

**“IMPACT ON PUBLIC REALM BY URBAN
INTENSIFICATION OF PRIVATELY OWNED PUBLIC
BUILDINGS”**

Special Reference to Major Public Spaces in Colombo

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Master in Urban Design

Department of Architecture

**University of Moratuwa
Sri Lanka.**

February 2022

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Dissertation submitted in partial fulfillment of the requirements for the
Master in Urban Design

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DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

The public Realm is a place where anyone can access, interact physically despite of their economic social circumstances, it is the location where individuals interact physically. As a result, pedestrian walkways, parks, streets, squares, as well as signage and street furniture, are all included in the context.

Privately Owned Public Buildings, spaces dedicated to public use enjoyment and which are owned and maintained by private property owners.

Urban Intensification, Development that allows for more people to connect with in the existing urban area.

The study will analyze the impact on public realm by urban intensification of privately owned public building. whether the privately owned public building has a positive or a negative impact for the urban user and its vicinity.

Key words –public realm, urban nitrification and privately own buildings and human activities

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INTRODUCTION

Background

Public Realm, the public Realm is a place where anyone can access, interact physically despite of their economic social circumstances. As a result, pedestrian walkways, parks, streets, squares, as well as signage and street furniture, are all included in the context.

Privately Owned Public Buildings spaces dedicated to public use enjoyment and which are owned and maintained by private property owners.

Urban Intensification, Development that allows for more people to connect with in the existing urban area

The study will analyze the impact on public realm by urban intensification of privately owned public building. whether the privately owned public building has a positive or a negative impact for the urban user and its vicinity.

Due to the current pandemic situation, the use of these places is restricted or close for public, therefore Photography Survey and observations survey is used as appropriate tool to identify human behavior and human activities within the context.

Research Problem

- How to activate a human friendly public space whilst the urban structure been drippily changed with upcoming future development in the city of Colombo.
- The connection between the newly built privately owned public buildings with the existing public realm..
- Negative / positive Impact on the public realm with the privately owned public building.
- How to overcome the issues that occur with the intensification and give more weight to the public space in heart of Colombo.

Research Objectives

- Analytical study of the public realm in the selected area (with in Colombo) in terms of physical, social and psychological components.
- To identify the urban intensification & privately owned public buildings.
- Study the theoretical framework and methodology: measures / qualities of the public realm.
- Explore the occupants' participants, author's observations and opinions on existing public realm and privately owned public building (interviews, questioners)- case studies.
- Analyze the new guide lines and regulations introduced for the betterment of public with the raped development around the public realm in colombo.

Method Of Study

The following methods are used to operationalize the above objectives.

OBJECTIVE 1 - Identify the Public Realm, Their Social-spatial Characteristics - literature review

OBJECTIVE 2 - Examine A Theoretical Framework to Measure the Impact Level of Privately Owned Public Buildings for The Public Realm. - systematic observations

OBJECTIVE 3 - Identify the Impact on The Public Realm in two Case Studies. Two Different Locations in Colombo will be selected Based on Its Different Characteristics.

This Chapter will elaborate the measures of the public realm and human behavior between the public realm and the privately owned public building.

The case studies will be selected based on the availability of a place which has been used by the public over a period time which may be of cultural or historical values and a newly incorporated building that may seem to have an impact on the buildings / Spaces that are older

CASE STUDY – 1

Public realm – Galle face Green.

Privately owned public building – The One Galle face - Galle Face

Urban Forest Park, Dining Capsule.

CASE STUDY – 2

Public realm – Independence Square

Privately owned public building –Arcade independence square, park walk

literature review (objective 1 and 2) will be collected via questionnaire, interviews and observations.

Scope And Limitations

Due to the current pandemic situation, the use of these places is restricted or close for public, therefore Photography Survey and observations survey is used as appropriate tool to identify human behavior and human activities within the context.

- Current pandemic situation will restrict observation survey.
- Lack of interaction by the public due to social distancing.
- Restrictions of public Gathering.

CHAPTER 01

URBAN PUBLIC REALM

1.1. What is an Urban Public Realm?

The 'public domain' refers to portions of the urban fabric that are open to the public. It is the location where individuals interact physically. As a result, it encompasses buildings and their design, as well as streets, squares, and parks, as well as signage and street furniture, as well as the microclimate. A diverse public domain can help to define a community's personality and identity.

A public realm enhances the character of the cities and townscapes focusing on details from micro-climates to macro-climates developing the activities around them. These public realms are specified as the spaces where the public have access which excludes private gardens, courtyards or gathering spaces at private malls. Basically, it is the physical manifestation happening outside of a private home in a community or a townscape creating human interactions.

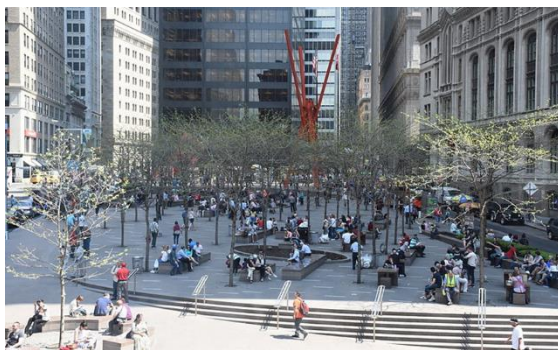


Figure 01: Zuccotti Park, New York
Source: Anonymous



Figure 01: Highline, New York
Source: Anonymous

The public realm plays an important part in the area's identity and function, according to the 'Public Review Draft' (Uptown Community Plan Update, Urban Design Element, 2014), serving overlapping roles such as:

- Access and circulation.

The public street rights enable for mobility inside and outside of town, facilitating walkers, cyclists, and buses apart from trucks and automobiles.

- Development of the Framework.

Public roadway rights offer the underlying structure that obtain and combines various projects into a whole project.

- The Public Open Space.

Along with the town's plazas and parks, public roadway claims serve as important public open space, offering light, air, and planting within developed areas, as well as serving as the "living room" for communal life—places where people gather, talk, and linger.

- The Visual Character.

While buildings are attractive visual elements, the public realm's physical architecture is critical in creating the community's identity and overall character.

As a result, the public realm enhances the nature of a city or townscape by showcasing its distinctive features and personalities, giving it a distinct identity.

1.2. Rudiments Of Public Realm

There are principles that enhances the character of a public realm highlighting the need of public spaces. These are the essential elements that are available to make a public space functional. These rudiments are:

Street and park furniture

Locating hard landscaped furniture in accessible and convenient places.

Outdoor furniture like, seats and benches can be found at bus stations, parks, and squares, and along pedestrian pathways. They should be placed in areas where people may congregate and remain, as well as in areas where people can experience views or enjoy activities. By providing comfortable seating where people are likely to rest for more than 15 minutes makes the place more convenient for the users. Locating seats about 100-meter intervals or more regularly along key pedestrian paths draws comfortability and increases the usage of the spaces.

Placing trash cans near litter generators like food sellers, cafes, and picnic spaces supports the place to maintain its hygiene. To reduce clutter, waste containers can be combined with other utility infrastructure, such as poles. Drinking fountains should be placed near and visible from popular pedestrian and cycling routes. Play equipment could be placed where children would usually play. Play equipment placed in secluded areas will make children feel unsafe. Placing post boxes at a safe traffic crossing enable its usage since people of various abilities use them; thus, they must be easily accessible from the community they serve. Placing bicycle parking hoops such that a bicycle can be parked on each side too attracts crowds to public spaces. Bicycle frames can also be used as tree guards.

Ensuring that seating is attractive and comfortable

It is essential that the seating is placed in a way it is convenient in using. They should be placed in a covered area with access to both winter sun and summer shade. One may reduce clutter and give shade by combining chairs with a tree guard. Seats should be arranged with their backs resting on a wall or fence, looking forward, allowing the

person seated to enjoy the views. Having proper views of the activity and entrances, makes a seat more comfortable and convenient in using. Good vantage points of the entire space and its entryways are required in places where people rest and relax. Seats with no backs should be placed in crowded open places where people can sit along both sides. In this situation, the seats are more a resting element than a furniture placed to enjoy the place or activity.

Ensuring that the location of hard landscaped furniture supports safety and amenity.

By placing trash cans at least 2 meters away from public seats or play areas encourage people in using the seats. Bin odors may discourage individuals from utilizing seats or playground equipment since it is uncomfortable to touch them. Apart from the seating, other equipment like; vending and ticket machines, Post boxes, parking meters, payphone cabinets, should all be accessible from the pedestrian walkway while not disturbing character and the activities of the space.

Use or install park - and - ride hoops near a busy street allows the bikers too to engage in the activities. Proximity to active users allows for informal surveillance.

Providing for engaging, accessible active recreation and play equipment

By providing play equipment that encourages active play and imagination attracts people towards places. Allowing a wide choice of recreation activities and play equipment that is appropriate for any age group and facility to encourage people from reaching public areas. Young and middle - aged children need to indulge in imaginative play that is exciting. Adults can enjoy the play and entertainment equipment as well.



Figure 03: Park benches
Source: Anonymous



Figure 04: Park benches
Source: Anonymous

Trees and planting

Ensuring trees and planting contribute to local identity and context

Consider trees and plants that are suited for the cultural background and identity of the area. Plantings and plants that captivate the senses are mostly suited in this. Plants that alter their look with the seasons add to the sense of place and create a dynamic experience. Plant noises and fragrances are also essential factors to consider. Planting trees that are appropriate for the scale of the roadway or public space enhances the quality of the space. To designate a street or path, it is essential to place trees and plants in strategic locations.

Between a sidewalk and a road, trees be able to give mental and physical shelter. Thus, by placing trees in wide roadways or huge open places can create a canopy and confine the space.

Having trees and plants ensures the safety and comfortability of the public. Choose trees with clean trunks and no branches or foliage that are less tall. Clear sightlines and no options for hiding are provided by foliage-free zones about 600mm and 2500mm out from ground. Even through planting shrubs and ground covers that are no more than 600mm tall safety of the public can be assured. Plantings may be bigger than 600mm in places behind a non-climbable barrier or screen, provided the barrier enhances protection of the public. Placing trees and plants so that clear sightlines may be seen along roadways and across different mode paths arises comfortability and usability of the space.

To avoid overshadowing of public lights and interference from overhead power lines,

trees can be planted away from overhead power lines and public lighting. This will necessitate collaboration between utilities and municipal governments. Integrate with additional road fixtures such as benches, cycle poles, or public artwork where safety barriers are necessary around vegetation. Tree grates which are parallel with the adjoining pavement surface can be installed to increase the variety. They eliminate trip risks while also allowing water to collect. Porous pavements could be a viable option heightening the safety of the passersby.



Figure 05: Trees in pathway
Source: Anonymous

Barriers and fences

Barriers and fences support amenity and safety of the people using the public spaces. Place bollards in strategic locations to support free pedestrian mobility while restricting car access to a certain area. When the goal is to limit movement modes, usage of bollards could be done. Bollards can be either temporary or fixed. Poles are preferred to an uninterrupted fence because they permit pedestrians and cyclists to move freely while restricting vehicle access. Bollards should be placed in such a way that they are readily visible to pedestrians, cars, and cyclists, as well as at a height that prevents injury. Bollards should never be used as a substitute for hazard markings. Make use of appropriate hazard warning indicators. For both day and night visibility, use highly conspicuous barrier materials.

People with low eyesight must be able to recognize obstacles as well. It's also possible that tactile ground surface signals are installed in public spaces. Set café screens or barriers back from the curb. Cafe displays can help to outline a street cafe area, provide wind protection, and provide spiritual safety from moving cars, further it can also hinder a person's motion on a sidewalk. Displays can be either immovable or moveable. By providing a non-injurious top rail feature on barriers and fences improves safety of the pedestrians as well. It is understood that the avoidance of low-level fences with pointed barbs enhances the safety of the passersby since they can be dangerous and have resulted in injuries.

It maintains the character of the area.

For barriers, by choosing a style, scale, and material that complements the area's current or anticipated future character, it can draw identity to the area. Facade fences can be a striking aesthetic component, especially in higher-density domestic areas, and they can add a lot to the street's individuality.

Ensures informal shadowing to the pathways and public areas.

Use low-rise or partially transparent fence types on a property border that abuts a street frontage or public space. Low or transparent barriers allow for street and public space surveillance in an unobtrusive manner.



Figure 06: Fences separating the pathways & public spaces
Source: Anonymous



Figure 07: Bushes & benches acting as barriers
Source: Anonymous

Lighting

It supports the night-time social life and activities and ensures the safety of the public. Place lights along pedestrian and cycling paths for safe passage and wayfinding, as well as to highlight crossings, landmarks, and destinations. For the betterment of the usage, only the portions of public space and walkways meant for nighttime use shall be lit. In the absence of light, it is possible to identify regions to avoid. Lighting should be installed on all pedestrian and cycling paths that lead to or through activity centers. Lighting levels in activity centers can be larger than in surrounding areas or in the pathways. Light pedestrian and cycling paths to much the same level as neighboring streets where its Crosse the public open.

Illuminate the entrance and departure routes to a certain degree as the underpass when a path goes through one. During the day, long freeways and tunnels may need lighting. Place illumination where there is a chance of a pedestrian-vehicle or pedestrian-bicycle collision. Place lights in places where people congregate at night for entertainment, cafes, or events. Lighting should be installed at bus stops, pedestrian refuges, and median openings, as well as payphone cabinets, bicycle parking hoops, and way-finding signs.

Lighting enhances the local character and cultural values.

Enhancing the appearance of a structure or landscape feature can be done with the usage of external lighting. Signs, landscaping, and other shared public components should all be integrated with lighting.

It ensures sensitive uses adjacent to public spaces that are protected from light spill

Control undesired light flow from public space lights onto sensitive areas. To reduce overall light pollution, it should be avoided the lighting that reflects upwards. By making a smooth shift from brightly illuminated to dimly lit regions, light sensitive spaces could be ensured. Over-lighting a space might give the appearance that the surroundings are dimly illuminated.



Figure 08 & 09: Lighting in public areas
Source: Anonymous

Signs and wayfinding

The signs keep the pedestrians and cyclists informed and aid wayfinding.

Maps and signage indicating connections and destinations, as well as the location of public facilities and public transportation routes, should be placed in public locations. In huge public open places with few other visual signals for location, maps and signs are very crucial. On major pedestrian routes, it shall display clear and consistent signage. Pedestrian signs should be concentrated at nodal points along pedestrian routes. Further, by placing signs away from pedestrian and cycling paths and places can help people find their ways. Signs installed in stages can encroach on and block walkways, as well as clutter public spaces.

Place signs away from any greenery. Pedestrian and cyclist signage should be placed at the user's eye level. Many roadway signs are created and placed above pedestrian eye level to provide information to drivers. Property street numbers should be visible from the roadway at all times of the day and night.

It improves the management of the settlement, currency, and strategy of signs in public area.

Review signs in public locations on a regular basis. Maintain current information on signs and eliminate any that are no longer needed. Implement procedures for coordinating sign design and placement. Inconsistent aesthetics and congestion in public spaces might result from signs put by several authorities.



Figure 10 & 11: Signage in public areas
Source: Anonymous

Small public buildings and structures

These easily accessible little public buildings and structures help people feel at ease in public places.

Locate tiny public buildings and structures where neighboring activity provide opportunity for informal surveillance. Place modest buildings and structures along a main pedestrian path so that they may be seen from afar. Passers-by will act as an informal security system for the structure. Place tiny public buildings and structures in such a way that pedestrian and bicycle paths have easy passage.

Ensuring small public buildings and structures are safe and attractive.

Provide a clear pathway to the public area or building. People sense more secure entering to a building with clear open views of the surroundings. The building or structure should be placed in such a way that appropriate circulation space is available around it. To reduce potential concealment locations, form of the façade of a modest public building or the vicinity.

Visitors entering to the building should be protected from the wind, rain, and sun. Lighting should be provided on all sides of the structure.



Figure 12 & 13: Sheltering structures in public spaces
- Source: Anonymous

1.3 Public Spaces and Community

Public spaces including parks, piazzas, shopping precincts, playgrounds, high streets, street markets, and free spaces in neighborhoods that create space for activities play a vital role in the social life of the communities. The good health and the mental stability of the community is based upon the atmosphere the public spaces are creating. Thus, they act as a ‘self-organizing public service’, which adds life to the personals of the community.

A public space is a non-barricaded space where all sort of people can interact. Public spaces fade the barriers between people and allow them to initiate bonds and encourage the concept of community. Though people might be in a regionalized community where it is resembled through peripheries, the common public spaces do act as linking agents to physically and mentally unite the people in communities.

The nature and the sense of liveness expressed by a public space change according to the time and the type of day it is being used or accommodated by people. The same space can deliver a wide range of experience and ambient with different occasions making it a vivid experience for the user. A public area in a city or a township is deliberately shaped in way that it fits to all sorts of user range of the community. There might be situations where the elderly generations of the community maybe using the space whereas at other times the youth will be the most active users of it. And there might be times where it is being used by all the types of generations allowing them to interact with each other, that is the wonder of a public space and its engagement in a community.

The ambient and the experience forwarded by a public space may vary with the activities performed in it. It may include commercial, artistic and leisure related activities which alters the nature and the vibe of the public space addressing to a wider range of the community.

1. Diversity of uses: Incorporating restaurants, cafes, bars, and local business into residential, office, and commercial districts draws people and improves the ambience. Because of the range of uses, external activities contribute to the safety of places: more

people out on the streets serves to lessen crime. This variation, however, must be available at all times of the day. The venues will be unsafe at night, even if they are inviting and crowded during the day. Organizing a public space accordingly in a manner that encourages public to exist and stay, is also a form of security concern.

2. Dynamic facades: The relationship between the ground level and the road, the sidewalks add safety and aesthetics of urban architecture. People prefer more interesting roads because they are more pleasing to the eye. Furthermore, people's opinions of the city and how they use it are influenced by this link: Streets and sidewalks, according to Jane Jacobs, are the key markers of how public space is seen and used.

3. Social dimension and urban vitality: Public space as a collection of people has an impact on the social component. People are encouraged to engage with the atmosphere, make better routine of the space, and promote urban life by having wide, accessible roads, parks, plazas, bike paths, footpaths, and urban hard landscape. It is vital to incorporate the peripheries in addition to high-density urban areas, guaranteeing the population who are not accommodated in the city core has access to high-grade public spaces.

4. Human friendly Measures: High-density, large-scale construction can be hazardous to people's health. In his studies, Jan Gehl discovered that people walk faster through inactive or empty areas, as opposed to the slower, calmer pace of walking through energetic, more crowded areas. Because they make people feel as if they were regarded during the planning process, human-friendly scale structures have a positive impact on people's ideologies of public spaces.

5. Lighting: It is simpler to use public spaces at nighttime when the lighting is both efficient and people-oriented, which increases safety. When given on a pedestrian and bike scale, public lighting appreciates the necessary requirements for travelling more safely when there is no natural light.

6. Stimulating the local economy: Individuals benefit from high-quality public spaces not just because they provide recreational and living places, but also because they can help the local economy. The secure and attractive atmosphere encourages cycling and walking, permitting for easy entrance to indigenous businesses.

7. Local identity: Small kiosk that contribute to the vicinity's attractiveness needs to be prioritized in public spaces. Large shops, supermarkets can benefit the economy as a whole, but they have minimal impact on local communities. Small kiosk has a long-term impact on a society's culture and identity. In order to develop a resilient interaction between people and the area, it is necessary to consider the socioeconomic systems and cultural specificities of the location when designing a public space.

8. Wide-Ranging streets: Public spaces should be thought of in terms of Wide-Ranging Streets and "shared spaces" whenever possible. The Complete Streets idea refers to streets that are built to allow all users to navigate safely, including pedestrians, bicycles, automobiles, and riders of public transportation. Sidewalks that are well-kept, bicycle infrastructure, street furniture, and signage for all users are all part of a complete street.

9. Green areas: In addition to enhancing air quality and cooling cities in the summer, vegetation has the ability to humanize cities by inviting people to participate in outside activities. Access to green common places will become even more crucial as cities become denser, as urban forestation can reduce stress and improve city well-being. For urban drainage and biodiversity, trees, plants, and garden beds are also necessary.

10. Social participation: To sustain the value of urban public spaces or the places where they live, residents need to get them self-involved in the process planning, development, and management. Each residential neighborhood's public spaces serve a range of roles and have varied meanings. Residents' feedback guarantees that the nature and use of the area is tailored to the people's needs. A facility will not be used or sustained if it does not represent the needs and preferences of the local public. A safer building, more equal public spaces require social engagement. Every day, cultural change, as well as the introduction of new legislation, technology, and other

modes of transportation, alters how we live in cities. Cities are being forced to consider new development patterns as a result of urbanization, densification, and high rates of motorization. Despite constant change, the value of public areas in enhancing quality of life stays constant. They are still places where people engage, coexist, and congregate. They are, however, essential for city people' well-being. The street is where life happens beyond the walls that surround us.

1.4. Public Spaces and Recreational Activities

A public space can be defined and identified by the activities performed in it. Mostly, it is the recreational activities which defines the public space providing the user a wide range of memories and experiences to cater with.

Recreational activities may include any activity performed on a designed or a constructed ground like, parks, water bodies, outdoor theaters or performing spaces or even on a naturally established locations such as hiking, camping, swimming, or activities like fishing.



Figure 14: Designed recreational activities
Source: Anonymous



Figure 15: Natural recreational activities
Source: Anonymous



Figure 16: Recreational activities
Source: Anonymous

1.5. Changing Nature of Public Space in City Centers

The public space of a city is what gives it its personality. Public spaces have an impact on the image of metropolitan communities and are essential to city culture and life. Urban regions are typically made up of a mix of communities cohabiting. They show a variety of examples from various levels of the social order. Since ancient times, public spaces have served as city centers and have played an important role for both people and the city.

According to an interview held with Manoj Parmar, an academic lecturer at the University Miami and an architect, regarding ‘Changing nature of Public Realm and its role in Urban Transformation’, he states, that the physical characteristics of public spaces, whether in the form of open plazas, market squares, or spaces between buildings, have traditionally served a variety of socio-economic and recreational functions. Cities have public areas that express their identity. People are drawn to locations because of their energy.

The quality of space reflects the neighborhood's sense of community. Globalization and urban sprawl have resulted in the decentralization of urban functions, for instance, city centers, which serve as public places, are losing their core and central functions. The city's focus and character are shifting to places with private spaces and all of the latest technological facilities. Today, public places are no longer referred to as such. The use of space in city parks and gardens is governed by rules and regulations.

The changing nature of the areas, as well as the preferences of the population, have led to the privatization of public spaces. Parks, gardens, and promenades – which were formerly open to the public – are increasingly falling under the authority of private entities around the world. They are missing the essential elements of public open space. Accessibility to everybody has an impact on the social life and character of the city. Regrettably, few public spaces today appropriately prioritize this mission. The changing nature of public places has an impact on city centers and their surroundings. The use of public areas has been restricted to a designated area, resulting in gradual adjustments in usage and accessibility.

Public space is frequently mistaken as merely a recreational space; yet, these areas are

potential city growth generators, and they frequently wind up being the most valuable land in cities. Public places should be recognized as a vital resource, analogous to transportation, water, housing, and sanitation, which are frequently considered basic assets by governments and communities. The neighborhood gains identity as a result of these disparities in attitudes and actions.

As a result, open spaces are altered to break down the boundaries of economic differences and, for the most part, remain spaces for the interchange of ideas. The public area in cities shapes public life and has an impact on daily city behaviors. As a result, the benefits could be numerous and can be applied to various aspects of urban growth and change, such as economic vitality through community empowerment, enhanced quality of life, and environmental sustainability.

1.6. Urban Transformation and Its Impact on The Public Realm.

1.6.1. Impact On the Nature and Spaces

Human activities and behaviors have hugely impacted the global health affecting the world to face numerous hazards repeatedly. The urbanization and the increment of the urban heat island have caused severe urban transformations. Conversion of lands into urban spaces with public activities is counted as one of the most irreversible acts that have been performed by human beings causing urbanization. It has affected for the reduction of farmlands available to produce food, affects the energy consumption and energy demands, affects the bio-climatic systems, and mainly alters the climate.



Figure 17: New York city
Source: Anonymous

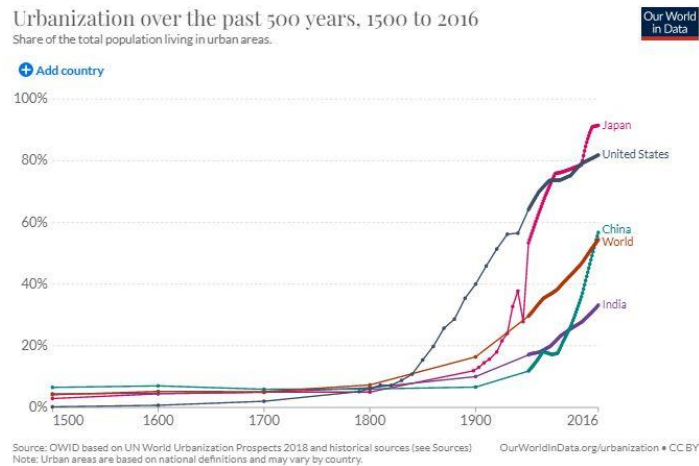


Figure 18: Urbanization over the past 500 years
Source: Our World in Data

The urban expansion or the urbanization occurring in the world is massive and unstoppable which has a direct impact on nature and its co-existence. Around 5% of total emissions from tropical deforestation and land-use change are predicted to come from direct loss of vegetation biomass in locations with a high possibility of urban growth. With or without the knowledge of human beings, the urbanization of rural areas has affected emitting CO₂ causing the increment of global warmth.

1.6.2. Impacts On the Livelihood of The Dwellers

Most of the people are reaching the urbanized areas with the intention of finding jobs. As per the research it says, currently half of the global population is already living in urban areas whereas the expectancy of the urban population by 2050 is two-third of the whole population. This tendency of moving to urban areas increases the necessity of more dwelling spaces which cause more heavy construction and environmental degradation.

Poor air and water quality, limited water supply, waste disposal challenges, and high energy use are all exacerbated by the increasing population density and needs of metropolitan regions. Strong city planning will be crucial in resolving these and other difficulties as the world's metropolitan centers increase.

Further, the threats of urbanization are air pollution because of intensive energy usage, large scale waste collection from the urban dwellers without proper waste disposing methods, similarly uncollected waste dumped in the city premises causing health issues, degradation of urban tree cover, the impact of poor air quality on animals in urban areas and collapsing of the food production cycle. All the above-mentioned incidents are impacting that urbanization is having on the livelihood of the people in the urbanity.

CHAPTER 02

URBAN INTENSIFICATION & PRIVATELY OWNED PUBLIC SPACES

2.1 What Is Urban Intensification?

Urban intensification or urban sprawl is the immense growth and expansion of the urban areas including housing units, commercial sectors and widened roads with less concern to the urban planning of the area. When elaborating on the urban intensification, apart from the urban sprawl and congestion it focuses on social and environmental impacts it is implying into the society.

Sprawl has had no direct drawbacks since the dawn of the industrial period, such as the loss of protection from medieval city walls. However, its drawbacks and expenses include longer travel times, higher transportation costs, pollution, and the constant devastation of the countryside. The cost of constructing the infrastructure required for new developments is rarely recouped through property taxes, resulting in a massive subsidy for developers and new inhabitants at the expense of existing taxpayers. There is a lot of debate over what constitutes sprawl and how to measure it. Some critics, for example, define sprawl as the average number of residential units per acre in a given area, while others correlate it with decentralization (distribution of population without a well-defined core), discontinuity (as described below), segregation of uses, and so on.

2.2. What is Privately Owned Public Space / Building?

Despite being privately owned, privately owned public Space / Building or similarly, privately owned public open spaces (POPOS) are terms used to describe a type of public space that is required to be available to the public by a city's zoning ordinance or other land-use law.

These areas are usually the result of a contract struck between cities and private real estate developers, in which the city grants the developers lucrative zoning concessions

in exchange for the developers providing privately controlled public spaces / Buildings on or near their properties. Plazas, arcades, miniature parks, and atriums are examples of privately owned public areas. Privately owned public areas can be found in many cities throughout the world, including Auckland, New York City, San Francisco, Seattle, Seoul, and Toronto.

A public space / Building is one to which the public has access and use rights, but which is not necessarily tied to its ownership. The "privately owned public space / building" approach allows the private sector to contribute and is helpful to private urban development. The policy has a significant impact on the city and has the potential to change commercial districts into pleasurable destinations (LUK, 2009) Cities all around the world have successfully proved this, including New York (where the concept began in the 1960s), Seattle, Tokyo, Bangkok, and Hong Kong. While the arrangements in these cities differ, the principle of exchanging tax and zoning incentives remains the same. Privately owned public space / buildings are marked with conventional signage that alerts the public to their existence in each of these cities.



Figure 19: Privately owned public space, New York
Source: Anonymous



Figure 20: Mechanism of Privately Owned Public space

While private sector involvement can reduce the cost of urban development, privatization of public places can readily occur if strict norms and regulations are not followed. Loopholes in the policy can easily lead to policy misuse for the profit of the owner and neglect of societal welfare. It's critical to keep an eye on these areas if you want to keep them in good shape. The protection of the public domain necessitates accessibility, visibility, and usability

Public spaces / buildings are areas where people get together to socialize. People utilize it for dining and drinking, business meetings, phone calls, sleeping, reading, listening to music, working, and entertainment activities all over the world. They remain one of the most essential features of the built environment, regardless of the size of the city, town, or village. Cities may create privately owned public places / buildings, that make communities livelier and more attractive by collaborating with the private sector.

Jerold S. Kayden's book, 'Privately Owned Public Space: The New York City Experience,' discusses the concept of Privately Owned Public Spaces and their implementation. He clarifies that a plaza is an extra sidewalk that runs along the north side of West 53rd Street, the east side of Broadway, and the south side of West 54th Street along the building's façade. During a recent site visit, an open-air café with palm trees was operating in the space along West 53rd Street, and a modest table and chair area had been set up opposite the building on Broadway. There is no evidence that the city has approved such a use.

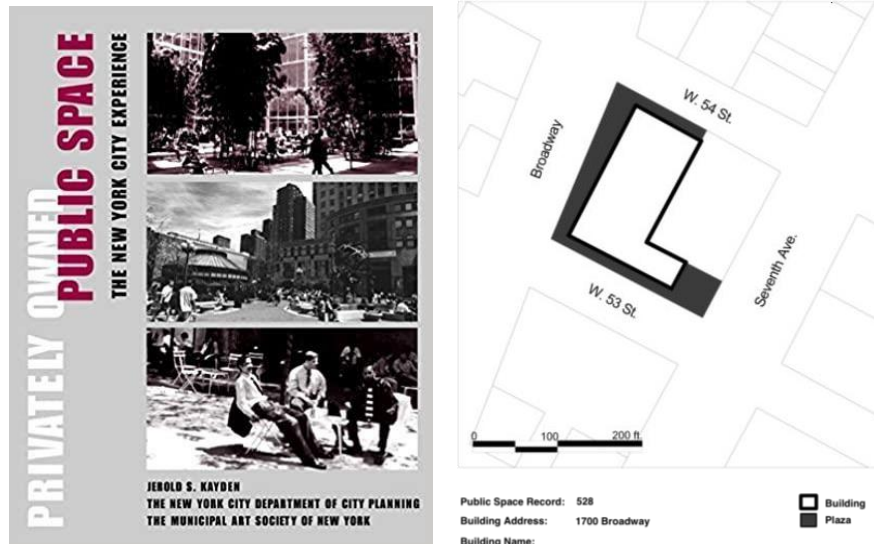


Figure 20: Book ‘Privately Owned Public Spaces’
Source: Jerold S. Kayden

Although Harvard professor Jerold S. Kayden popularized the term in his 2000 book *Privately Owned Public Space: The New York City Experience*, written in collaboration with the New York City Department of City Planning and the Municipal Art Society of New York, the history of privately owned public space dates back to 1961, when New York City introduced an incentive zoning mechanism that allowed developers to build 10 square feet of privately owned public space for a fee.

Between 1961 and 2000, 503 privately owned public spaces were built in 320 buildings across Manhattan's borough, nearly all of which were located in the downtown, midtown, and upper east and west sides. Since then, more rooms have been added. According to the book, the program's public space generation was statistically successful, but 41% of these spaces were of "marginal" quality, and about half of the buildings had one or more areas that were found to be in violation of applicable statutory criteria, leading to privatization.

While the term "privately owned public space" refers to privately owned property that is required to be open to the public due to zoning or other regulatory arrangements, it can also refer to privately owned and open to the public places such as shopping malls and hotel lobbies, even when they are not required to be open to the public by law.

2.3 Public Space in Urban Situation

Urban design is the process of planning for the supply of municipal services to residents and visitors, as well as designing and molding the physical aspects of cities, towns, and villages. Despite the fact that it deals with challenges on a greater scale than architecture, it cannot be considered a separate discipline of research and design because the quality of one is dependent on the quality of the other.

Urban design principles for parks, street spaces, plazas, and communal open spaces.

1. Guarantee all users have the opportune and safe access to the public spaces

Having connected pedestrian pathways to public space and highlighted the entrances of the park pathways with clear vistas or the park exit routes. Continue with direct, logical pedestrian paths through the public space.



Figure 21: Access through open spaces
Source: Anonymous

When a public space has a visibility through-path with regular escape ways connected to nearby roads, pedestrians feel secure.

2. To achieve attractive and vibrant public spaces

A variety of activities should be added to the public space to make it more enjoyable and appealing to users. It should be suitable for a wide range of user groups and can be used at any time of day as long as the user wishes to use the area.

Other activities and functions, such as cafes and play areas, can help to increase the use of such spaces, making them brighter and busier.



Figure 22: Vibrant public spaces
Source: Anonymous

It is critical to organize the functions in a public area in such a way that people will be drawn to it. As a result, placing the climax of the events in the center of the public area attracts more people to the place, piquing their interest to investigate or enjoy it.

A sculpture, fountain, water body, play area, or even a giant tree that gives the space its own personality could all be used to draw people in. They create a focal point that draws visitors into the space.



Figure 23: Attracting features at public spaces
Source: Anonymous

Having locations for vendor stalls in addition to pedestrian walkways with potential seats is a plus in bringing people to the area. Despite the importance of populating the core of the public space, it is also necessary to populate the margins, as this is the area that will be frequently viewed by the public. People also congregate towards the borders of venues to view the events taking place in the center. Edges are well-known

for being excellent vantage places from which to observe activities.

3. Providing informal surveillance of the space.



Figure 24: Surveillance from surrounding buildings
Source: Anonymous

When a public location is under monitoring, the user just feels at ease and secure. Because even a public place can be deserted at certain times of the day or season, it is critical for someone in the public space to feel comfortable, even if there are no other people nearby. This might easily be resolved with the use of informal observation. Even though they are not constantly observed, the user's access to closure makes them visibly and psychologically safe.

The distinction between public and private can be defined by a modest shift in ground level. A small boundary wall could be converted into a seating area, providing for the separation of sections while also serving as a resting area



Figure 25: Making boundaries
Source: Anonymous

4. To ensure safety and amenity in public spaces

The safety of the surrounding environment can be assured by situating activities such as play areas, recreational facilities, and public restrooms. Furthermore, providing appropriate transparency to areas may improve the public space's safety.

A modest fence separating a cycling path from a play area, for example, can safeguard children who wander into the bicycle lane while also allowing the cyclist to maintain visual clarity between spaces to avoid undesirable occurrences. It essentially brings the space and its operations to a close.



Figure 26: Barricades separating paths
Source: Anonymous

Installing lights to designate paths and places for nighttime use, as well as locating utilities infrastructure in a specified area away from the main pedestrian through-walk ways and leisure zones, can help to ensure the safety of the public in a public space.

5. Inconveniently placed infrastructure, such as service control boxes and telecommunications poles, can obstruct vistas, restrict useable space, and put pedestrians and cyclists in danger.

Arranging walks, seats, and main spaces to catch the sun in the winter and be sheltered in the summer adds to the public's comfort. Aside from that, planting trees to give shade and erecting structures to protect the public from strong winds and rain make public places more comfortable for users.

When planting barriers or shadow trees, avoid generating hiding opportunities.

Locating seats to give users with a fascinating aspect and visions of the location, as well as the ability to watch passers-by, makes the environment more pleasant.

Increase the number of seats available in high-traffic areas. Areas having good views of the entire location and its access arguments are frequently popular.



Figure 27: Vistas in a public space
Source: Anonymous

Install signage with maps in larger public spaces to illustrate connections and destinations, public facility locations, and estimated walking times and distances.

2.4. Internationally Known Privately Owned Public Spaces (Pops)

1. London Eye, London, United Kingdom

The London Eye, which is also known as the Millennium wheel is an observation wheel constructed on the Southern Banks of the river Thames. It is labelled as the most popular and most paid tourist attraction in the United Kingdom. It comprises of 32 fully air-conditioned capsules which enables the users to observe the surrounding.

Though it is used by the public in common it has been owned by a private body ever since. its ownership has been revolving around famous group of companies due to the fame “the London Eye” is rewarding.



Figures 28 & 29: London eye
Source: Anonymous

The London eye itself is a sight-seeing eye candy for the area which brings identity to London. It is a significant feature of the city where anyone can visit it and have a view of the city. The London eye to London is similar to the Eiffel Tower to Paris where the general public has accessibility to it rather than being used by the rich only.

Further, the structure itself brings more charm to the area drawing hundreds of people towards it, which support the subordinate buildings and spaces to be highlighted as well. The unknown surroundings along the River Thames have received more value due to this sightseeing viewing wheel.

2. Zuccotti Park, New York city, USA

The Zuccotti Park, which was earlier called as the Liberty Plaza Park is located in Manhattan, New York city in a Privately Owned Public Space owned by the Brookfield Properties and Goldman Sachs. The park is spreaded over a vast area of 33,000 sqft with access from several areas in the city. It is a park which is popular among the local tourists and financial workers drawing hundreds of people towards the park.

Though the Park was severely damaged by the September 11 attacks, it slowly recovered sparkingly more than ever earlier attracting more people than ever.



Figures 30 & 31: Zuccotti Park, New York
Source: Anonymous

There are three sculptures to which the park is home to: a bronze businessman sitting on a bench at the edge of the park, the Rose and an art piece moved from the Storm King Art Center which is 70 foot in height, and which is an abstract monument.



Figures 32,33,34: Sculptures at the Zuccotti Park
Source: Anonymous

These sculptures have been attractive points which draws the public towards the park. Though this has been owned by private parties it has been a widely used public space in New York.

3. Orchard Street, Singapore

The Orchard Street is a well-known and a famous tourist attraction which is owned by the Urban Redevelopment Authority, Singapore. It is a 25 km long street which connects many spaces and activities alongside making it a more active and well-used space. It is a well-known shopping fiesta in the area with internationally known restaurants, coffeehouses, shopping malls and department stores which are widely used by the public.



Figures 35 & 36: Orchard Street, Singapore
Source: Anonymous

The street itself adds value to the area giving importance to the spaces attached to it by attracting the crowd.

CHAPTER 03

THEORETICAL FRAMEWORK AND METHODOLOGY: MEASURES / QUALITIES OF THE PUBLIC REALM

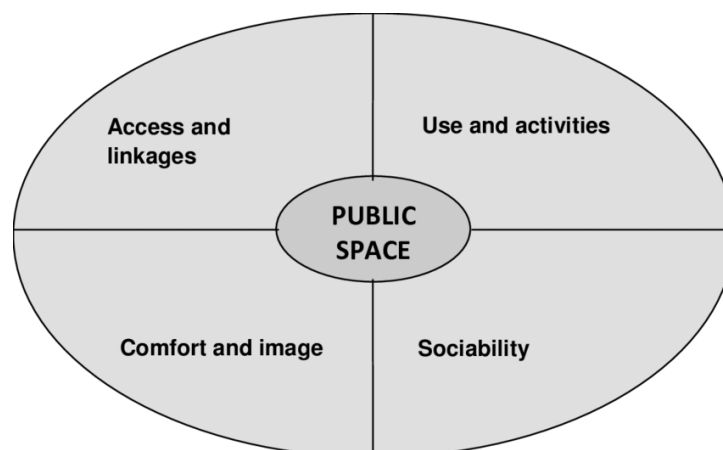
3.1. Theoretical Framework Derived Through Literature Survey

'Public spaces,' 'public world,' and 'human behavior in the public realm' have all been the subject of innumerable articles, pronouncements, and literary works. As a result, they include a variety of approaches for assessing the usability and usefulness of a public area.

According to Professor Lars Lerup in 1972, the four elements in correctly establishing the features of a public places are,

- Securing the area
- Safety factor
- Coherent structure,
- uniformity and readability and space obviousness

According to him, the elements of analyzing the success of a public place are the space's responsiveness and comfort, the volume of data, and the place's excitement, which presupposes aspects such as subtlety, mystery, education, possibility of identity, variability and contrast, classification, appreciation of identity, solace, and attachment in space.



Figures 37: Key qualities of successful public spaces Source: PPS, 2000

WHAT MAKES A GREAT PLACE?

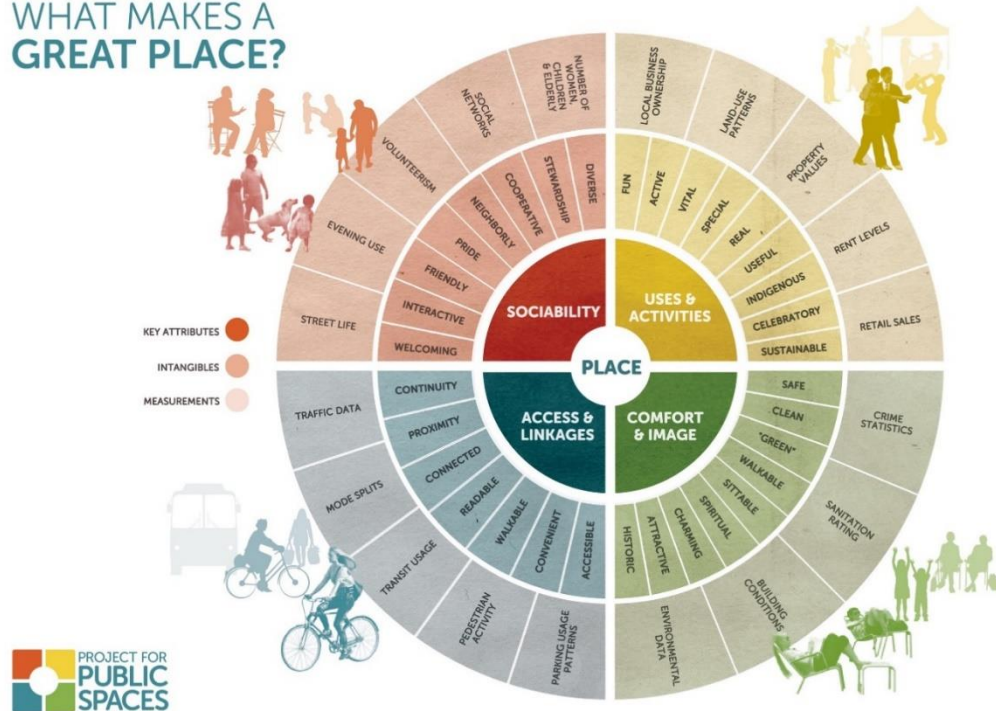


Figure 38: Diagram of dimensions of urban public open spaces
(Source: WWW.PPS.ORG,2015)

Moreover, from the characteristics described above, there are a few more ways to evaluate a better public place, such as the means of access, the sensation of safety, and comfortability. The means of access makes a space more useable. The availability of access allows the user to explore the space and gives closure.

1. Means of access

The simple presence of individuals in public areas is the primary precondition for good public space utilization. This brings up the question of whether that inclusion is possible; in other terms, accessibility. On a wider scale, it's a question of how pedestrian-friendly the entire environment is; on a smaller scale, it's a question of physical, visual, and symbolic accessibility to specific locations. (CARR ET AL., 1992).

Visual access

Visual access to a place increases the closure to the space and allow the users to be comfortable and to get used to the space. Visibility of a place is one of the foremost elements that attracts people to places.

- The space should be level with the street, or no more than 3 feet from the ground level or lower. (clear space vision)
- Space transparency from surrounding areas (eyes on the street)
- Space transparency based on parking areas in the street adjacent to the place.
- Active road frontage and permeability
- A variety of transportation choices enable access to the location, as well as connectedness and sidewalk continuity.

Physical access

Apart from the visual access, the actual accessing method of a place is being physically able to reach it. A place will be fully experienced through physical access only.

- Arranging the Space for people with special needs
- Connection between pathway and public space
- The relationship between street and space

Economical access

- Accessibility to space for people of all income classes.

Psychological entree

A place should address the user's intellectuality as well. The mental and psychological personality of the person using a public space shall be treated too in order to make the space usable.

- Sense of place Symbolic access
- Symbolic limitation or attraction

2. Social interactions - Services and facilities

The activeness of a public space is derived through the social interactions the place is generating. Though the people using it may be strangers with no prior acquaintance, a public space has the ability to connect them and in creating new connections. Further, the features like;

- Mix of ages, ethnic groups, and cultural groups.
- Volunteerism
- Welcoming and stranger receptivity
- Level of contacts
- Presence of people across different times of the day and night to enhances the quality of a public space through social interactions.

3. Sense of safety and security:

The basic human need in a public space is for psychological and physical security. it determining pleasure, which in turn brings about the following aspects:

- Perimeter perception and assistance, proper lighting, open vision outlines, relocation of unsafe areas and signs that help people identify, further through a variety of planned activities and events aimed to educate public.
- Perimeter awareness and aid, sufficient illumination, wide vision outlines, elimination of insecure areas, and symbols that assist individuals in recognizing their spatial location.
- Perceiving a location's aesthetic values, identifying the location, and traits that restrict individuals from roaming in space.
- Managing a site in a variety of methods, including mechanical devices such as cameras, gates, and barriers, as well as naturally designating area and territory and transparency in monitoring. and architecturally defining space and territory, as well as introducing supervision transparency, police, and guards. Lynch describes the factors that lead to a location's surveillance and, as a result, security as follows:

- **User-friendly:** Infers those actual users or occupants of a space are engaged with the monitoring process to some extent, depending on the duration of their benefit. Do families, for example, own their homes? Or do salespeople own their businesses? User-friendliness has two advantages: greater adaptation for monitoring by people with the most experience with the place's functionality and the highest drive for development, resulting in increased security, enjoyment, and freedom in activities generated from this method.
- **Responsibility:** To be able to accomplish the job correctly, responsible person for monitoring the location needs to be motivated, authority, and compliance. They should also feel devoted to the place and needs of other people and animals and be willing to admit failure and attempt another time. As a result, space monitoring needs to be done in stages and assigned to people who are capable of doing the duty. Furthermore, people must be trained in order for them to be able to manage their own living spaces.
- **Trust:** This refers to how well individuals understand the monitoring process, how well they can predict it, and how comfortable they are with it. However, this does not suggest that monitoring should be immune to change; rather, the ambiguity and conflict might lead to misunderstanding. If there was a lack of agreement on a legal right or a justifiable claim, people would be worried, and they would use energy in self-defense (Lynch, 1998).

4. Sense of Comfort

According to Marcus & Francis, 1990, Physical and psychological comfort are important factors in voluntary and social activities in public spaces, including long stays. One of the most important aspects of physical comfort is weather protection, as public places should provide both protection from harsh weather and the realization of pleasurable scenarios. According to Marcus and Francis, as a desired public space scenario, a mix of physiologically acceptable weather conditions that allow a person to be casually dressed beneath the shade should be designed such that as much of their area as possible falls inside people's 'comfort zones.' (Marcus & Francis, 1990).

The amount of time spent in the sun should then be increased (Marcus & Francis, 1990), and in particularly hot environments, shelter should be provided. Reflective surfaces and unobstructed skylines should be investigated when direct exposure is not possible, as long as glare is avoided (Marcus & Francis, 1990; Whyte, 1990). As a result, the material used for sitable surfaces should be resistant to temperature variations. Because temperature is sometimes more important than sunshine, wind protection should be supplied (Whyte, 1990). The design can provide hidden nooks in addition to avoiding high-rise buildings.

According to Jacobs, available resources, material selection should consider future upkeep.

In addition to that, the safety and comfortability of a public place could be measured with the availability of the elements such as;

- Protection against traffic and accident
- Protection against crime & violence
- Protection against unpleasant sense experiences
- Possibilities for walking
- Possibilities for standing / staying
- Possibilities of sitting
- Possibilities for seeing
- Possibilities of hearing / talking
- Possibilities for play / unfolding / activities.

5. Variety of current activities

Scholarly research emphasizes how much (good) public space use is dependent on chance encounters, unexpected activities, and the accessibility of both public spaces and their users. This section discusses how public space construction can help to broaden the possibilities for such activities over simple practicality and individual

motivations. A number of alternate paths and interactions between different locales are conceivable due to the connection and permeability of urban fabrics. A public space may be a goal for some users, a place to pass through for others, and a secondary or incidental destination for others. The tissue's compactness works in concert with these spaces, which are made up of diverse, interconnected, and overlapping circulation routes.

6. Appearance and availability of Elements: arrangement of the space, colors, quality of space, soft and hard landscape

According to Lynch in *Categorizing elements of a place* - a place's importance and uniqueness refers to its simplicity in understanding and recognition, as well as its ease of interaction with non-spatial concepts and ideals. Finally, he regards structure, consistency, transparency, and readability as elements that give meaning and identity to a place's soul, which might be characterized as follows:

- **Structure:** On a tiny scale, structure refers to how components are put together. However, on a larger scale, the connectivity of the rest of the areas to the main space. To build a structure, people use a variety of suggestions, such as identifying a shape or activities in a place, linkages, relationship with the rest of the area, time and distance, symbols. Characteristics and space are two data that aid us in comprehending and incorporating place and time into our models.

- **Consistency:** the uniformity between shape of a place and the activities that occurs in the particular location. (Lynch, 1998)

- **Transparency:** This refers to a person's ability to see how things are done, as well as the numerous activities, social, and natural processes that take place inside a given space.

- **Readability:** This refers to how well individuals can comprehend a location. Readability is measured on two facts:

- o form
- o Activities

Places may be eligible and understandable at each of these levels. It is possible to form a strong impression of a location's physical look, for example. Regardless of their

shape, more offered activities quickly mark into our mental picture. To properly harness a location's potentialities, physical shape and activity patterns must accompany the two aspects, which is especially vital for uninitiated individuals (Bentley et al., 2010)

3.2. Theoretical Framework of The Study

The most basic characteristics of a public space is to identify variables that inspire pedestrians and the public life, further it compares how these differ in other areas. This presupposes that the type and location of public space are both measurable and significant. It also relies on a rigorous, unbiased assessment of the physical environment. It should be noted that categorizing every venue for social contact that occurs in the public domain of urban regions is impossible. To summarize, the complexity of metropolitan social settings is impossible to fully comprehend. However, most of the amenities and locations that make up the public realm are part of the planned, built environment.

The study is done based on several researching methods, such as:

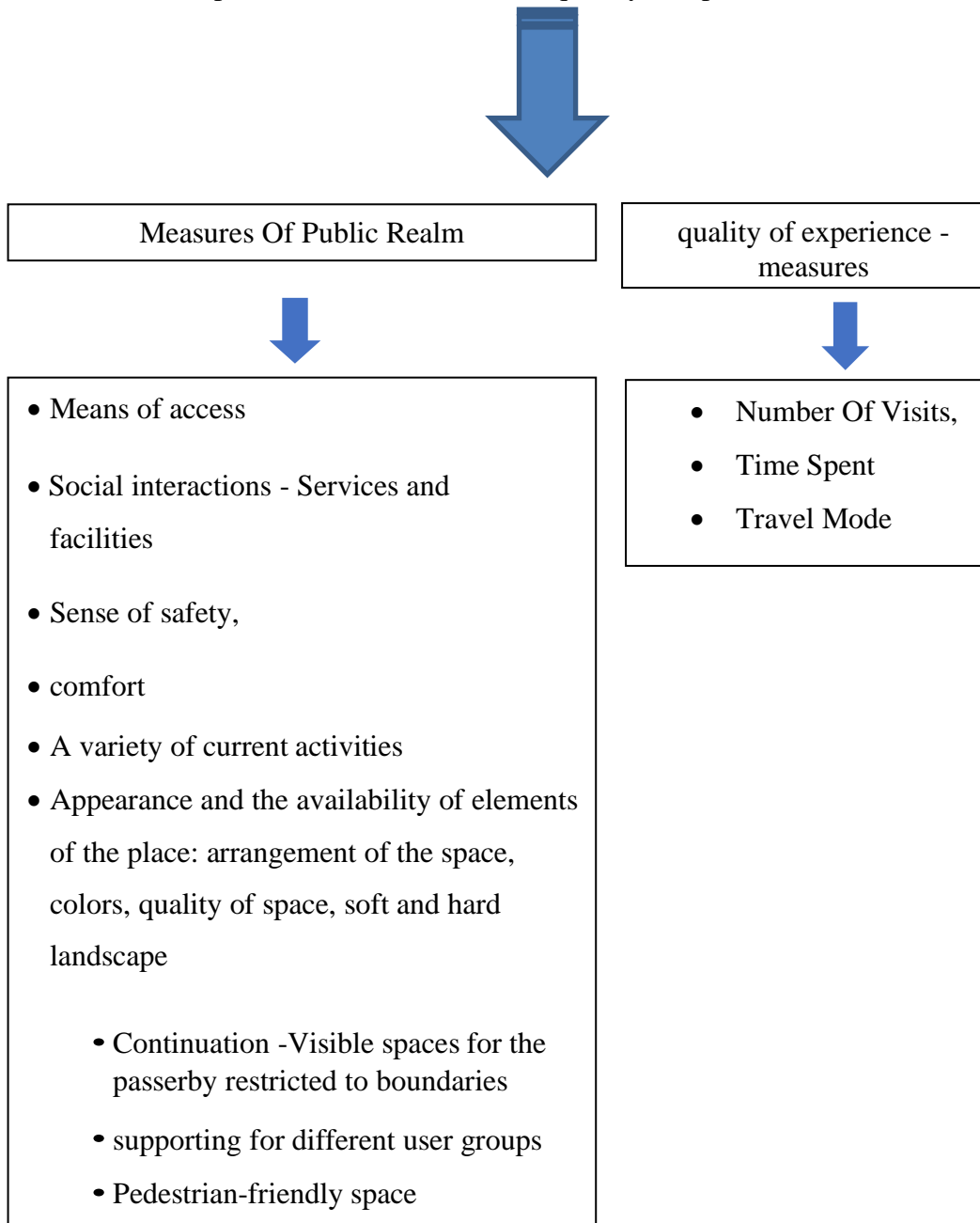
- Literature survey and deriving of a common methodology of analyzing public realm and Impacts on Privately owned public spaces.
- Surveys related to the study:
- Photographic survey- analyzing the six elements as forwarded in section 3.2. theoretical framework derived through literature survey. The availability and usage of these elements in public places will be captured and discussed.
- Observation survey- in this situation, the selected cases will be visited and observed with the intention to understand whether the facts elaborated in the literature survey is being forwarded in the practical scenario.
- Questionnaire- an online questionnaire will be distributed among possible users of the selected spaces and their opinion on the study will be obtained.
 - The questionnaire will focus on the items:
 - The reasons for the selected places to be visited
 - Duration of the time that will be spent in these places
 - Safety and adequacy of services of the selected cases

- Age groups that are visting
- Pedestrian friendliness of the location
- Recreational activities available in these places and their relevance and adequacy
- Interviews- Interviews too were intended to be done as a survey method of the study, with the unexpected statuses occurred with the covid-19 pandemic, meetings and interviews were not held.

The case studies will be wisely chosen with the availability of a place which has been used by the public over a period time which may be of cultural or historical values and a newly incorporated building that may seems to have impact on the buildings that are older. As per the study, it is essential that the selected places with cultural values are privately owned public building too since the focus of the study is based on the impact of intensification of public realm over privately owned public building.

PUBLIC REALM

People can easily speak by voice or recognize a person in the public realm in successful public worlds, which are frequently compact and human-scaled.



3.3. Methodology Of the Study

- Objective 1 - Investigate a theoretical framework for identifying the public sphere, as well as its social and spatial aspects. – literature review
- Objective 2- investigate a theoretical framework for calculating the influence of privately held public structures on the public space. –questionnaire and systematic observations
- Objective 3- Based on their differences in characteristics, two locations in Colombo will be chosen as case studies. A questionnaire will be used to collect data for the literature review (objectives 1 and 2).

Measures of physical characteristics

- Data collection tool – Observations / site surveys
- Method of analysis – Map / sketches / Graphics

Field study procedure

Physical research was accompanied through the following methods:

- Direct Observations
- Photographic survey with context study

The photographic study facilitated to record physical characteristics, demonstrate situations and characters of the place.

- Public survey using a questionnaire

Criteria for selection of Case study and the limitations imposed are:

- Located within the Colombo District

- Easily accessible
- Selection of streets which are distinct through their physical character
- Commercial activities of shops at streets selected to be different from one another

Further details on the case studies selected are elaborated in table 01 below

Table 1- Details on Case Studies selected

	Case – 1	Case – 2
Name	Public realm - Galle face Green – privately owned public building – One Galle face	Public realm -independence Square – privately owned public building – Independence Arcade
Location	Colombo Fort	Cinnamon Gardens – Colombo 7
Characteristics	<ul style="list-style-type: none"> • Means of access • Social interactions - Services and facilities • Sense of safety, comfort • A variety of current activities • Appearance and the availability of elements of the place: arrangement of the space, colors, quality of 	<ul style="list-style-type: none"> • Means of access • Social interactions - Services and facilities • Sense of safety, comfort • A variety of current activities • Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.

	space, soft and hard landscape <ul style="list-style-type: none"> • Supporting various groups of users • Pedestrian-friendly space 	<ul style="list-style-type: none"> • Supporting various groups of users • Pedestrian-friendly space
Present usage	Galle face – Leisure One Galle face – Mixed use	Independence square –Leisure Independence Arcade - Mixed use

(Source: By Author)

Sampling and Data Collection

Data collection survey was conducted via on line questionnaire due to the prevailing condition of COVID 19 pandemic situation.

Further the data collection survey was answered by the public.

Table 2- Sample numbers for Survey

Age Group	18-30	31-40	41-50	Above 50
as a %	20	60	25	2
By Sex	Male		Female	
as a %	45		62	

(Source: By Author)

Summary

The measures of the public domain and human behavior between the public realm and privately held public buildings will be discussed in this chapter.

The case studies will be wisely chosen with the availability of a public space that has been used by the public over time and may have cultural or historical significance, as

well as a newly included building that may appear to have an impact on older structures. Because the study's focus is on the influence of intensification of the public realm over privately held public buildings, it's critical that the Selected locations with cultural qualities are also privately owned public buildings, according to the study.

CHAPTER 04

CASE STUDIES

4.1 Introduction

Colombo is the metropolitan city of Sri Lanka and has the highest population in the island with 5.6 million citizens within the area and 752,993 inhabitants within the municipality. It's no surprise that this commercial city is the financial hub of Sri Lanka and has many popular landmarks that draws in foreign and local tourists alike.

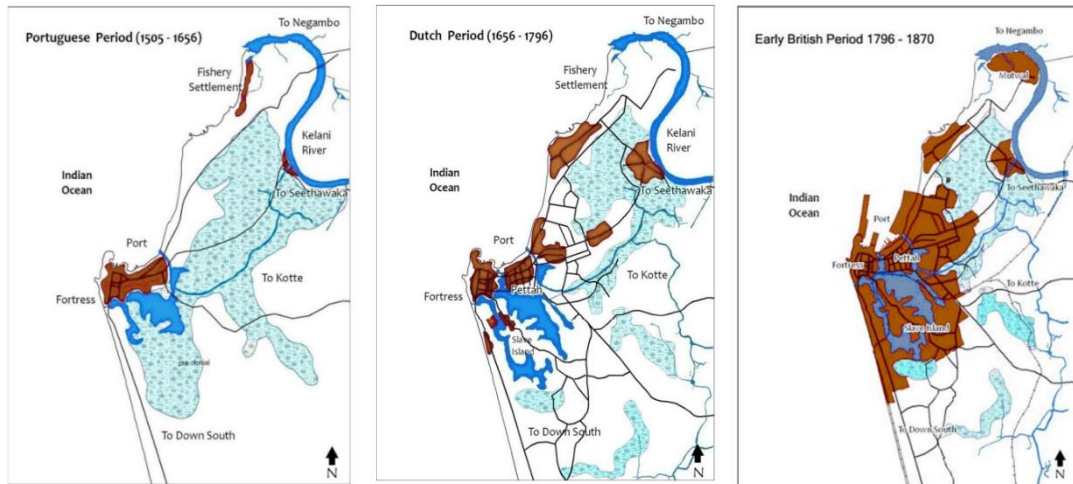
The Colombo city scape boasts of modern structures while maintaining its colonial buildings, highlighting its vibrancy. Galle Face Green, Viharamahadevi Park, Colombo Lotus Tower, Colombo Racecourse, Nelum Pokuna Theatre, Planetarium, University of Colombo, Beira Lake, Mount Lavinia Hotel, Mount Lavinia Beach, Dehiwala Zoological Garden, and the National Museum are all famous sites in Colombo. With its many canals running through its real estate and the 65-hectare Beira Lake at its core, the city's geography is a combination of land and water.

The purpose of this study is to conduct a deep analytical study of urban public spaces in Colombo city in terms of physical, social, and psychological components, to analyze how people perceive a public space (square) and what factors should be considered when designing a public space, and to investigate attitudes and methods to encourage people to interact with the urban environment, particularly urban squares.

Future the study and analyze the impact for public realm through urban intensification of privately owned public building. whether the privately owned public building has become a positive or a negative impact for the urban user.

Due to the current pandemic situation, the use of these places is restricted or close for public, therefore Photography Survey and observations survey is used as appropriate tool to identify human behavior and human activities within the context.

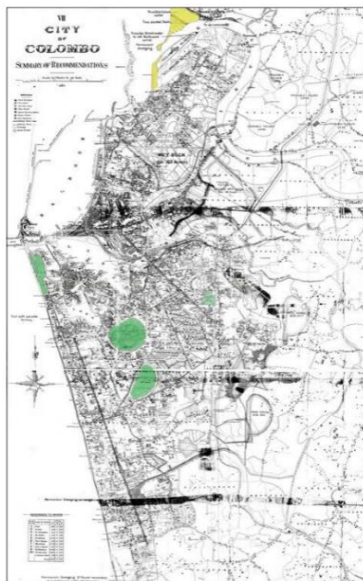
4.1.1. Evolution Of Colombo



Figures 38,39 & 40: maps showing the evolution of Colombo
Source: anonymous

4.1.2. Interventions to Plan Colombo in 19th Century

With various urban planning concepts introduced to the country, there are several plans that speaks of the urban growth of the cities over the time.



Sir Patrick Geddes made the first formal planning attempt in 1921, when he presented a new vision for Colombo: "The Garden City of the East."

Figure 41: City plan by Sir Patrick Geddes - 1920
Source: Anonymous

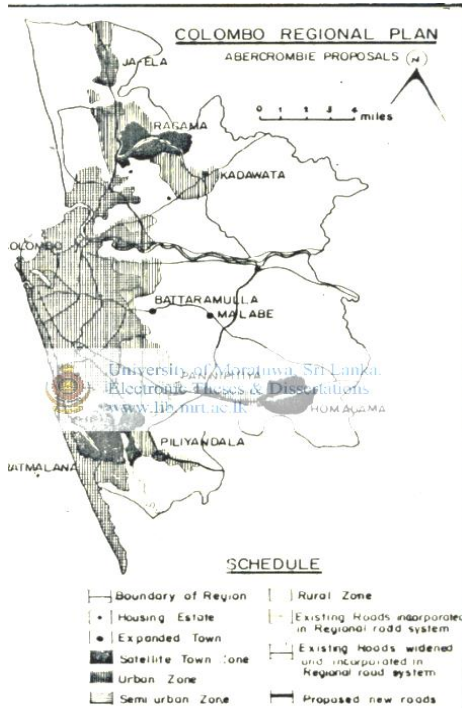


Figure 42: City plan by Clifford Holiday
Source: Anonymous

Controlling the people movement by "Zoning", which assumed would regulate and stabilize the future growth of Colombo. Commercial, industrial, and residential areas were provisionally defined in this plan.

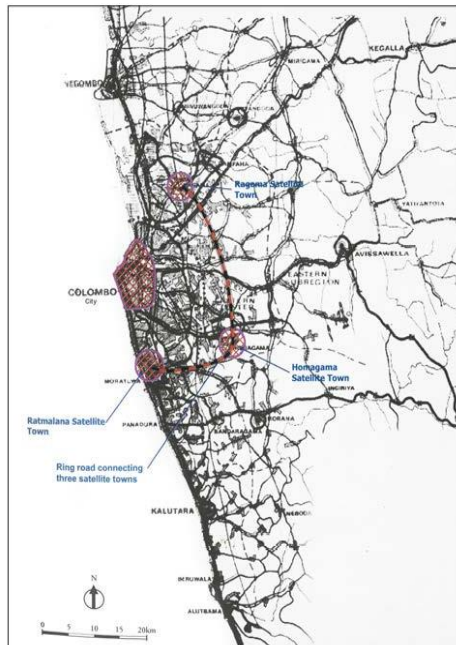


Figure 43: Regional Plan by Patrick Abercrombie - 1948
Author: Anonymous

Patrick Abercrombie prepared a town planning scheme for the City of Colombo based on the **principle of decentralization** of urban activities.

4.2 Case Study 01 – Gall Face Green and The Impact of The Privately Owned Public Buildings of The Vicinity

4.2.1 Galle Face

Galle Face is a 5 hectare (12 acre) ocean-side urban park in the center of Colombo, Sri Lanka's financial and business hub. It spans for 500 meters (1,600 feet) down the shore. Sir Henry George Ward who was the governor laid up the promenade in 1859, but the original Galle Face Green covered a far greater extent than what is seen now. The Galle Face Green was originally intended for horse racing and golf, but it has since been utilized for sports such as cricket, football, and rugby.

The Galle Face Green is presently Colombo's prime open space. A popular place for kids, sellers, youngsters, couples, kite flyers and people who wants to enjoy their favorite activities while enjoying the open air adjacent to the sea. The countryside is bustling with day trippers and food vendors on weekend evenings. The Kingsbury Hotel, on one end, and the Galle Face Hotel, on the other, the two large hotels which borders along the vicinity. It is also the location of Sri Lanka's annual national day celebrations, which take place on February 4th. At Galle Face Beach in Sri Lanka, people relax on the beach.

The Sri Lankan Urban Development Authority manages and maintains Galle Face Green (UDA).

Gall face green in old days



Figures 44,45,46: Images of Galle face in the past
Source: Anonymous



Figures 47,48,49: Growth and urban intensification of Galle face over the time
 Source: Anonymous

4.2.2 Map of Galle Face Green



Figure 50: Image of Galle Face on Google map
 Source: Google Earth



Figure 51: Nollie, map of Galle face
 Source: Author

4.2.3 Privately Owned Public Buildings Along Galle Face Green.

One Galle Face Mall

The first luxury shopping development in Colombo. A top shopping, entertainment, and dining destination that brings together local and international shoppers.

The design was intended from the start to combine clear sight lines, ease of access, and a high-quality material environment. Providing the world's most well-known and well-loved companies with perfect display and foot traffic opportunities, as well as ensuring that visitors are engaged and satisfied with an experience unlike any other in Colombo.

The rooftop offers a range of alfresco dining options with cuisines to suit every palate, along with breathtaking views of the ocean, making it a must-visit location for a drink with friends, coworkers, or family. The high-end themed food court will feature well-known international brands alongside the best of local fare, ensuring that the mall will be buzzing with activity.

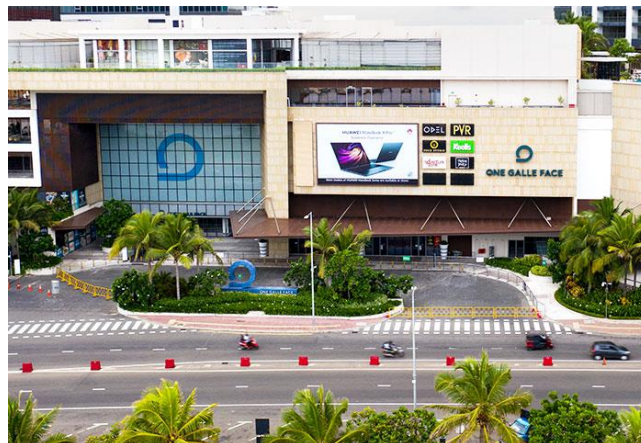


Figure 52: One Galle face Mall
Source: Anonymous

The one Galle face shopping mall is a well-developed and finely detailed building creating multiple recreational spaces attracting the public.

Galle Face Urban Forest Park:

A collaborative effort of the Urban Development Authority and Sri Lanka Land Development Corporation Built with the hopes of providing relaxation to the public, while adding a touch of greenery to the Colombo city infrastructure, the Galle Face Urban Forest Park, it's an attempt to transform the city of Colombo into one of the fastest-growing cities in the South Asian region, while embedding an eco-friendly landscape into it, as well as to add economic value. All these are available for the experience and amusement of the urban population. The Galle face urban forest consists of a 1.5 km well developed jogging track with Hard and soft Landscape Garden, where people would like to visit for an evening walk watching the sunset.

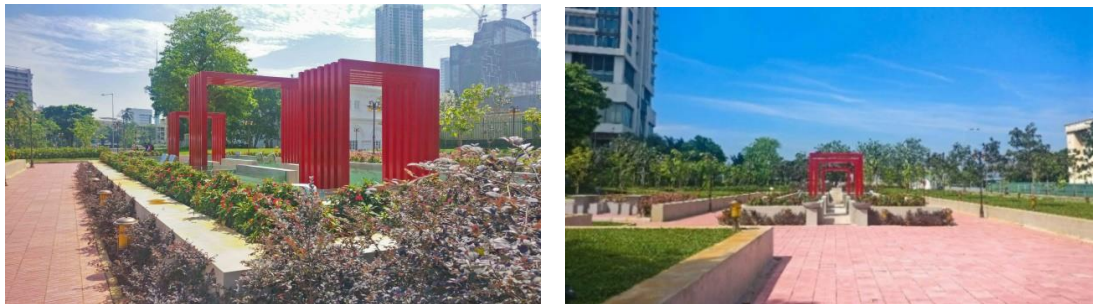


Figure 53 & 54: Galle face Urban Forest Park
Source: Author

Dining Capsule

The Dining Capsule and Galle Face Urban Park Forest are located 750 meters away from each other. Serving up some Sri Lankan and Continental treats, the Dining Capsule has 8 open-air restaurants. This restaurant collection includes Dunhinda, Roots, Grand Monarch, Street Wok, Lavinia, Spice Junction and Giovanni's. Aside from that, there's Box Bar, a beer and wine store. A massive seating space is arranged for you to sit down for a meal, or simply to relax and have a chat. During our visit, we did both. Most of the restaurants open in the afternoon, but we decided to grab a bite from the 3 spots that were open while we were there.



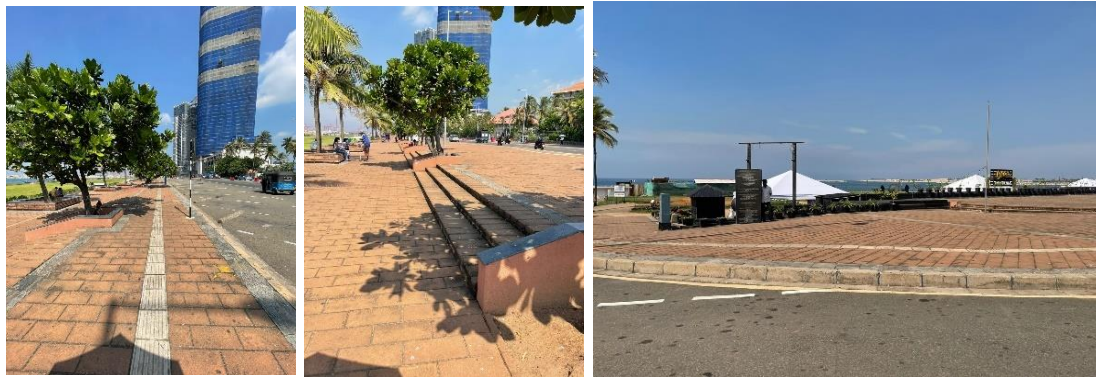
Figures 55& 56: Dining Capsule, Source: Author

4.2.4 Measures of Public Realm in Galle Face Green

Means of access:

Visual access

Significant number of entrances has been provided in different locations to access the main public space. Generally, its approximately 3 feet below from the Galle Road level.



Figures 57,58 & 59: Entrance to Galle face
Source: Author

Very clear visibility from adjacent buildings to the location has been provided encouraging to steal eyes from passersby.

Since it's the largest open space in the heart of Colombo, from the center of the open space and from the adjacent buildings towards the open space has a clear visibility. The nature and orientation of the place have played a massive role in obtaining the attention to the place.



Figures 60,61, & 62: Outdoor images of Galle face
Source: Author

Visibility of the space is highly appreciated where the parking is too encouraging the view. Adequate parking has been provided and from all parking lots the space beyond is clearly visible as in a see-through scenario.



Figure 63: Parking Lot of Galle face
Source: Author

Availability of active street frontage & permeability enhances the pedestrian walkway. Street frontage and the permeability is one of the main aspects in a public realm, where in this situation, it is naturally has been provided being the character of the space. Thus, physically, and visually the quality of permeability attracts the public to the place.



Figure 64: Pedestrian walkway at Galle face
Source: Author



Figures 65: Pedestrian walkways
Source: Author

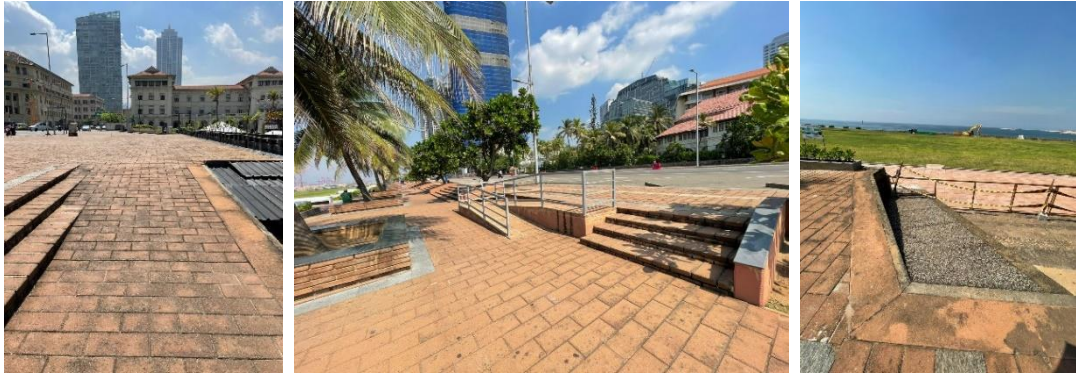
Access to the location is made possible via a variety of transit alternatives, which improves connectivity. The continuity of sidewalks allows people to visually access the place making it physically connective.



Figures 66 & 67: Pedestrian walkways
Source: Author

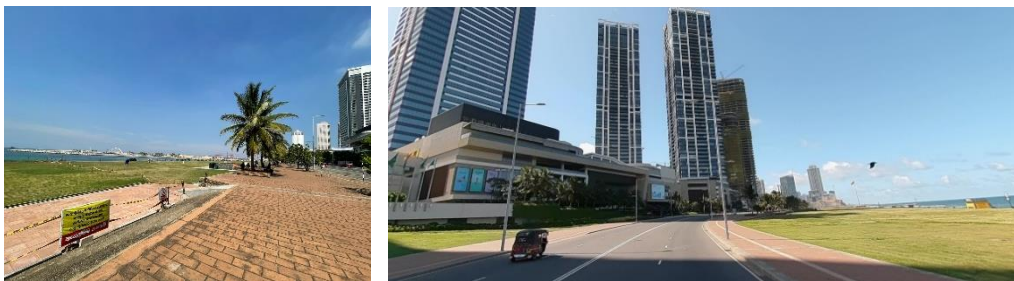
Physical access

A place should be accessible by all sorts of people who are in need of reaching it. Allowing physically challenged people to reach the place can be seen continuously at the Galle face at every entrance of it. It is manifested, the concept: that the public spaces need to be created to all types of people, no matter the age or the physical ability, has been seriously taken into consideration when creating access to this place. The analytical site study shows that reasonable number of facilities have been provided to the public for instance by providing ramps with safety railings.



Figures 68,69 & 70: Pedestrian access to Galle face
Source: Author

The linkage between street and space is highly depicted in this place. A public realm needs to be human friendly, which should not be hidden and needs to be visible. This required clarity and visibility of space is available in the Galle face. Further the public space and the linkage between the streets are created accordingly where no one will be lost in the space.



Figures 71 & 72: Visibility of the place
Source: Author



Figures 73 & 74: Seating provided for people
Source: Author

Overall design relates to people, and it is a user-friendly space that attracts crowd continuously.

Economical Access

Galle face has a history which runs back to centuries, at all times all persons from higher class, middle and lower were allowed to enter to the public realm without any disturbances. Even the current day, this facility has not been changed. Any time of the day, all were welcomed to this place. However, with the current pandemic situation there has been a restriction to enter further, there were some maintenance works was on going, one part of the Galle face green was closed for public.

Galle Face Green is the prime open public space in Colombo. Any age group children, vendors, youngsters, lovers, kite flyers, and all those who want to spend time with their favorites next to the sea under the open sky can walk in freely. During weekends large crowd enters to the space, there is no limitation or restriction to access the place.

Further during special holidays, religious event respective people are gathering to celebrate their events.



Figures 75, 76 & 77: People using the place
Source: Author

Social interactions - Services and facilities

Galle face is a place where it caters for a large scale of society despite of their social status. All sorts of people with various social backgrounds are visiting the place. Thus, it creates a platform where people share their norms enhancing social interactions.

Moreover, the services and facilities of the premises are created in a way that can be used by everyone coming to the place despite their differences.



Figures 78, 79 & 80: People at Galle face
Source: Author

Sense of safety and comfort

In general, during daytime there is considerable amount of safety and military presents is also available since it is in heart of Colombo. However, during the nighttime, there is a safety issue with the inadequate lighting methods. only Street light and periphery lighting methods are available.



Figures 81,82, & 83: Surrounding of Galle face
Source: Author

- Appearance and the availability of elements of the place:

arrangement of the space, colors, quality of space, soft and hard landscape elements are displayed in order to attract the people.



Figures 84 & 85: seating and resting spaces @ Galle face
Source: Author

Apart from the above features, Galle face carries far more positive characteristics that encourage people of visiting it. It never judges people by their appearances or social status thus embrace all of them as one. It supports various groups of users without social discrimination.



Figures 86,87 & 88: Street vendors at Galle face
Source: Author

Further it encounters a pedestrian-friendly space providing adequate pedestrian sidewalk.



Figures 89 & 90: Pedestrian walkways
Source: Author

4.2.5 Impact of The Development of One Gall Face Building on Galle Face:



Figure 91: Old map of Colombo
Source: Author

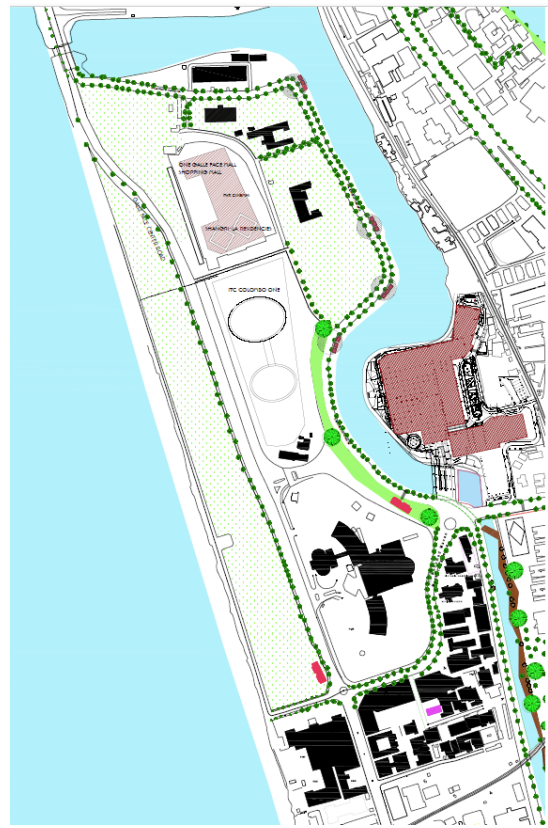


Figure 92: New map of Colombo
Source: Author

With the evaluation of Colombo city through out the years, the area has become more momentous. Adding value to the urban area. Galle face green with a remarkable history, though there is very less facilities for recreational activities an individual still wanting to visit the place with a companion for a long walk, for a chit chat or to enjoy the ocean at a distance.

The newly completed projects the one Galle face is the most influent privately owned public building in the vicinity, catering most amount of entertainment, shopping experience and different crucians.

Further to the manmade structures, creation of hard and soft landscape which consists of pedestrian friendly recreational belt in Baladaksha Mawatha wrapping the one Galle face, runs towards cinnamon life which also a value-added element for the public realm.

4.2.6 Summary of The Survey

The questionnaire survey was conducted whilst the country was facing uncontrollable pandemic situation. However, successful online questionnaire survey was completed with 100 participants (age between – 18 to 30, 31 to 40, 41, 50- above) via a google form application.

Case Study One,

The two locations of the case study 01 as follows,

- Galle face green
- One Galle face

Participant’s opinions on the selected area as follows,

1. Safety

A safe place is where no one is being harmed mentally or physically. When a person feels safe, it’s easier to reach peace of mind. Further a person to feel safer, he or she should be comfortable with every aspect in that space.

Out of the two locations mentioned above, from the total participants of 104, 71 number of participants wish to visit one gall face and they mentioned and agreed that it is safe to visit comparing to gall face green. whilst 37 participants commented as opposite, Gall face green is safe place to visit to comparing with one Gall face.

In the two locations where the study was conducted, most of the participants feels one Galle face is the safest place, the reason being the sense of security

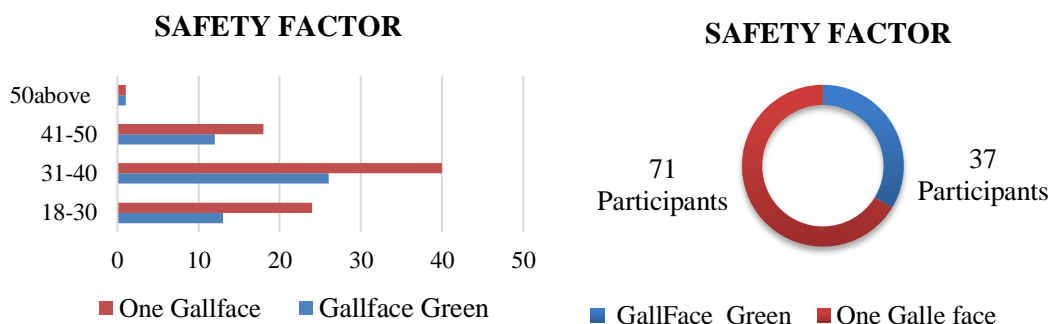


Illustration 01: Safety factor- case study 01

Source: By Author

2. Comfort

A place to feel Comfort – it needs to be Visual, Psychological and Thermal ease. The participants with different age groups have answered with different judgement, age group 41 to 50 participants have voted the Galle face green as the most comfort place.

The reasons they have highlighted as,

- relaxation,
- the fresh air,
- lesser crowd
- serenity
- peacefulness
- enjoy variety of street food

further, the younger crowd (age group 18-30) had voted as the One Gall face, the reasons they have highlighted as,

- Entertainment
- Convenience
- Lifestyle
- Available Facilities
- Following the Trend

Study derives that a person’s age determines or control the needs and the means of comfort they wish to achieve.

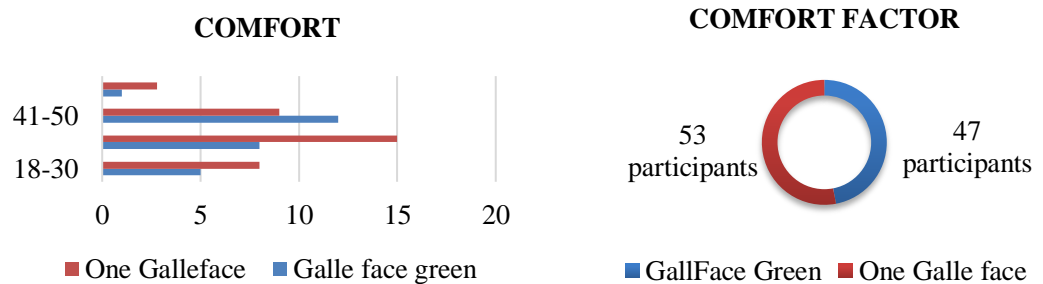


Illustration 02: Comfort factor- case study 01

Source: By Author

3. Available Activities

This address the activities which are provided to enhance the location. The connectivity and permeability which creates between public realm and the privately owned public building surrounded in the vicinity.

Galle face Green:

Further to the questionnaire carried out on Galle face Green,

- The open space and the greenery
- Long Walks overlooking the beach
- food kiosks
- Facility to fly kites on the one space

The most common activates are the above mentioned, however 30% of the participants have mentioned the current activities are adequate to sustain the attractiveness of the Gall face.

Further, in order to enhance the location, above 55% of the participants have voted to upgrade the following,

- Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.
- self-assured in terms of safety and security.
- Introduce more entertainment activities.
- Make more user friendly for different age groups

One Galle face,

Is the Colombo's first prestigious shopping experience. Inclusive of retail, entertainment, and dining paradise to cater both local and global commuters in one roof. The most famous privately owned public building among the younger and older generation in the vicinity.

- Multiplex - PVR Cinemas
- Food court, Food Studios, and supermarkets
- Shopping / Retail
- Entertainment facilities and luxury type Restaurants.

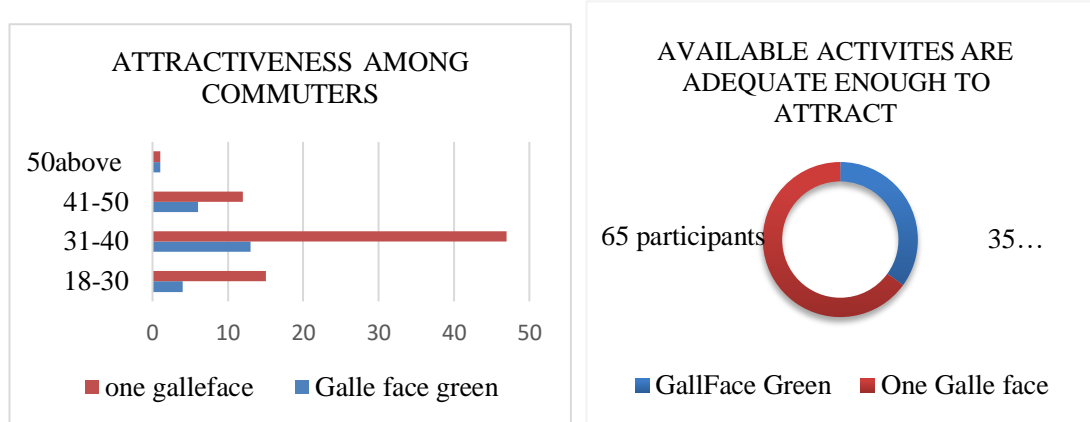


Illustration 3: Availability of activities- Case study 01

Source: By Author

These activities have satisfied both younger and the older participants who participated for the questioner. However, in order to develop one Galle face, the following comments been stated.

- Introduce more entertainment activates
- Make it more use friendly for various age groups
- self-assured in terms of safety and security.
- Appearance incorporating elements of the place: style, form, color, texture.

most facility provided location is highlighted as the privately owned building element. the age group between 31-40 had voted for one Galle face for the amenities and entertainment factors available at present.

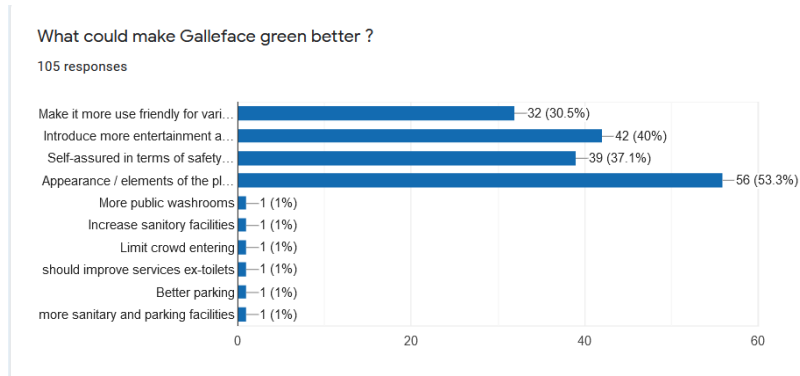


Illustration 04: User perception

Source: By Author

4. Available Services and Facilities,

As per the questionnaire survey data, the below graphs show the majority of the participants (Age Group Between 31-40) have agreed and given the comments as the one Galle face provides more facilities than the gall face.

Illustration o5 with the response of the different age groups for to the questionnaire summery emphasizes the interests of the place, respectively with the services and the facilities available. All three categories of age groups show an interest in the indoor entertainment, food, retail services and facilities in One Galle face.

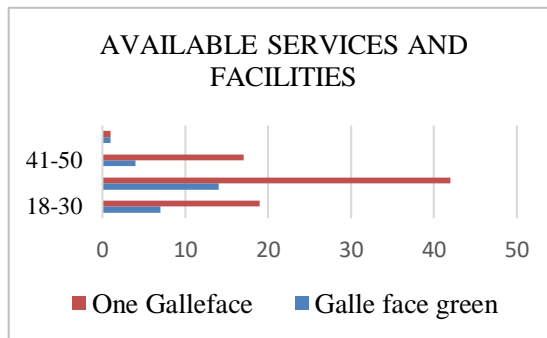


Illustration 05: Availability of services - Case study 01

Source: By Author

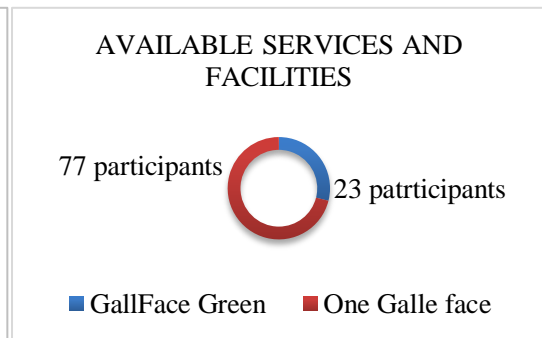


Illustration 06: Availability of services- case study 01

Source: By Author

5. How Much Time Will Be Spent in The Location?

Purpose to visit the place will determine the time spent in the particular location. The study of the time spent has segregated to five slots as shown in the illustration 07 below and analyzed the amount of time spent respectively in the selected locations. A person who visits the ‘One Galle Face’ mainly visits to spend more than 1 hour, the collected data shows the reason been the facilities available and the convenience.

However, gall face green will also be visited for couple of hours by the participants, there will always be a clear reason to visit the particular place and the time spent. Illustration 08 indicates the comparison data analysis of the participants vote, out of 104 questioner surveyor participants, 70 participants visit one Galle face and spend more than 2 hours per visit. 34 participants visit Gall face green for less than 2 hours.

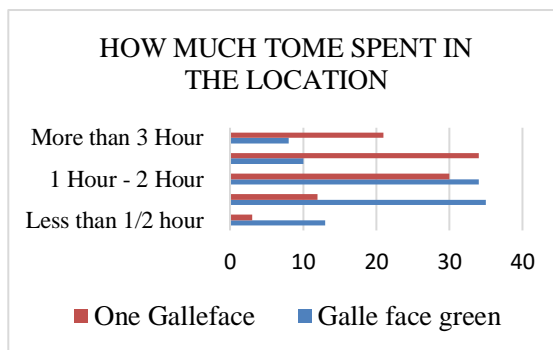


Illustration 07: Time spent at the place- case study 01

Source: By Author

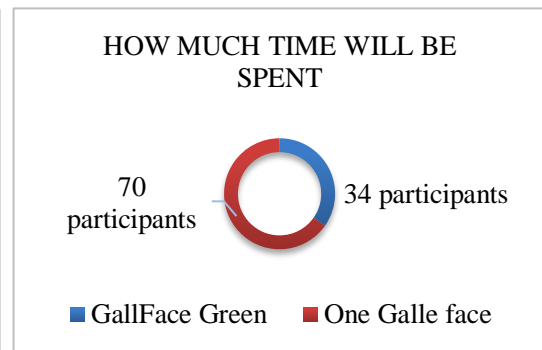


Illustration 08: Time comparisons- case study 01

Source: By Author

6. Facilities Provided to Support Various User Groups

With the analytical data collection study shows undoubtedly that the ‘One Galle Face’ have the most agreed numbers, convincing that the provided facility in the building supports various user groups. Illustration 09 Demonstrates the comparison data of the agreed, disagreed expanse.

Out of 104 participants, 75 participants have selected the ‘One Galle Face’ as the place out of the two locations provides various user group facilities.

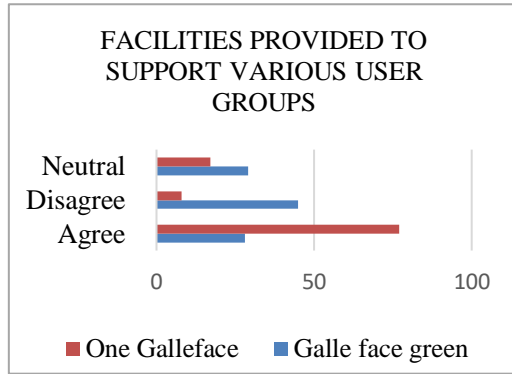


Illustration 09: Facilities provided for various user categories
Source: By Author

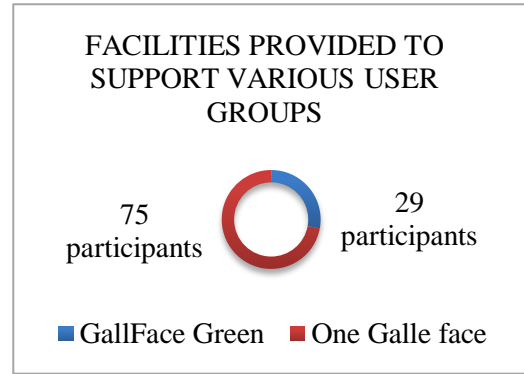


Illustration 10- Comparison to user perception- Case study 01
Source: By Author

7. Pedestrian Friendly Location

Galle face Green and One gall face both are pedestrian friendly locations. One gall face has a wide entrance which generates permeability, creating an inviting space for the guests into the building. However, Galle face green has the same qualities fulfilling the pedestrian friendly location for all user categories.

Illustrations 11 and 12 show the comparison of the two locations respectively.

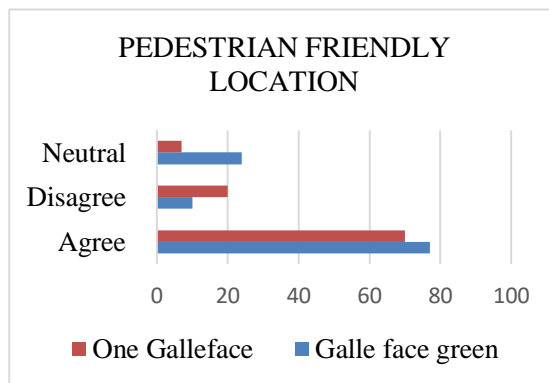


Illustration 11- Pedestrian friendliness- case study 01
Source: By Author

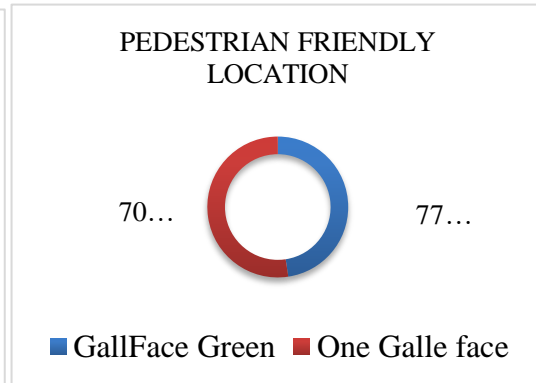


Illustration 12: Comparison to user perception
Source: By Author

4.2.7 The Inference of The Case Study 1

Summary of the questionnaire:

Table 01: Summary of the questionnaire- case study 01

QUESTIONNAIRE	GALLE FACE GREEN	ONE GALL FACE
Mostly safe place	33.7%	70%
Mostly comfort place	42.6%	72.2%
Provided activities are attractive	29.6%	62%
Services and facilities provided	27.8%	64%
Maximum hours wish to spend	½ hours to 1 hour	Two hours or more
Facilities provided to support various user group	27.8 %	65%
Pedestrian friendly	77%	70%

Source: By Author

The study of the main aspects clearly justifies that, significant amount of value been added by ‘One Gall face ‘to the vicinity. However, Gall face green been the largest open space in the heart of Colombo, the value of the open public realm has been decaying for following reasons,

- the lack of sense of safety,
- lack of security,
- Lack of comfort,
- Lack services and facilities,
- Lack entertainment facilities

Further analytical questioner surveyor, it illustrates clearly that one Galle face is an advantage for gall face green. With the justification of the privately owned public building convince that, gall face green the public realm has a momentous advantage.

“Impact On gall face green the Public Realm by Urban Intensification of Privately

Owned Public Building ‘the One Gall face’ is a positive impact for the vicinity”
 Graphical response from the participants, whether the One Galle face is an advantage
 for Galle face Green,

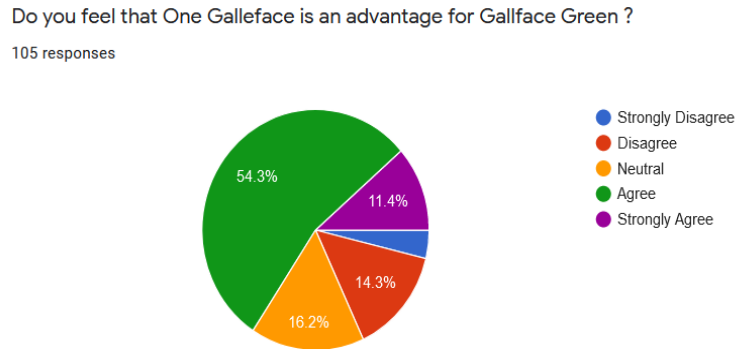


Illustration 13: Overall summary of the questionnaire -Case study 01

Source: By Author

From the questioner of 104 participants ,69 participants agree with the quote ‘The One
 Galle Face is an advantage for the Gall Face Green.

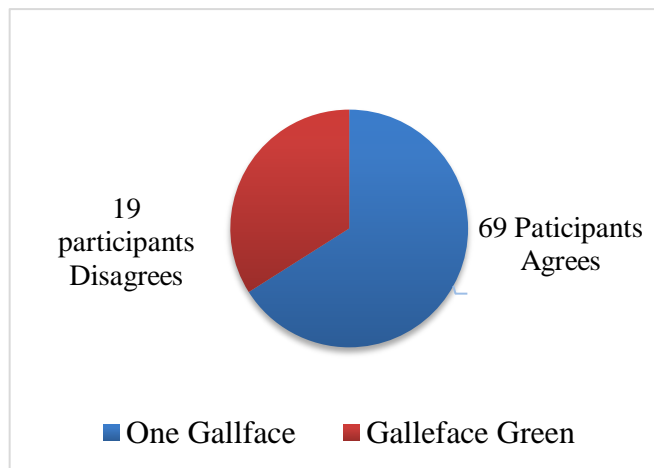


Illustration 14: Summary of the statement- Case study 01

Source: By Author

4.2.8 Guidelines to Enhance Gall Face Green – Public Realm

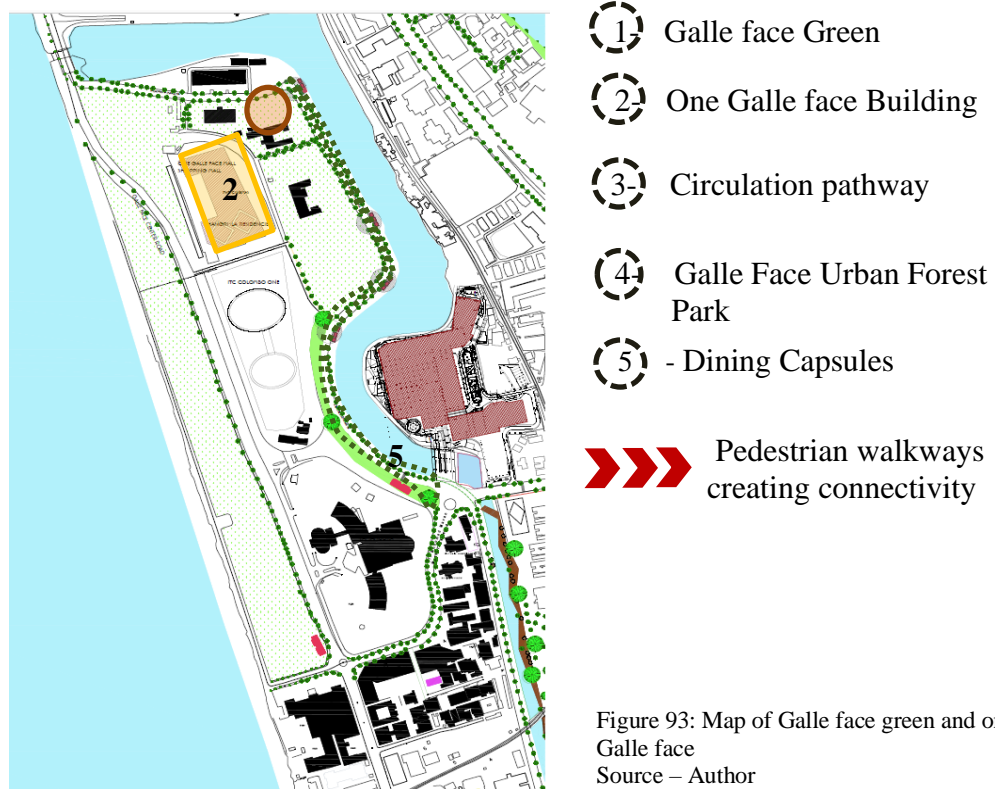


Figure map shows the connectivity and the pedestrian activities created along the vicinity between the public realm ‘The one Galle face “and the privately owned public building, ‘The One Gall face and the surrounding pedestrian activities have been created in Baladaksha Mawatha, between the one Galle face and cinnamon life. However, the public realm needs to be upgraded with the following guidelines to attract more public.

- Introducing more Social Interactions gaining Services and Facilities
- Introducing and creating Sense of Safety
- Creating more Comfortable Environment to spend more time – introducing hard and soft landscape methods to enhance the space.
- Introducing Variety of Activities, pedestrian friendly for all user groups.
- Introducing more Social Interactions Services and Facilities
- Supporting Various Groups of Users.

Case Study 02 – Independence Square and The Impact of The Publicly Owned Development of The Vicinities

4.3. Independence Square

On February 4, 1948, when Sri Lanka gained independence from British rule, Independence Memorial Hall was dedicated to the restoration of complete governmental authority to a Ceylonese-elected legislature. Independence Square (previously Torrington Square) in Colombo's Cinnamon Gardens is where you'll find it. It also serves as the home of the Independence Memorial Museum.

The monument was built on a one-of-a-kind pedestal on the location of the solemn ceremony commemorating the birth of self-rule with Prince Henry, Duke of Gloucester's opening of the first parliament on February 4, 1948. It is now used for religious gatherings as well as annual national day celebrations. The Ministry of Cultural Affairs owns it.



Figure 94: Independence square and the surroundings buildings – old map
Source: Author

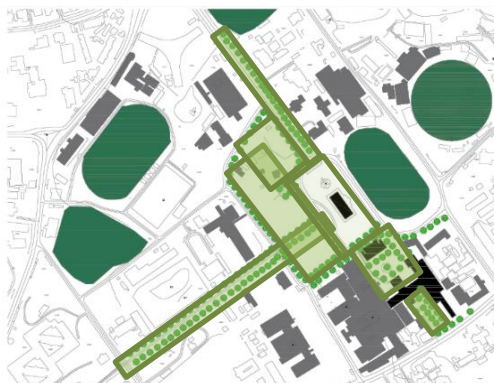


Figure 95: Independence square and the surroundings buildings – current map
Source: Author

4.3.1 Privately Owned Public Buildings Along Independence Square

Arcade Independence Square

The Arcade Independence Square is a shopping complex in Jawaththa Road, Colombo 07. This is renovated building was built as a portion of the Independence Square Redevelopment program originated by the government.

The Urban Development Authority began renovating the building in 2012, with special attention paid to preserving the structure's original architectural characteristics while also integrating new technical features and facilities. With no additions or renovations, the buildings remain authentic to the original complex.

Managed and owned by urban development authority.



Figure 96 & 97: Independence Arcade
Source: Author

Independence square park walk

It is a 0.3-mile route, where so many publics come to visit during morning hours and evening hours. This walking park has become very famous among Colombo and suburban residence without any age difference.

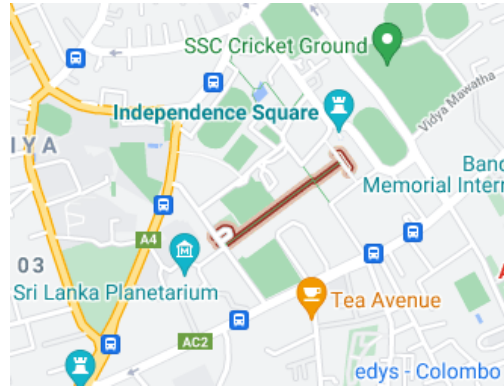


Figure 98: Image of Independence Arcade
Source: Google maps



Figures 99 & 100: Independence arcade
Source: Author

4.3.2 MEASURES OF PUBLIC REALM IN INDEPENDENCE SQUARE

1. Means of access

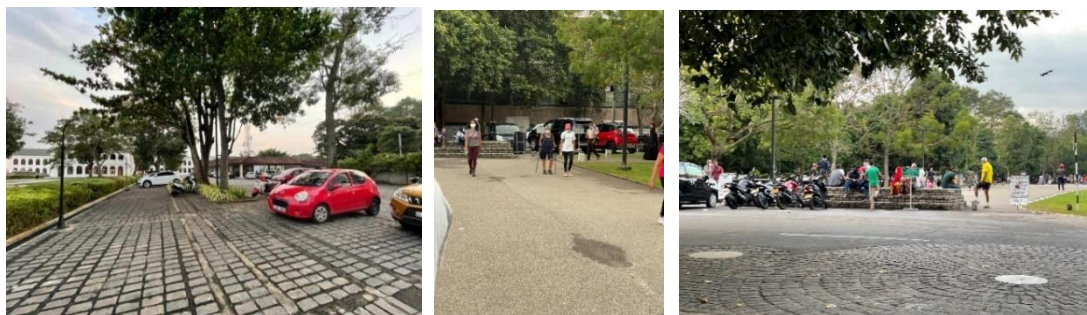
Visual access

The entrances for both independences square and the newly build arcade building is the same level as the street level. (Space visibility from distance) which has a clear vision from neighboring buildings (eyes on the street).



Figures 101 & 102: Visual access at Independence Arcade
Source: Author

Space is clearly visible from the location of cars in adjacent of street. The space can be clearly grasped and enjoyed without vehicular obstacles. Similarly, the street frontage is very active which attracts people passing by.



Figures 103,104 & 105: Street frontage @ Independence arcade
Source: Author

Variety of transportation opportunities provided to access and continuity of sidewalks.

1. Physical access

people with special need, such as usage of ramp facilities has been provided where necessary for differently able people to access. Further, evenly leveled walkways without any level differences are available too making the space usable by the differently abled people.



Figures 106 & 107: Physical access for the place
Source: Author

Through the linkage between street and space, overall design is created in a way that it relates to people's use.



Figures 108 & 109: Independence arcade
Source: Author

2. Economical access

Space accessibility for people of all economic classes (providing a variety of services at various rates and levels of quality).



Figures 110 & 111: Activities at the Independence arcade
Source: Author

As shown in the above images, an entertainer entertains the public while the kids are playing around the space. Thus, this place is too accessible by all sorts of economic classes.

3. Psychological access

- Sense of place - Symbolic access
- Symbolic limitation or attraction

4. Sense of safety and comfort Sense of security:

In terms of space, humans have a basic yearning for psychological and physical safety. A variety of planned actions and events aimed at boosting social presence in space, visual permeability, intelligibility, and simplicity can be used to attain space visibility. Controlling an area using a combination of mechanical and organizational tactics, such as cameras, gates, and obstacles in a natural way (by designating space and territory, overseeing transparency, and so on) (by defining space and territory, oversight transparency). Lynch discusses the elements that lead to monitor and, as a result, in another work (introducing Police and guards to the location).



Figures 112 & 113: Images of the surrounding of Independence arcade
Source: Author

5. Comfort

For optional and social activities in public space, including long stays, physical and psychological comfort is a very strong condition. Public places should be built in such a way that as much of their surface area falls into people's "comfort zones."



Figures 113, 114 & 115: Soothing environment around Independence arcade
Source: Author

- Protection against traffic and accident, Barrier between the pedestrian walkway and the road



Figures 116 & 117: Surroundings of Independence Arcade
Source: Author

- Possibilities for walking.



Figures 118 & 119: Walkable spaces around Independence Arcade
Source: Author

- Possibilities of sitting



Figures 120 & 121: Seating around Independence Square
Source: Author

4.3.3 Evolution of The Impact During the Past Years



Figure 122: Map of Independence Square & independence Arcade
Source: Author

With the evolution of the surrounding of proposed landscaped walkways, walking pathways has made the independence square has become more public friendly space, independence arcade conservation project added value to the area. Introducing different amenities such as shopping, restaurants, and other facilities.

further, the independence arcade and surrounding landscapes walkways attracted more people than before. More public friendly space has been created, sense of security and comfort, entertainment public space has been created. Further during different time of the year, the privately owned public open space been facilitating for individual vendors to out up food stalls for public. Independence arcade is one of the central public spaces where public gather during any time of the day. When there are exhibitions at the BMICH in particular the annual book fair, independence square and the arcade is a mostly visited place. However, with the current pandemic situation around the world and in Sri Lanka, most of the time the open space has been used for day-to-day walkout sessions and folks who wish to come for a walk in the evening session.

Furthermore, as the conclusion I would like to highlight the independence square has become more public oriented with the rapid development of the privately owned public space.

4.3.4 Summary of The Survey

The questioner survey was conducted whilst the country was facing uncontrollable pandemic situation, However, successful online questionnaire survey was completed with 100 participants (age between – 18 to 30, 31 to 40, 41, 50- above) via a google form application.

Further to the questionnaire survey,

The two locations of the case study 02,

- Independence Square
- Independence Arcade

most of the Participants opinions area as follows,

1. Safety

- A safe place is where no one is being harmed mentally or physically. When a person feels safe, it's easier to reach peace of mind. Further a person to feel safer, he or she should be comfortable with every aspect in that space.
- Out of the two locations mentioned above, from the total participants of 104, 57 number of participants wish to visit independence square and they mentioned and agreed that it is safe to visit comparing to Independence Arcade. whilst 47 participants commented as opposite, Independence Arcade is safe place to visit to comparing to Independence square.
- In the two locations where the study was conducted, most of the participants feels independence square is the safest place, the reason being the sense of security, the openness and the wide range of visibility from the square.

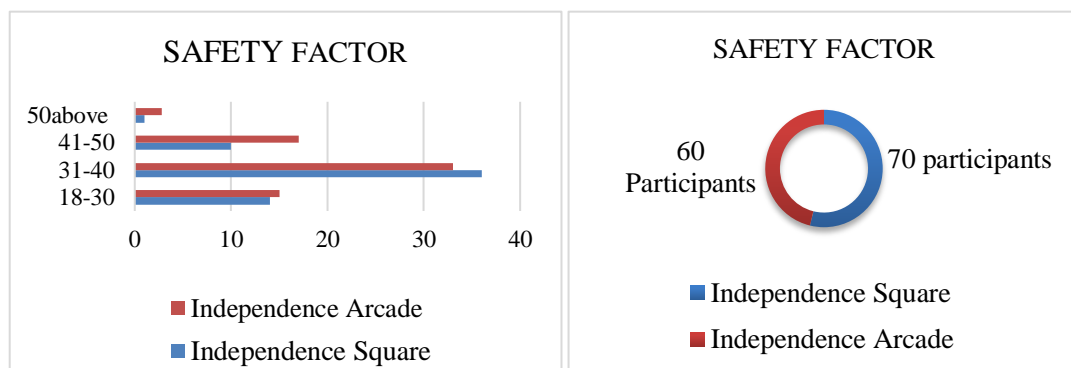


Illustration 15: Safety factor- Case study 02
Source: Author

2. Comfort

A place to feel Comfort – it needs to be Visual, Psychological and Thermal ease. The participants with different age groups have answered with different judgement, age group 31 to 40 participants have voted the Independence Square as the most comfort place comparing to Independence Arcade. The reasons they have highlighted as,

- relaxation,
- the fresh air
- lesser crowd
- serenity
- peacefulness
- workout activities

Further, age group 41-50 had voted as Independence Arcade, the reasons they have highlighted as,

- Entertainment
- Convenience
- Lifestyle
- Available Facilities
- Following the Trend

Study derives that a person's age determines or control the needs and the means of comfort they wish to achieve.

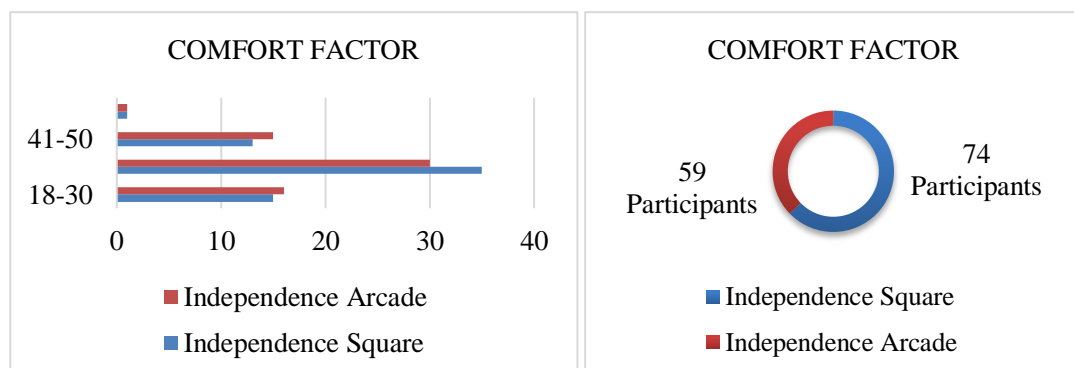


Illustration 16: Comfort factor- Case study 02
Source: Author

3. Available Service and Facilities

As per the questionnaire survey data, the illustration 17 shows the majority of the participants (Age Group Between 31-40) have agreed and given the comments as the Independence Arcade provides more facilities than Independence Square. However, both Independence Square and the Independence Arcade been a satisfactory location for all age categorize for the facilities provided at present. Independence Square is famous among the younger and older generation

- for workout sessions conducted by under different trainers and the environment,
- lesser crowd
- lesser traffic congestion
- peaceful environment

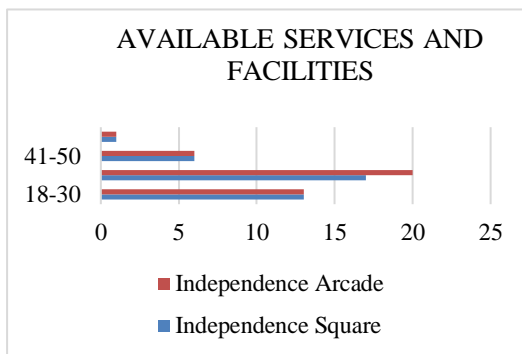


Illustration 17: Availability of services-
Case study 02
Source: Author



Illustration 18: Comparison of the availability
of services
Source: Author

Furthermore, in order to develop the independence square, participants have mentioned, adding the following will be an advantage,

- Introduce more entertainment activities
- Making it more user friendly for all user groups
- Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape

6. What could make independence square better ?

105 responses

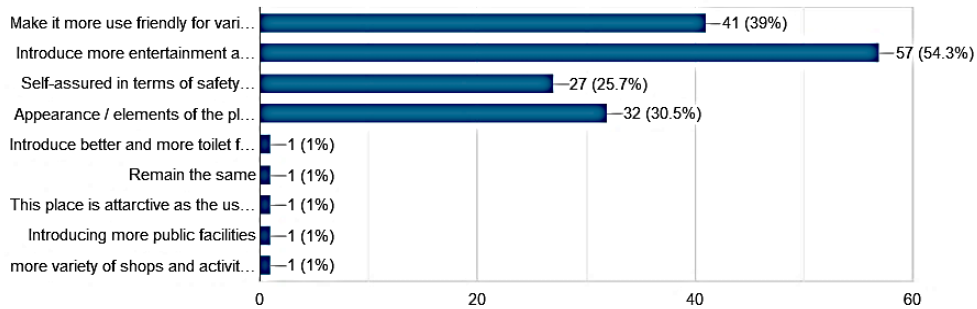


Illustration 19: User Perception -case study 02

Source: Author

4. How Much Time Will Be Spent in The Location?

Purpose to visit the place will determines the time spent in the particular location. The study of the time spent has segregated to five slots (shown in illustration 20) and analyzed the amount of time spent respectively in the selected locations. A person who visits the ‘Independence Arcade ‘mainly visits to spend more than 1 hour and lesser that 2 hours, the collected data shows the reason been the facilities provided.

However, Independence Square will also be visited for average 1 hour to 2 hours by participant, there will always be a clear reason to visit the particular place and the time spent. With the analytical data collection, the main reason for the participant to visit the independence square is for relaxation.

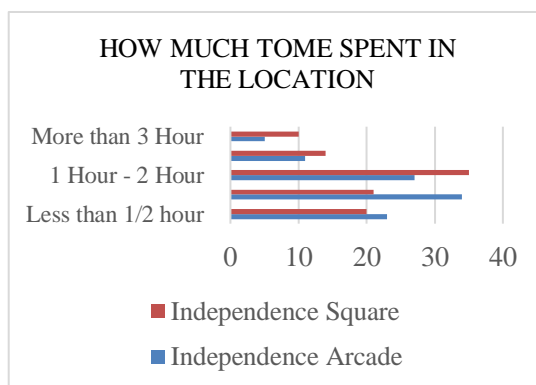


Illustration 21: Time spent on the space- case study 02

Source: Author

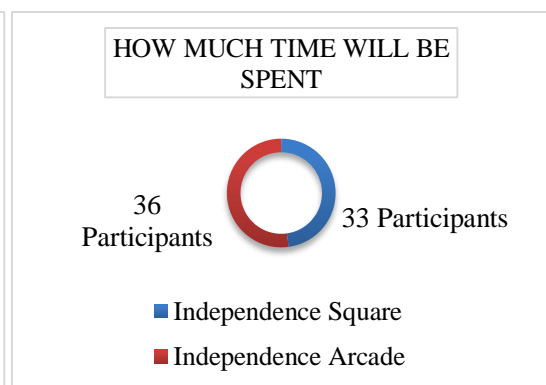


Illustration 22: Comparison of the time usage- case study 02

Source: Author

5. Facilities Provided to Support Various User Groups

The analytical data collection shows that the ‘Independence Arcade’ have the most agreed number, convincing that provided facilities supports various user groups. The illustration 23 demonstrates the comparison data of the agreed and disagreed data. Out of 104 participants, 34 participants have selected the ‘Independence Arcade’ as the place out of the two locations provides facilities for all user groups. Further 28 participants selected as Independence Square.

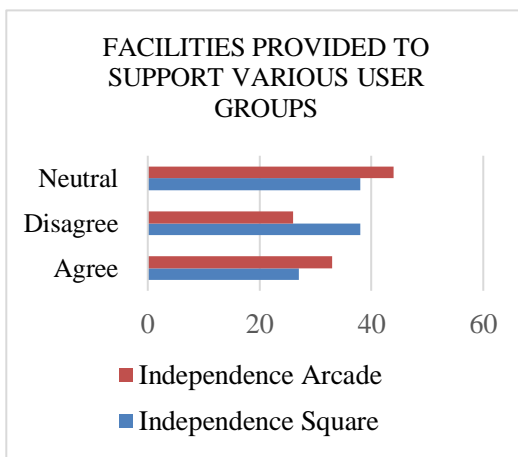


Illustration 23: Facilities supporting different user groups- case study 02
Source: Author

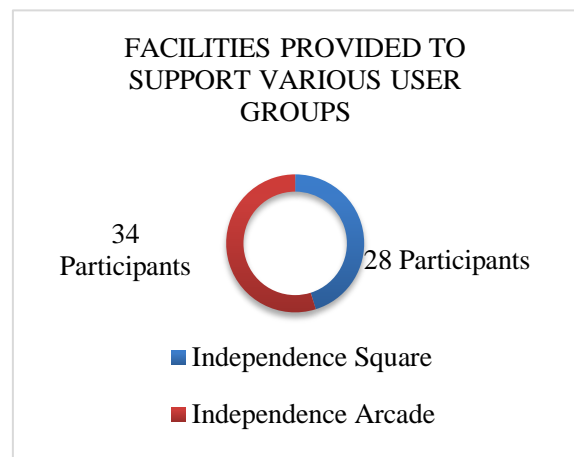


Illustration 24: Comparison on user perception on Facilities supporting different user groups- case study 02
Source: Author

6. Pedestrian Friendly Location

The analytical data (Illustration 25) clearly shows that Independence Square is pedestrian friendly locations. Its permeability, creating an inviting space for the guests into the space.

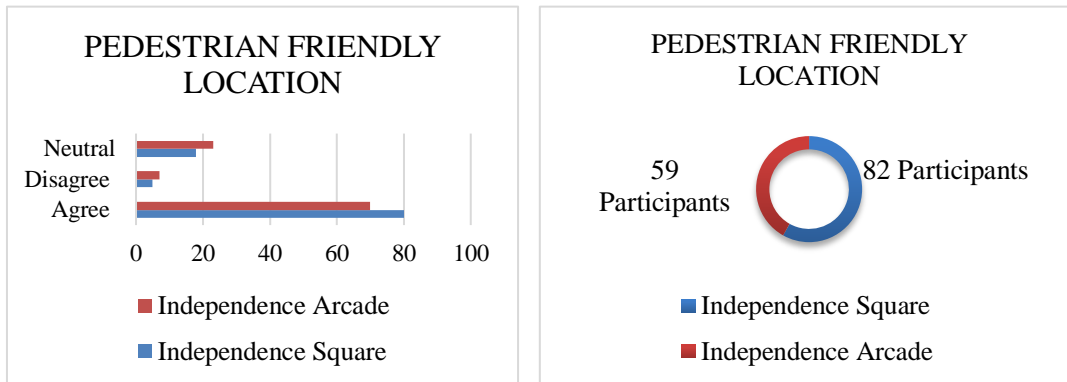


Illustration 25: Pedestrian friendliness of the place- Case study 02
Source: Author

Illustration 25: User perception on Pedestrian friendliness of the place- Case study 02
Source: Author

4.3.5 The Conclusion of The Case Study 2

Table 02: Summary of the questionnaire- Case study 02

QUESTIONNAIRE	INDEPENDENCE SQUARE	INDEPENDENCE ARCADE
Mostly safe place	67.9%	61.8%
Mostly comfort place	66.4%	55.5%
Provided activities are attractive	40%	45.5%
Services and facilities provided	34%	47.3%
Maximum hours wish to spend	1 hour to 2 hours	½ hours to 1 hour
Facilities provided to support various user group	27.2 %	32.7%
Pedestrian friendly	79.1%	69.1%

Source: Author

The study of the main aspects clearly justifies that, a reasonable amount of value been added by ‘The Independence Arcade ‘to the vicinity. However, Independence Square been the one of the main open spaces in Colombo, the value of the open public realm has been decaying for following reasons,

- Lack services and facilities,
- Lack entertainment facilities
- Lack of food and beverages out lets

Further analytical to the questionnaire survey, illustration 26 clearly shows that the Independence Arcade is an advantage for Independence Square. With the justification of the privately owned public building convince that, the Independence Square, the public realm has a momentous advantage. “Impact On the Independence Square the Public Realm by Urban Intensification of Privately Owned Public Building ‘the Independence Arcade’ is a positive impact for the vicinity”

Graphical response from the participants, whether the One Galle face is an advantage for Galle face Green,

Do you feel that Independence Arcade is an advantage for Independence Square ?
105 responses

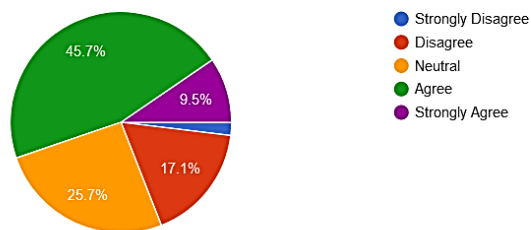


Illustration 26:
Summary of the overall user perception- Case

Source: By Author

From the questioner of 104 participants ,69 participants agree with the quote ‘The One Galle Face is an advantage for the Gall Face Green (illustration 27)

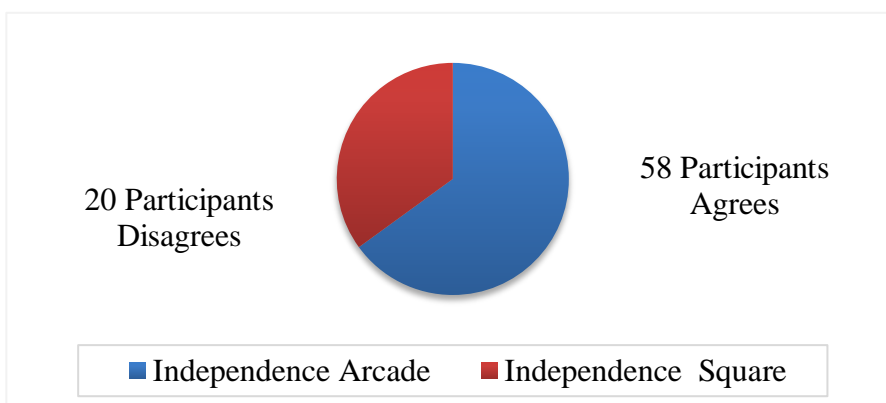


Illustration 27: Overall user perception- Case study 02
Source: Author

4.3.6 Guidelines to Enhance Independence Square – Public Realm



Figure 123: Map of the Independence square & independence arcade
Source: Author

However, the public realm needs to be upgraded with the following guidelines to attract more public.

- Introducing more Social Interactions gaining Services and Facilities
- Introducing and creating Sense of Safety
- Creating more Comfortable Environment to spend more time – introducing hard and soft landscape methods to enhance the space.
- Introducing Variety of Activities, pedestrian friendly for all user groups.
- Introducing more Social Interactions Services and Facilities
- Supporting Various Groups of Users.

CONCLUSION

“IMPACT ON PUBLIC REALM BY URBAN INTENSIFICATION OF PRIVATELY OWNED PUBLIC BUILDINGS”

Case Study One,

The two locations of the case study 01

- Galle face green
- One Galle face

Case study one – Galle face green is the one of the largest open spaces facing the sea front located in the heart of Colombo. As a result of high Means of access and permeability, all categories of users are attracted to this place. Though the Galle Face green is visited by a considerable amount of people, most of the crowd is concerned about the sense of security the place is generating. Since it is a large open space, people feel unsafe for not having proper safety measures. Furthermore, lack of pedestrian activities, services and facilities is a disadvantage for the place making it less attractive that eventually feels unsafe due to lack of human availability. Additionally, absence of elements that enhance its appearance, such as arrangement of the space, colors, quality of space, soft and hard landscape that make the place more interesting is a reason to spend less time.

Sense of Comfort – visual, physical and thermal – gall face green has a large open space with the longitudinal side facing the sea front which makes it slightly uncomfortable to visit during day time due to high temperature, warm wind and atmospheric dryness. All these issues need to be addressed with a practical solution to make it a better public realm.

However, one Galle face strengthen the public attraction in terms of sense of security, safety, services and facilities provided. This increases the potential to develop the gall face green.



Figures 125 & 126: The Galle face green
Source: Author

Case Study Two

The two locations of the case study 02,

- Independence Square
- Independence Arcade

Case study two, the independence square is one of the centralized public spaces within Colombo. Comparing the gall face green, this location has a higher sense of security and comfort. Similar to case study one, all categories of user groups are attracted to this place, since this is a comparatively smaller area, and all physical boundaries are visible from the highest point which is the independence square monumental structure. Most people are attracted to this location due to the sense of comfort; the natural and man-made landscape and vegetation which increases the thermal comfort of the place. Further, most of the public prefers to visit the independence square compared to the case study one, due to the above reasons.

Furthermore, the independence arcade has strength in attracting the public in terms of recreational activities, and the sense of security.



Figure 127: The Independence square
Source: Author



Figure 128: The Independence Square
Source: Author

According to Lynch and Hack, (Consistency with users' needs and goals (Lynch and Hack, 1985)

The main three parameters in a public space are mentioned as below,

Support: Providing assistance to users in the face of cars, crime, and extreme weather.

Comfort: Walking, sitting, listening, chatting, stopping, admiring scenery, and playing games are all examples of activities.

Pleasure: Aspects and proportions, ideal climatic circumstances, aesthetic features, and pleasurable sensory experiences are all factors to consider. (Gehl, 1987).

Successful public realms are often compact and are to human-scale, allowing people to comfortably interact, recognize a person in the other end of the public realm. Further successful public spaces need to have a Clear Visibility throughout the day, clear boundaries marked, hosting various user groups including personas with special need, good lighting at different hours of the day for sense of security.

The participants are believed that the privately owned public buildings have made the public open spaces, the realms more interesting and attract more people to the place. As a conclusion, public realms are always improved with a privately owned public building on the vicinity, creating more user-friendly activities, engendering more facilities and last but not least, creating a space for a person to remember, visit over and over again.

Furthermore, Introducing Guidelines for Privately Owned Public Buildings in Public Realms.

Creating Connectivity

The public realm and the proposed neighboring privately owned public buildings needs to be well connected.

- Means of access.
- Well-connected pedestrian friendly walkways,

- Accommodate multimodal connections
- Implement signage and wayfinding.

Providing facilities which fulfills Social Interactions, Services, and facilities,

- A variety of current activities
- Appearance/ elements of a place: style, form, color, texture, landscape layout and furniture
- Pedestrian-friendly space
- Sense of safety, comfort
- Supporting various groups of users

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ANNEXURES

“IMPACT ON PUBLIC REALM BY URBAN INTENSIFICATION OF PRIVATELY-OWNED PUBLIC BUILDINGS”

Special reference to major public spaces in Colombo and development in privately owned public spaces in their proximity.

Dissertation 2021 - Master of Urban Design - University of Moratuwa

* Required

1. Gender *

Male

Female

2. Age (yrs) *

18-30

31-40

41-50

Above 50

3. Email * _____

4. 1. Which of these places would you like to visit the most? *

Mark only one oval.

- gall face green
- One Galle face
- Independence Square
- The Independence Arcade
- I don't prefer above mention places

5. "I don't prefer above mention places " please specify

6. Why? *

Check all that apply.

- Sightseeing
- Social Space
- Entertainment Relaxation
- Convenience to Shop
- Eat and drink

7. According to you, what are the biggest factors when deciding to visit place?*

Check all that apply.

- Logistical constraints (Traveling distance / inadequate transportation / inadequate Parking facilities))
- financial constraints (can't afford the food/beverages /shopping there)
- the place suits my lifestyle
- Adequate facilities
- Comfort (Visual, Psychological, Thermal)
- Other: _____

8. Do you feel safe at Galle face green? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

9. Do you feel comfort at Galle face Green? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

10. Does the available activities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

11. Does available services and facilities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

12. How much time do you spend in this location ? *

Mark only one oval.

- less than half an hour
- half an hour to one hour
- one hour to two hours
- two hours to three hours
- more than three hours

13. Facilities provided to support various user group are adequate in this place ? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

14. Is this Location Pedestrian-friendly ? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

15. What could make Galleface green better ? *

Check all that apply.

- Make it more use friendly for various age groups
- Introduce more entertainment activities
- Self-assured in terms of safety and security
- Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.
- Other: _____

One Galleface - Colombo 1

16. Do you feel safe at One Galleface ? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

17. Do you feel comfort at One Galleface ? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

18. Does the available activities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

19. Does available services and facilities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

20. How much time do you spend in this location? *

Mark only one oval.

- less than half an hour
- half an hour to one hour
- one hour to two hours
- two hours to three hours
- more than three hours

21. Facilities provided to support various user group are adequate in this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

22. Is this Location Pedestrian-friendly? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

23. What could make One Galle face better? *

Check all that apply.

- Make it more use friendly for various age groups
- Introduce more entertainment activities
- Self-assured in terms of safety and security
- Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.
- Other: _____

24. Do you feel that One Galle face is an advantage for Gall face Green? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

Independence Square - Colombo 07

Case study 02

25. Do you feel safe at Independence Square? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

26. Do you feel comfort at Independence Square? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

27. Do the available activities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

29. Does available services and facilities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

30. How much time do you spend in this location? *

Mark only one oval.

- less than half an hour
- half an hour to one hour
- one hour to two hours
- two hours to three hours
- more than three hours

31. Facilities provided to support various user group are adequate in this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

32. Is this Location Pedestrian-friendly? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

33. What could make independence square better? *

Check all that apply.

- Make it more use friendly for various age groups
- Introduce more entertainment activities
- Self-assured in terms of safety and security
- Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.
- Other: _____

The Independence Arcade - Colombo 07

34. Do you feel safe at The Independence Arcade? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

35. Do you feel comfort at the Independence Arcade? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

36. Do the available activities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral A
- Agree

Strongly Agree

37. Does available services and facilities are adequate enough to attract you to this place? *

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

38. How much time do you spend in this location? *

Mark only one oval.

- less than half an hour
 half an hour to one hour
 one hour to two hours
 two hours to three hours
 more than three hours

39. Facilities provided to support various user group are adequate in this place? *

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

40. Is this Location Pedestrian-friendly? *

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

41. What could make the Independence Arcade better? *

Check all that apply.

- Make it more use friendly for various age groups
 Introduce more entertainment activities
 Self-assured in terms of safety and security
 Appearance and the availability of elements of the place: arrangement of the space, colors, quality of space, soft and hard landscape.
 Other: _____

42. Do you feel that Independence Arcade is an advantage for Independence Square? *

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

General

43.how honest do u answer the above survey? *

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Careless										
<input type="radio"/>										
Honest										

44.Any comments on Survey.