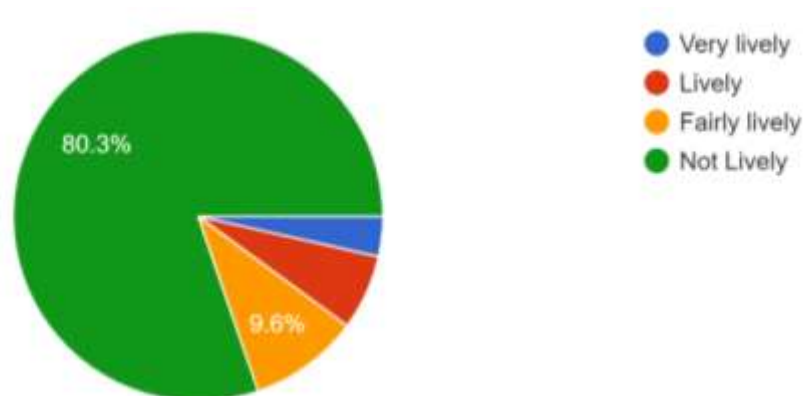


Figure 5. 30: The livability of the Square during the night

In this Figure 5.30, we analyze if Meskel square is lively at night and the response not lively is 80.3%, fairly lively is 9.6%, lively is 6.6%, very lively is 3.5%. this implies the user doesn't use the space at night and we can imply this is because they don't feel safe and because there are no lights on the open space.

What is the reason you visit Meskel Square?



Figure 5.31: The reasons to visit Meskel Square

This question tries to analyze the reason why they visit the open space. the respondent that said they visit the site for exercise purposes is 53.7%, for access purpose are 26.1%, for recreation purpose are 16.3% and the rest is for different holiday purposes once a year. From this, it can be implied that the open space should make the above three things as the main focus when its redesigned.

What is your experience in the Square?

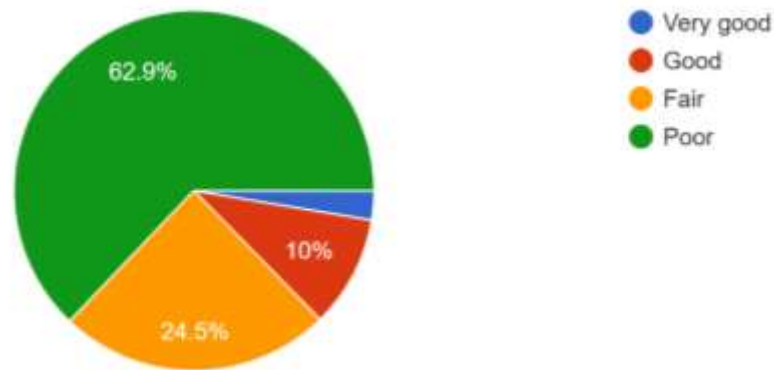


Figure 5.32: The experience of the respondents

Here the question intended to ask the experience the users have on the square and 62.9% responded that the experience they have was poor, 24.5% responded fair, 10% responded good and 2.6% responded very well. From this, we can understand the user's experience of the space was bad and according to the researcher's analysis this happened because there is no urban furniture, it's not safe to enjoy at night, and other different reasons.

How do you rate the existing physical condition of the Square?

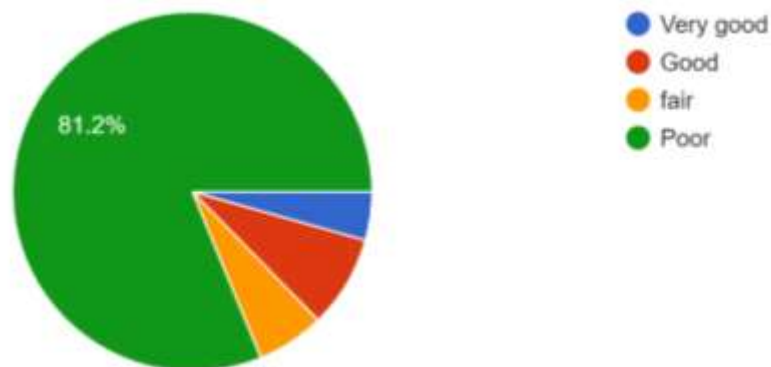


Figure 5.33: Respondents rating of the physical condition of the square

On this part of the chart (Figure 5.33) the researcher asked the users how they rate the physical condition of the space where 81.2% responded poor, 8.3% responded good, 6.1% fair and 4.4% very good. From this analysis, the majority of the users responded it is poor and as discussed on the above charts the lack of urban furniture and other facilities makes the physical condition poor.

Is Meskel Square appropriate with the current years?

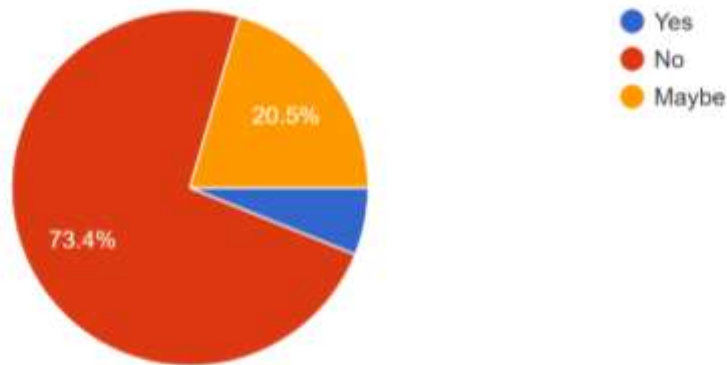


Figure 5. 34: Meskel square compatibility with recent years

The above figure 5.34 shows the appropriateness of the square with the current years and 73.4% responded with no, 20.5% with maybe, and 6.1% with yes. From this again we can analyze the respondents who didn't think the square is appropriate within current years and in accordance with the previous charts, we can conclude that the open space needs to be up-to-date and modified.

Do you think the culture of the city is represented in the Square?

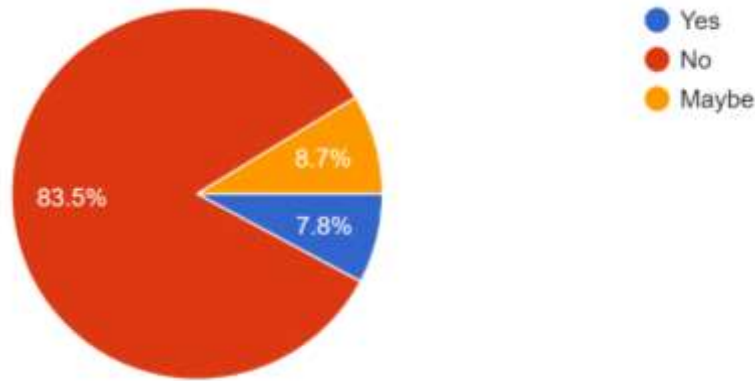


Figure 5.35: The participants thought on the square representing the culture

The above (Figure 5.35) shows that 83.5% of the users responded that the square doesn't represent the city, 8.7% responded maybe and 7.8% responded no. from this we can analyze that the majority of the users didn't believe that the city was represented and the culture, which needs to be redesigned.

5.4 Motives of Seclusion in the Square

Based on the data gathered and analyzed the urban open space is not used to its potential. 71.6% of the respondents choose mornings as a convenient time to visit the square while 11.8% choose during the afternoon which indicates that the users are avoiding the harsh sun since there is no form of shade that can shield or protect the users from unwanted wind, rain or sun glare even though Addis Ababa has 9 months of sunny seasons and 3 months of rainy seasons.

Many users have stated that Meskel Square is very lively during the day due to its long history and background it has on exercising in groups, this is mainly the reason the square used for, it is also known for it but during night time the square is almost dead due to lack of adequate lighting provided.

As indicated in the charts above the reasons why people visit the urban open space are mainly first is for fitness purposes, second is for access and third is for recreation such as yearly religious events or cultural celebrations. And it illustrates the steps incorporated are used for exercising which is not an inclusive space to the mobility impaired society.

62.9% of the respondents rated Meskel Square poor due to the experiences they encountered with the outdated design it has, the physical condition of the square (sitting area, pathways, and the parking space) which is not able to represent the city culture as a whole even though it is situated at the center of Addis Ababa.

5.5 Livability of Meskel Square

Table 5. 1: Evaluation of urban open space based on livable space attributes (Author, 2021).

Name	Meskel Square	Ethiopia	1950		
No	Livable space Attributes	Excellent	Good	Fair	poor
Image and Comfort					
1	Assurance of safety (good lighting within the place and the surrounding area)				✓
2	Protection against various unwanted weather or climate (dust, wind, rain, and sun glare)				✓

Table 5.1 Continued

3	Having social inclusivity (alluring urban furniture where people are comfortable to sit or defined settings)			✓	
4	Aesthetically pleasing (attractive hard and soft landscape plan)			✓	
Activities and Usage					
1	Embrace all types of people and activities				✓
2	Encompass services that support the open space				✓
3	Specified area for mass gatherings	✓			
Connectivity and Access					
1	Incorporates eye-catching or interesting scene	✓			
2	Distinct space composition			✓	
3	Clear linkage and joints			✓	
4	Provides an opportunity for walking, jogging, and other activities		✓		
Socializing					
1	Sitting positioning that activates for group discussions		✓		
2	Allowance for cultural, religious celebrations or other gatherings	✓			

As shown in Table 5.1 the square lack Image and Comfort based on the checklist which results in dropping numbers of users and livability, in terms of Activity and Usage the square does not encompass different types of people due to its insensitivity towards mobility-impaired also does not cater or give service to its visitors for a longer stay, and safety is also an issue when it comes to the urban open space hence a smaller number of female users and almost no activity during night time.

5.6 Findings

The research indicates that the questionnaire analyzed reveals the reasons for isolation of the iconic urban open space within the current years that are listed below:

- Many respondents were aware of the concept of urban open space.
- The respondents stated that they visit their neighboring urban open space sometimes.
- Male participants feel safe when visiting while female respondents don't feel safe.
- Almost half of the participants do not enjoy the urban open space.
- Many respondents chose greenery as an interesting part of an urban open space even though there is little to none in Meskel Square.
- The users of Meskel Square stated that the usability of the space is not properly used.
- Meskel Square has been rated poor mainly due to its inappropriate or incompatibility to relate with the present day.
- The users pointed out that the square is not integrated to the present day.
- Many users visit Meskel Square for exercise, access, recreational purposes, and holiday celebration.
- 84.7% of visitors come from a different distance where they are much further away.
- The convenient time for 71.6% is in early morning times and 16.6% in the night in avoidance of the afternoon sun due to lack of shades.
- The livability during nighttime is almost dead due to the safety factor.
- The physical state of the urban open space is in bad condition and out of order, which is not representing the city culture.

CHAPTER 6

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Meskel Square is an iconic square located in the middle of Addis Ababa having various potentials such as the view (scenery), spacious area, location, space for religious space, the neighboring buildings such as church and museum, and the people, but the findings show a different perspective.

This explains the square and the perception of users in regards to the open space. The findings of the analysis have displayed the causes of isolation that has been facing in recent years and have been declining in numbers of users throughout the years. The lack of proper urban furniture, lack of adequate lighting, lack of greenery, lack of activities to be engaged, inadequate design, poor space management, materials used are outdated, poor sanitary management, lack of service that can be used within the space, lack of and lack of proper shading structure have chased away many users and have given the city unpleasant image.

The results have shown the main concerning points from the viewpoint of users and personal observation done on Meskel Square. This is significant for future studies and renovations to be done on the site while helping society participate in the process.

Urban open spaces are a breathing place of a city, which have been incorporated into different cultures through many decades. These places are essential in various dynamic ways, where they are used from little children to elders creating an area to bond help communication in the diverse age group. The public spaces have been utilized for recreational purposes with the potential of being one way to generate income and a representation of a city and country.

In developing countries, the activity of many open public spaces is left alone, they are being a void area and have a high crime rate. But in this particular research Meskel Square was selected due to its rich historical background, a big impact on the city image, its centralized location, and the capability it consists.

Exploring the literature review, livability was defined and different scholars explain a livable public space, also the services that are provided to the population. In this chapter employment of urban open space was explored to define its function and necessity.

In order to have a comprehensive understanding international case studies are selected, they are chosen from developing and developed countries then were evaluated based on livable space attributes, to gain enhanced knowledge and show how different countries achieve increased livability areas through comparison of the cases as seen in Table 3.11.

Using the post-occupancy evaluation procedure, information was gathered through personal observation, questionnaires, evaluation of the case area in Table 5.1, and reviewing multiple pieces of literature on the topic. As a result, Meskel Square was analyzed and showcased the cause for the declined number of the enjoyer. The research helps in making the awareness and attention necessary to the society and further studies to be done on the relevant issue for inclusive design for all age groups.

6.2 Recommendation

For future renovations of urban open spaces, it is preferred to involve the public or day-to-day users' perspective as one measure to approach a design for enhanced livability rate and utilization of such areas.

The livability of a space can be obtained through the physical elements of public space and through the service it provides the people, and the surrounding area. For additional use, it is valuable to put livability as the central idea in creating the population.

While asking the public one of the questions was “what is the livability of a space?” and many respondents gave different opinions and perspective such as a healthy environment, a space that gives a fresh mental state, comfort of a space, the safety of the space, quality of life in regards with physical condition, meeting the requirement of space, enjoyable activity, clean surrounding, aesthetically pleasing, strong relation with the environment, the life of the city, and the people engaged.

The potentials of public open space are that people don't have to pay money to interact with each other when there are spaces provided for free, different generations can interact and

share experiences, can encompass numerous activities. And this can be elevated through the involvement of the community for future renovations.

A further recommendation to improve the study is to go deeper into the personal investigation in the chosen case. Having precise information on the background of the study will enhance the research in a constructive direction. Also, defining the principles of livability in an urban area will contribute a profitable understanding within the research space.

REFERENCES

- Alexander, C. (2019). The timeless way of building. *Journal of Research in Architecture and Planning*, 26(2). Retrieved from http://www.neduet.edu.pk/arch_planning/NED-JRAP/index.html
- Aragaw, M. T. (2011). Urban Open Space Use In Addis Ababa: The Case Of Meskel Square. Retrieved from https://www.academia.edu/26674229/Mikyasa_Tesfaye_Aragaw_URBAN_OPEN_SPACE_USE_IN_ADDIS_ABABA_THE_CASE_OF_MESKEL_SQUARE
- Archdaily. (2021). Archdaily. Retrieved from https://www.archdaily.com/search/projects/categories/urban-design?ad_medium=filters
- Arvanitidis, P. A., & Papagiannitsis, G. (2020). Urban open spaces as a commons: The credibility thesis and common property in a self-governed park of Athens, Greece. *Cities*, 97(October 2019), 102480. <https://doi.org/10.1016/j.cities.2019.102480>
- Boethling, J. (2017). Ethiopia, Addis Ababa, buildings and traffic at Route de Bole / AETHIOPIEN, Addis Ababa, Verkehr in der Bole Road. Retrieved from Alamy website: <https://www.alamyimages.fr/photo-image-l-ethiopie-addis-abeba-des-batiments-et-du-traffic-a-la-route-de-bole-aethiopien-addis-abeba-verkehr-in-der-bole-road-170281774.html>
- Burcu Akinci. (2010). The Need For Evaluation In Urban Open Spaces A Case Study From The City Of Vienna (Vol. 9). İstanbul Technical University.
- Chapman, E. H., & Lynch, K. (1962). The Image of the City. *The Journal of Aesthetics and Art Criticism*, 21(1), 91. <https://doi.org/10.2307/427643>
- Earth, G. (2020). No Title. Retrieved from google Earth website: <https://earth.google.com/web/search/Meskel+Square,+Addis+Ababa,+Ethiopia/@9.0102464,38.7613592,2349.56628559a,1041.96129093d,35y,0h,45t,0r/data=Co8BGmUSXwolMHgxNjRiODViOTE1ZGI4YzhiOjB4ZDg1NzczODBlZGRhZjAxMhmwzSE>

EPwUiQCEeQeA3dGFDQCokTWVza2VsIFNxdWFyZSwgQWR

- Foster, K. P. (2004). *The Hanging Gardens of Nineveh* Author (s): Karen Polinger Foster
Source : Iraq , 2004 , Vol . 66 , Nineveh . *Papers of the 49th Rencontre Assyriologique Internationale* , Part One (2004) , pp . 207-220 Published by : British Institute for the Study of I. 66(May 2021), 207–220.
- Garcia-almirall, M. P. (2019). *The impact of open spaces in the social life; the case of Jeddah, Saudi Arabia*. Universidad Polit cnica de Catalu na, UPC.
- GNS: Country Files. (2013). Retrieved from <https://geonames.nga.mil/gns/html/>
- Isendahl, C., & Smith, M. E. (2013). Sustainable agrarian urbanism: The low-density cities of the Mayas and Aztecs. *Cities*, 31, 132–143.
<https://doi.org/10.1016/j.cities.2012.07.012>
- Kashef, M. (2016). Urban livability across disciplinary and professional boundaries. *Frontiers of Architectural Research*, 5(2), 239–253.
<https://doi.org/10.1016/j.foar.2016.03.003>
- Lai, D., Lian, Z., Liu, W., Guo, C., Liu, W., Liu, K., & Chen, Q. (2020). A comprehensive review of thermal comfort studies in urban open spaces. *Science of the Total Environment*, 742, 140092. <https://doi.org/10.1016/j.scitotenv.2020.140092>
- Lyster, C. (n.d.). e ' I-an sea e r anlsm ea er. *New York*.
- Madanipour, A. (2003). Public and private spaces of the city. *Public and Private Spaces of the City*, (October), 1–237. <https://doi.org/10.4324/9780203402856>
- Nicol, C., & Blake, R. (2000). Classification and use of open space in the context of increasing urban capacity. *Planning Practice and Research*, 15(3), 193–210.
<https://doi.org/10.1080/713691902>
- Nikšič, M., & Watson, G. B. (2018). Urban public open space in the mental image of users: the elements connecting urban public open spaces in a spatial network. *Journal of*

Urban Design, 23(6), 859–882. <https://doi.org/10.1080/13574809.2017.1377066>

- Parsons, R., & Ulrich, R. (1990). Ulrich & Parsons 1992 Influences of experiences with plants on well-being and health. *The Role of Horticulture in Human Well-Being and Social Development*, (August), 93–105.
- Peteropaliu. (2013). meskel: Ethiopian festival for the true cross a “cultural heritage experience.” Retrieved from Religious holidays and festivals website: <https://readthespirit.com/religious-holidays-festivals/meskel-ethiopian-festival-for-the-true-cross-a-cultural-heritage-experience/>
- Sara Amare. (2014). *Enhancing Livability of Squares and Streets : The Case of Romanat District, Mekelle CBD, Mekelle, Tigray*.
- Security, A. U. peace &. (2018). Statement of the Chairperson of the Commission on Today’s attack in Addis Ababa. Retrieved from Security, African Union peace & website: <https://www.peaceau.org/en/article/statement-of-the-chairperson-of-the-commission-on-today-s-attack-in-addis-ababa>
- Sen, J. (2010). On Open Space: Explorations Towards a Vocabulary of a More Open Politics. *Antipode*, 42(4), 994–1018. <https://doi.org/10.1111/j.1467-8330.2010.00785.x>
- Shimnik. (2020). Meskel square. *Trip Advisor*. Retrieved from https://www.tripadvisor.com/Attraction_Review-g293791-d8041858-Reviews-Meskel_SquareAddis_Ababa.html#photos;aggregationId=101&albumid=101&filter=7&ff=444076978
- Stanley, B., Stark, B., Johnston, K., & Smith, M. (2012). Urban open spaces in historical perspective: A transdisciplinary typology and analysis. *Urban Geography*, 33(8), 1089–1117. <https://doi.org/10.2747/0272-3638.33.8.1089>
- Tajima, K. (2003). New estimates of the demand for urban green space: Implications for valuing the environmental benefits of Boston’s big dig project. *Journal of Urban Affairs*, 25(5), 641–655. <https://doi.org/10.1111/j.1467-9906.2003.00006.x>

- Ulrich, R. S., & Addoms, D. L. (1981). Psychological and recreational benefits of a residential park. *Journal of Leisure Research*, 13(1), 43–65. <https://doi.org/10.1080/00222216.1981.11969466>
- Uzakgoren, Y. (2010). *Design Criteria for Increasing Environmental Performance of Recreational Areas : Analysis of Kordon İzmir*. İzmir Institute of Technology.
- Wendt, M. (2009). The Importance of Death and Life of Great American Cities (1961) by Jane Jacobs to the Profession of Urban Planning. *New Visions for Public Affairs*, 1(1961), 1–24. <https://doi.org/http://dx.doi.org/10.1016/j.amjcard.2010.03.038>
- Whyte, W. (1980). *The Social Life of Small Urban Spaces City : Rediscovering the Center*. Washington: *The Conservation Foundation, D.C., VIII*(1).
- Wikipedia. (n.d.). culture of Ethiopia. Retrieved April 26, 2020, from Wikipedia foundation website: https://en.wikipedia.org/wiki/Culture_of_Ethiopia
- Yadeta Berhanu (BBC), Amensisa Negera (BBC), R. and A. (2019). In pictures: Ethiopia's Oromos celebrate thanksgiving. *BBC NEWS*. Retrieved from <https://www.bbc.com/news/world-africa-49945694>
- Yamralafrica. (2019). Demera Festival: Finding The True Cross. Retrieved From Yamral Africa Safari & Tours website: <https://www.yamralafrica.com/demera-festival-finding-the-true-cross/>

APPENDICES

Appendix 1

Questionnaire

Hello! My name is Feven Hailu Tadesse, from Near East University, Cyprus. I am a master's student in the Depart of Architecture. I will be very happy if you can spare few minutes to fill my questionnaire about Urban Open Space, the information you provided here will be strictly used for academic purpose. Thank you

Personal Information

1. Age range
a. 15-25 b. 26-35 c. 36-45 d. over 45
2. Gender
a. Female b. Male
3. Education level
a. Secondary b. Degree (B. Sc.) c. Masters (M. Sc.) d. PhD and above
e. None
4. Occupation status
a. Employed b. Unemployed c. Self-employed
5. Income range
a. Low-income b. Middle income c. High income

Social Information

1. Do you socialize with friends or family members?
Yes or No
2. Where do you go to interreact with friends or family?
a. Café and Restaurant b. Home c. Urban open Spaces d. Out of the city
3. How many times during a week do you go out?
a. 0 b. 1-3 days c. 3-5 days d. 5-7 days
4. Do you prefer a quiet place or noisy place for socializing with friends?
a. Quite b. Noisy c. Both above
5. What kind of activities do you enjoy during your free time?
a. Exercising b. reading c. hanging out d. Other indoor activities

Urban Open Space

1. Do you have the concept of Urban Open Space?
Yes No Maybe
2. Do you visit Urban Open Spaces found near to you?
Yes No Sometimes
3. How often do you visit Urban Open spaces?
a. Everyday b. Sometimes c. Rarely d. Never
4. Do you feel safe when visiting?
Yes No
5. Do you enjoy the Urban Open Spaces?
Yes No Sometimes
6. What do you enjoy about Urban Open Spaces?
a. The greenery b. The activities c. The people d. The Neighbourhood
7. Do you think Urban Open Spaces are necessary?
Yes No Maybe
8. What do you think is the use of Urban Open Space in a city?
a. For recreation b. For exercise c. For access d. For aesthetic
9. What do you think is the liveability of a space?

10. Is Urban Open space found near you lively?
Yes No Maybe
11. If yes, why are they lively?

Meskel Square

1. Do you think Meskel Square is usable?
Yes No Maybe
2. How will you rate Meskel Square?
a. Very good b. Good c. Fair d. poor

3. Is Meskel Square appropriate with the current years?
 Yes No Maybe
4. What are the Main problems of Meskel Square?

5. What are the attractive parts of Meskel Square?

6. What is the reason you visit Meskel Square?
a. Recreation b. Exercise c. For access d. Other
7. What means of transportation do you use to visit the Square?
a. Pubic bus b. On foot c. Private vehicles d. Bicycle e. Other
8. What is the convenient time to visit the Square?
a. 5:00 -11:00 AM b. 12:00 -5:00 PM c. 5:00 -8:00 PM d. Other
9. What is your experience in the Square?
a. Very good b. Good c. Fair d. poor
10. How lively is the Square during the Day?
a. Very lively b. Lively c. Fairly lively d. Not Lively
11. How lively is the Square during the night?
a. Very lively b. Lively c. Fairly lively d. Not Lively
12. How do you rate the existing physical condition of the Square?
a. Very good b. Good c. Fair d. poor
13. Do you think the culture of the city is represented in the Square?
 Yes No Maybe
14. What kind of activities do you enjoy in Meskel Square?

15. Do you think the Square have an economic activity?
 Yes No Maybe
16. Do you think the Square have a social value?
 Yes No Maybe
17. Do you think the Square still have the political value?
 Yes No Maybe

18. How did you find out about the Square?

a. I live in the surrounding b. From people I know c. While passing by d. Other

19. How is the neighbouring buildings physical condition of the Square?

a. Very good b. Good c. Fair d. poor

Appendix 2

Ethical Approval Document



BİLİMSEL ARAŞTIRMALAR ETİK

KURULU

12.04.2021

Dear Feven Hailu Tadesse

Your application titled “**Analyzing the Livability of Urban Open Space in the Case of Meskel Square, Addis Ababa.**” with the application number NEU/AS/2021/118 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.


Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

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