## Major Research Project

by Cynthia Espinola Cano

**Submission date:** 14-Sep-2020 11:41AM (UTC+0100)

**Submission ID:** 133187424

File name: Major\_Research\_Project\_2015051\_262021643.pdf (64.5M)

Word count: 14053 Character count: 76361

# BREAKING

# BARRIERS

Designing for Urban Social Cohesion in Diverse Neighbourhoods to Integrate Segregated Social and Ethnic Groups

Msc Urban Design and City Planning Major Research Project CYNTHIA ESPINOLA

#### UNIVERSITY COLLEGE LONDON FACULTY OF THE BUILT ENVIRONMENT BARTLETT SCHOOL OF PLANNING

#### MAJOR RESEARCH PROJECT

#### **BREAKING BARRIERS**

Designing for Urban Social Cohesion in Diverse Neighbourhoods to Integrate Segregated Social and Ethnic Groups

Cynthia Espinola

Word Count: Main Text 8,669 + Visual Material: 1,843

Supervisor: Colin Haylock

Being a Major Project in Urban Design & City Planning submitted to the faculty of the Built Environment as part of the requirements for the award of the MSc Urban Design and City Planning at University College London, I declare that this project is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

Signature

Date:

September 8th, 2020

#### **ABSTRACT**

Barriers of social class, ethnicity and economic inequality are generating segregation between different backgrounds even if they inhabit in the same part of a city, this is particularly the problem in multicultural and high dense cities, where lack of interactions between users of the same space in has become a more frequent issue causing problems of segregation and distrust. Considering the public realm as the main or only space that users share with others makes it a favourable place to bring them into contact with other groups. For this reason, external open spaces have been considered fundamental and the best option for this project to allow people to mix.

This project presents an exploration on how to use public space to promote social cohesion in areas with the mentioned problematics. Information from multiple theories, research and authors has been compiled by using a literature review to explore how different groups make use of the public space, what characteristics of a public place attract users and if there are existing elements that prevent people from having interactions among ethnic and social backgrounds groups and how these barriers could be reduced.

By using the principles from the literature review, case studies and in situ observations, design strategies are developed and applied in a network of public spaces in the Borough of Tower Hamlets, London, UK, to respond to the problem of segregation by using the built environment as a tool to allow interactions to take place, creating social mix and inclusion without people perceiving each other's status or ethnic background.

#### **ACKNOWLEDGMENTS**

I would like to start by presenting my deepest appreciation to those who were present, through this journey and during the challenging times that COVID-19 represented.

Firstly, I would like to thank Colin Haylock for being my supervisor, for his immense patience, for guiding me in the right direction with his constant and constructive feedback to make this project possible. Secondly, all the people behind the UDCP programme.

I would also like to extend my endless gratitude to my mother and grand-mother who have continuously encourage me with every decision in my life and who have always look after me, even in the distance. Lastly, I would like to thank my friends and loved ones for all their support when I needed them the most.

#### **TABLE OF CONTENTS**

01

#### INTRODUCTION

Research Problem and Question p.7

Conceptualization of the Problem p.8

#### 04

## CASE STUDIES Borough of Newham Lillington Gardens

Peavey Park Community p.25

Bukit Indah Town Park and MutiaraRini Urban Forest p.26

p.23

p.24

p.27

p.28

p.33

Albany Multicultural Scultpure Park
Carlton Public Housing Estate

Mile End Park p.29
Jardin du Luxembourg p.32

07

#### DESIGN INTERVENTIONS

Summary of Findings

 Overview
 p.56

 Site 1: Bartlett Park
 p.57

 Site 2: Brabazon Multiuse
 p.61

 Site 3: P.O.S.
 p.65

 Site4: Landgon Park
 p.69

 Site 5: Jolly's Green
 p.73

02

#### METHODOLOGY

Methodology p.11 Limitations p 12 Timeline p.13

05

#### CONCEPTUAL DESIGN AND TOOLKIT

Framework p.36
Toolkit p.37

80

#### CONCLUSION

Conclusion p.78

03

#### LITERATURE REVIEW

Definition of Public Spaces p.15
How Diverse Groups Use the Space p.17
Frequency and Interactions p.19
There is More than Meets the Eye p.20
Summary of Findings p.21

06

#### SITE

Site Selection p.39
Focus Area p.44
Site Analysis p.45
Summary of Findings p.54

09

#### REFERENCES

References p.80
References of Figures p.81

#### LIST OF FIGURES

Figure 1. Research Problem

Figure 2. Conceptualization of the Problem Figure 3. Objectives Figure 4. Methodology Figure 5. Timeline Figure 6. Informal Businesses Figure 7. Events on Streets Figure 8. Cricket game Figure 9. Street Art Figure 10. Place Diagram Figure 11. Findings Figure 12. Public Space Newham Figure 13. Priory Park Figure 14. Badminton Figure 15. Landscaping Figure 16. Gardens Figure 17. Pathways

Figure 19. Typical usage of BITP Figure 20. Playgrounds Figure 21. Peavey Park Fogure 22. Mosaic Benches Figure 23. Playgrounds Figure 24. Sculptures Figure 25. Concerts Figure 26. Culture Figure 27. Communal Space

Figure 18. Bukit Indah Town Park

Figure 28. Division Figure 29. Temporary Markets

Figure 30. Playground-Sculpture Figure 31. Cycling Playground

Figure 33. Weekend Figure 34. Park Figure 35. Furniture Figure 36. Pétanque Figure 37. Retail Figure 38. Framework Figure 39. Toolkit Figure 40. Location Figure 41. Tower Hamlets Figure 42. Faith Profile

Figure 32. Picnic

Figure 43. Population by Ethnic Group Figure 44. Ethnic Diversity in London.

Figure 45. Segration Map

Figure 46. Household Income Distribution
Figure 47. Median Household Income

Figure 48. Focus Area Figure 49. Land-use Figure 50. Roads Figure 51: Landmarks Figure 52. Chrisp Street Market Figure 53. Retail

Figure 54. Chrisp Market Figure 55. Clock Tower

Figure 56. St Mary & St Joseph Church Figure 57. Langdon Park DLR

Figure 58. Lime House Cut

Figure 59. Socio-economic Background Figure 60. High-income Dwellings Figure 61. High-income Dwellings Figure 62. Low-income Dwellings Figure 63. High-income Dwellings

Figure 63. High-income Dwellings Figure 64. High-income Dwellings Figure 65. High-income Dwellings Figure 66. High-income Dwellings Figure 67. Low-income Dwellings

Figure 69. Low-income Dwellings Figure 69. Low-income Dwellings Figure 70. Low-income Dwellings Figure 71. Low-income Dwellings Figure 72. Low-income Dwellings

Figure 73. High-income Dwellings Figure 74. High-income Dwellings Figure 75. High-income Dwellings Figure 76. High-income Dwellings

Figure 77. Low-income Dwellings Figure 78. High-income Dwellings

Figure 79. Overview
Figure 80. Bartlett
Figures 81-85. Bartlett Park
Figures 86. Interventions
Figure 87. Proposal
Figure 88. Retail + Sculpture
Figure 89. Sport Facilities
Figure 90. Flexible Spaces
Figure 91. Multi-Use Spaces

Figure 92. Brabazon

Figures 93 & 94. Brabazon Multi-use

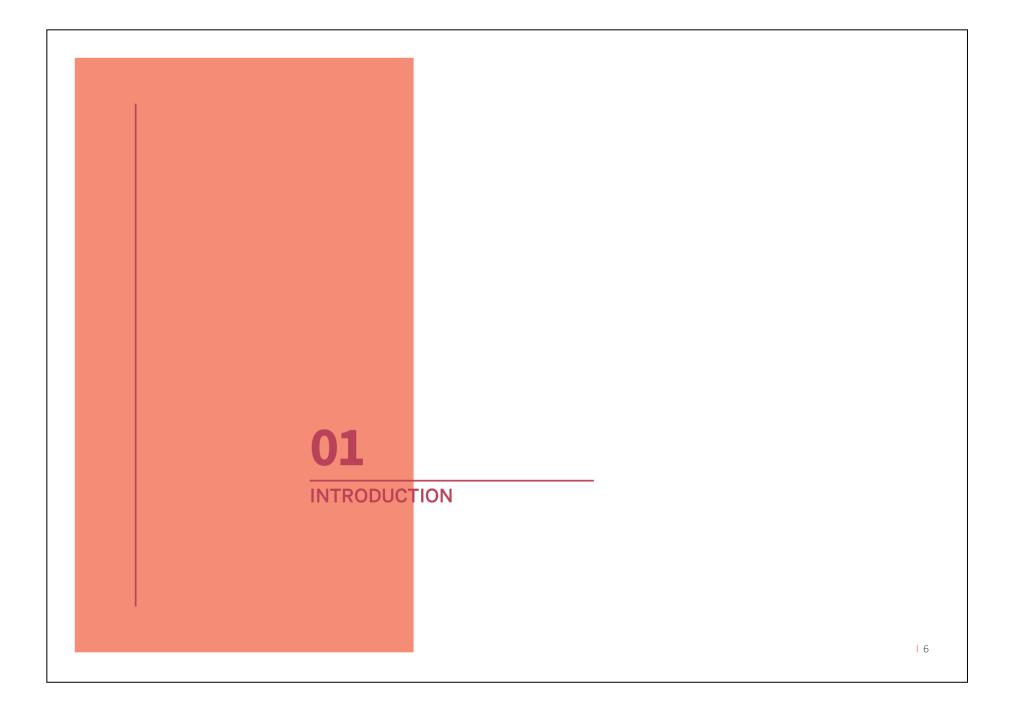
Figure 95. Interventions Figure 96. Proposal Figure 97. Retail Figure 98. Sport Facilities Figure 99. P.O.S Figures 100-102. P.O.S Figure 103. Interventions Figure 104. Proposal

Figure 105. User-Defined Spaces

Figure 106. Sculpture Figure 107. Langdon Figures 108-111. Langdon Park Figure 112. Interventions

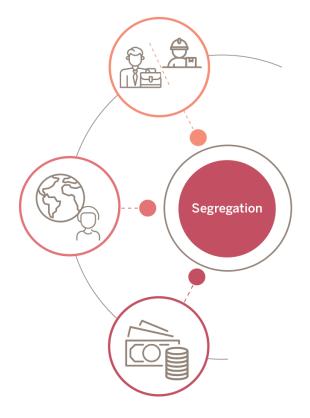
Figure 113. Proposal
Figure 114. User-Defined Spaces
Figure 115. Flexible Spaces
Figure 116. Jolly's Green
Figures 117-120. Jolly's Green
Figure 121. Interventions
Figure 122. Proposal
Figure 123. Flexible Spaces

Figure 124. User-Defined Spaces



#### RESEARCH PROBLEM AND QUESTION

Barriers of social class, ethnicity and economic inequality are generating segregation between different backgrounds even if they inhabit in the same part of a city



How can the built environment and urban design strategies be used to increase social mix, interactions and reduce segregation between diverse users from the same neighbourhoods?

Figure 1. Research Problem

**I** 7

#### **CONCEPTUALIZATION OF THE PROBLEM**

Studies show that the diversity within ethnic groups and social backgrounds in neighbourhoods may tend to cause people to distrust and avoid one another (Surgis, P. et al, 2012) this might lead to a lack of interaction between users from the same space and their physical environment since this could tend to create communities within communities, having as a result the sense of segregation from external groups.

Nowadays lack of interactions between inhabitants and spaces has become a common issue in high dense cities hence the importance of redesigning the built environment to create new solutions that could be implemented to facilitate social mix and improve integration. Dawodieh, E. (2017) in his research journal gives us an insight in the way environment affects directly personal relationships and neighborhood relations, while spatial configuration is an important factor in determining cohesion between residents.

Considering the public realm as the main or only space that users share with others makes it a favourable place to bring them into contact with people from different backgrounds. When interactions take place, social mix and inclusion occur without people perceiving each other's status (Espinola, 2020). CABE (2008) recognizes that there are various factors that create social cohesion. They include a mixture of social, cultural and economic relationships between communities of faith, class and race, between affluence and poverty and between generations. Therefore, the spatial design and management of a place can contribute to foster good relations between, and within, communities.

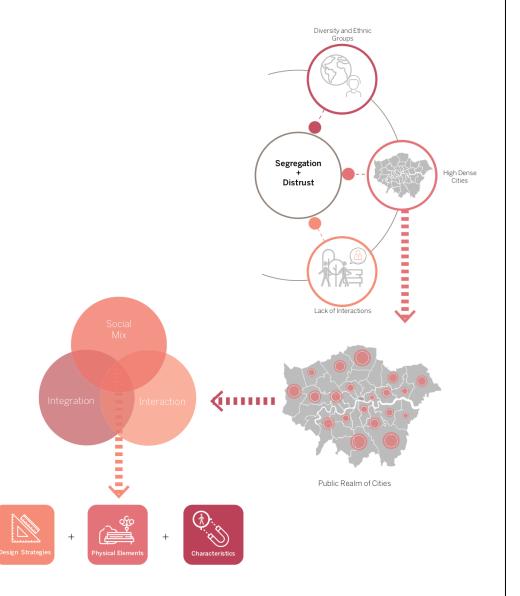


Figure 2. Conceptualization of the Problem

#### CONTRIBUTION TO PRACTICE AND OBJECTIVES

While many strategies and guidelines have been created to change the atmosphere of public spaces to attract users and incentivize them to use the space, their focus has been mainly on creating pleasant places and universal accessibility in response to people with physical disabilities. Nevertheless, there has been less exploration on how to use public space to promote diversity in areas with problematics of segregation.

This project would provide a theoretical contribution to future changes that could be made in diverse cities in the need of a project to promote schemes to generate interactions, social mix and decrease segregation of groups in different contexts.

#### Objectives:

- Understand how different groups make use of the public space and if there are specific characteristics that attract them.
- Identify the factors that prevent people from having proper interactions in their space and how these boundaries could be reduced.
- Explore design strategies that could help to mingle people in the same space by using the built environment as a tool.
- Raise awareness of how urban design strategies could be used to generate a sense of belonging and trust among users of the same space.
- Establish a conceptual and design toolkit that provides new schemes to generate interactions, social mix and decrease segregation of groups through architectural tools.

#### **OBJECTIVES**



**Explore** 

Raise Awareness

Establish

how different groups make use of the public space and if there are specific characteristics that attract them

Understand

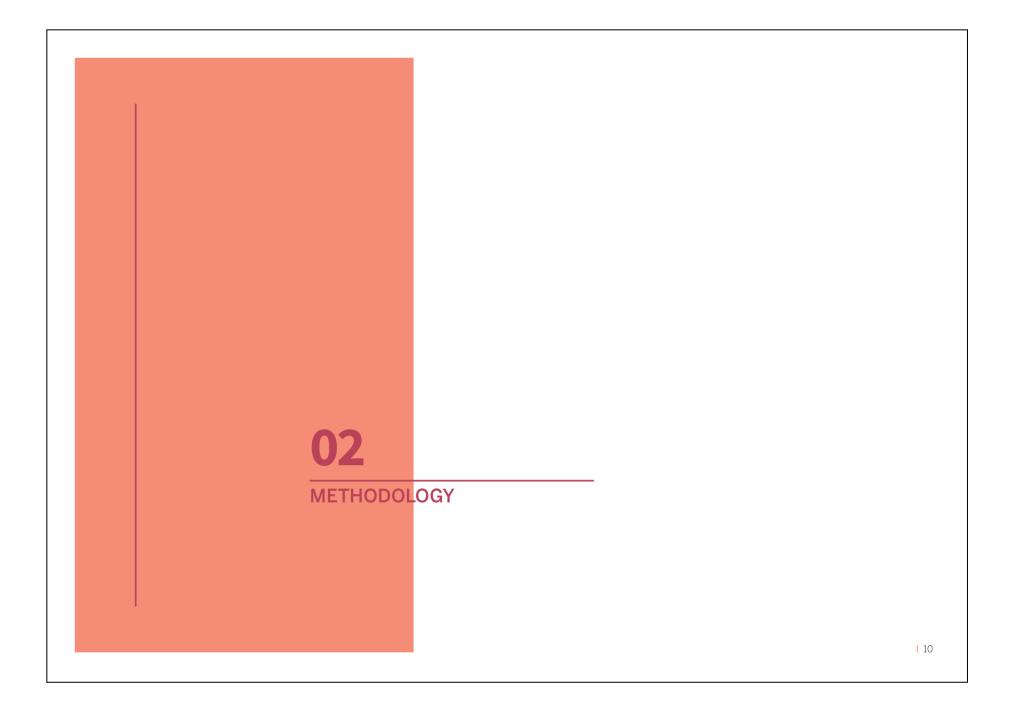
the factors that prevent people from having proper interactions in their space and how these boundaries could be reduced.

Identify

design strategies that could help to mingle people in the same space by using the built environment as a tool.

of how urban design strategies could be used to generate a sense of belonging and trust among users of the same space.

a conceptual and design toolkit that provides new schemes to generate interactions, social mix and decrease segregation of groups through architectural tools.



#### METHODOLOGY AND PROJECT TIMELINE

This major research project will be conducted in four stages

O1 Research: During this stage of the project, further investigation on the topic will be made based in the research question and the objectives to establish lines of research. An analysis of current studies related to what makes people gather in a place, and how the built environment can contribute to create social mix and interactions of multicultural and economic backgrounds will be presented in a literature review and case studies

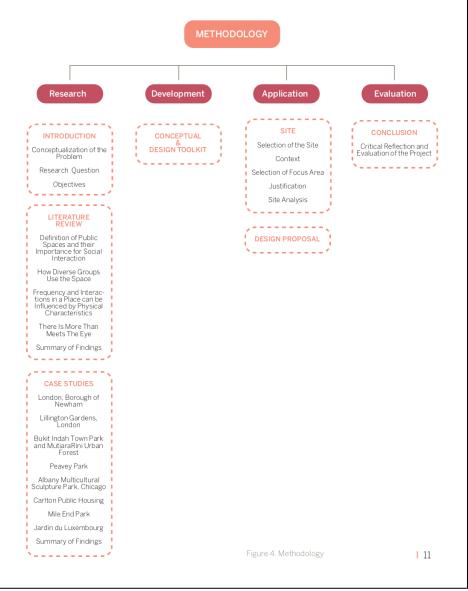
O2 Development Stage: After a deep analysis of the research from the literature review and case studies review, a conceptual design toolkit will be developed to highlight the objectives and provide an answer to the research question.

O3 Application: After gathering enough information of tools and making a proper research of the site where a design contribution could respond to the issues on an area in terms of segregation, a site analysis will be conducted.

After that, a design proposal could be implemented on the site based in the success of previous case studies and the literature review that showed similar challenges.

#### O4 Evaluation and critical reflection:

A critical reflection of the chance of success of the project will be presented along with possible limitations for further research and development on the topic.



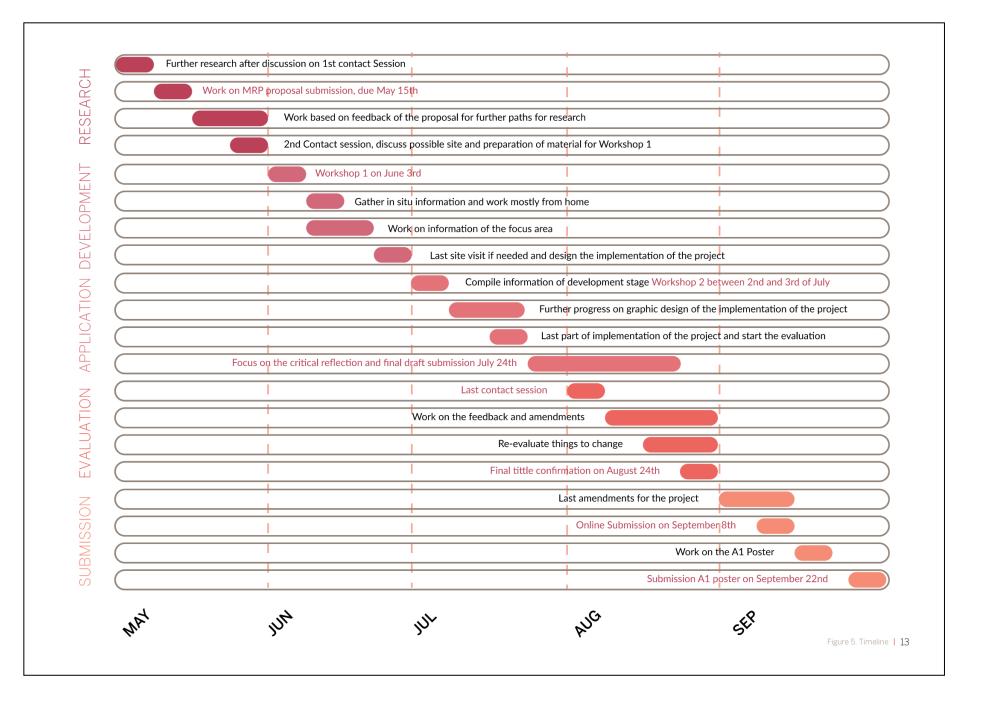
#### **LIMITATIONS**

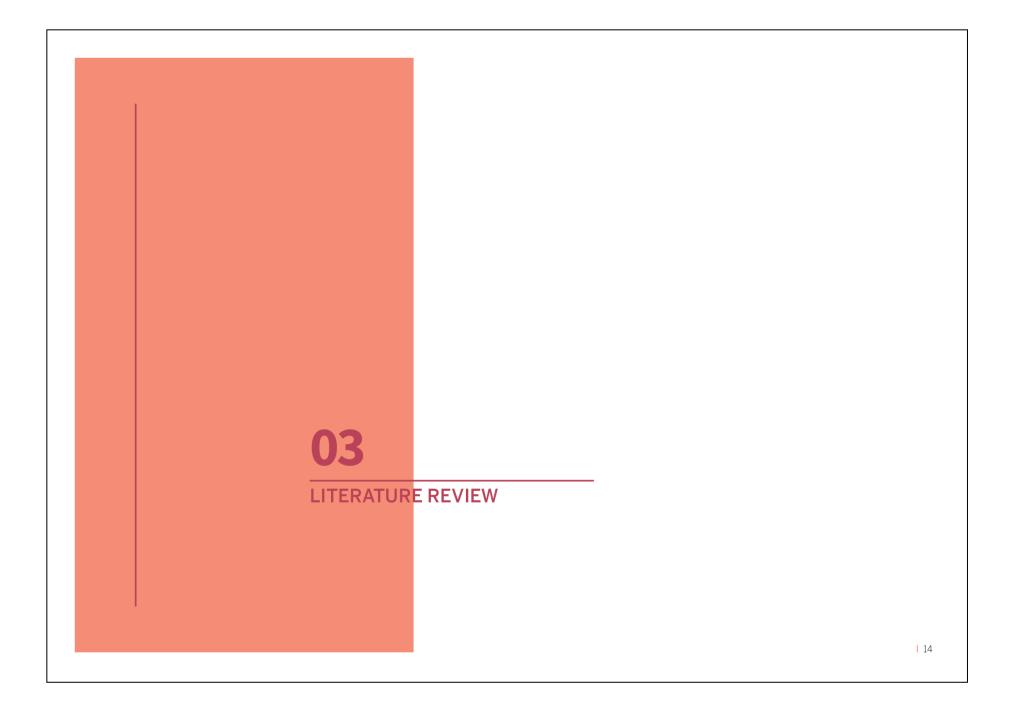
While observations of around 5-10 min were done during the summer of 2020 after the measures for COVID-19 were eased in the UK with proper social distancing from people and always using face covering, it is important to acknowledge that the presented data gathered from the parks could be different from normal circumstances. This due to the fact that the only places available to gather during this time were mostly parks and open spaces since shops, companies and the majority of restaurants were closed. Having as a result the possibility of an increase of people using these spaces or even a decrease of a usual number of users trying to avoid the spread of the virus.

Another important fact to take into consideration are the vulnerable groups which, according to the NHS (2020), are people who:

- have had an organ transplant
- · have some kind of cancer
- have a condition with a very high risk of getting infections
- are taking medicine that makes them much more likely to get infections (steroids or immu-nosuppressant)
- are pregnant
- are 70 or older
- have a lung condition
- have heart disease
- have diabetes
- have chronic kidney disease
- have liver disease
- have a condition affecting the brain or nerves
- have a condition that means they have a high risk of getting infections
- are very obese (a BMI of 40 or above)

In addition to this groups, statistics from England showed that more people from black, Asian and minority ethnic groups are dying from coronavirus than those from white ethnic groups (BBC, 2020). These groups then, could have been less present in the open spaces compared to normal circumstances, which could also have had an impact the gathered in-situ information.





#### DEFINITION OF PUBLIC SPACES AND ITS IMPORTANCE FOR SOCIAL INTERACTION

According to Gehl (2018), public spaces can be defined as those primarily outdoor spaces that don't require special access, admission fees, or membership. Inclusion can be defined as the sensation when people who use a public space feel welcome, respected, safe, and accommo-dated, regardless of who they are, where they come from, their abilities, age, or how they use the space.

Garau (2014) also allows to understand publics spaces as a site we are all equal, in the sense that in such places we can all exercise our shared right to the city without having to display our social status nor our ability to spend money. But public spaces are also the embodiment of equity, as the physical expression of the principle that it is fair for all citizens to enjoy access to basic, fundamental amenities, such as recreation, aesthetic enjoyment, walking, cycling, play, sports, culture, information. For this project we will narrow public spaces following CABE (2003) guide-lines to:

- Streets
- Squares
- Parks
- Gardens
- Incidental open spaces

Numerous claims exist (Dempsey, 2008) about the significant influence that the quality of built environment has on specific social activities and behaviour. The author also acknowledges that good parks and public spaces help to provide a sense of community and places to meet and socialise. When reflecting in an environment the quality and amount of public spaces, more frequent contact within people in their neighbourhoods is observed., developing a sense of trust among them than those who have little or no interpersonal contact (Stolle et al. 2008; Sturgis et al. 2014), this contributes to create and strengthen a community (Espinola, 2020).

Carmona et al. (2004) state that high-quality public space is not simply a matter of aesthetic appreciation by a few, select users, but rather it has a fundamental impact on how 'all users perceive, function, and socialise in public space'. The built environment is encountered by people on a daily basis, and its quality arguably makes a direct contribution to people's everyday lives.

Dempsey (2008) argues that the integration of individual behaviours is believed to be partly achieved through residents interacting with one another. Further research in the topic has allowed to strengthen her theories with a published case study (Hagen et al, 2017) that compared two neighborhoods in Germany, showing that long periods of stay in a place and high levels of social contact can indeed suggest a higher level of trust among people (Espinola, 2020).

Another study published by Mojanchevska (2018, p.106) with residents of both mixed and ethnic neighbourhoods in Macedonia showed that they do not prefer co-ethnic places for rest and socialisation. They prioritise places where they felt comfortable and with good company or an event that fitted their personal interests despite the ethnic groups that might be there.

#### HOW DIVERSE GROUPS USE THE SPACE

#### Ethnic groups in the USA

Some evidence also suggests that racial/ethnic minorities are more likely to use parks for passive, social purposes than whites. For example, in a national survey, non-Hispanic whites were less likely to attend a gathering of family or friends in parks than non-Hispanic blacks [9]. Similarly, among residents of Los Angeles, CA, Spanish-speaking Hispanics and Asian and other racial/ethnic groups were more likely than whites to visit the park with other people or meet people in the park [8]. Moreover, a study of users of Lincoln Park in Chicago, IL found large differences, whereby whites were more likely to visit the park alone or with only one other person, whereas racial/ethnic minorities tended to visit the park with their family or other larger group (Vaughan, C.A et al, 2018).

#### Public Spaces in Dhaka, Bangladesh

As most of the population from the analysis of the focus area of this project were identified as Bangladeshi, it was important to understand how public spaces are used and perceived in this country. By taking, Dhaka, capital of Bangladesh, we can understand the background of the population. It is known that Dhaka is one of the densest cities in the world and is also considered one of the least livable cities in the world, ranked 139 out of 140 cities in 2018 (The Economist Intelligence Unit, 2018). It has a population of 18 million people squishing in 1,528 square km, with an average density of around 41,000 inhabitants per square kilometer (Bird et al, 2018).

In Dhaka, due to the lack of private space, the boundaries between private and public places get blurred because of the way they are being used and how they host a wide mix of uses. For the people facing poverty in Dhaka, public space represents a place of livelihood, one of the only resources available for a large part of the population. Public space is treated as an outdoor



Figure 6. Informal Businesses



Figure 7. Events on Streets

extension of private space or as a place to make commercial exchanges, to organize public or private events, to do sports or to meet with friends, among many other uses (Ecosistema Urbano, 2018).

Something usual to see is people proposing services or goods directly to customers in informal businesses in Dhaka, since this represents a huge part of the city's economy with around 750,000 rickshaw pullers and 300,000 street vendors (Islam, 2005) working in public spaces. Hawkers are often found on sidewalks and traffic intersections, nevertheless, they are not perceived as something negative since they contribute as an essential service to all socio-economic segments of the population by offering low cost goods and services at convenient locations (Ecosistema Urbano, 2018).



Figure 8. Cricket game



Figure 9. Street Art

#### FREQUENCY AND INTERACTIONS IN A PLACE CAN BE INFLUENCED BY PHYSICAL CHARACTERISTICS

Research proves (Gehl Institute, 2018) that the physical features of a space can affect the frequency and period of time that residents spend in a location, in addition to this, comfort criteria aspects will also have an impact when designing the physical features of the spaces. By observations from previous studies (Bigdeli Rad & Bin Ngah, 2013) it is known for instance that the more trees, the more people will use a space at any given time and will create a social mix between adults, young people, and other mixed-age groups.

Architectural tools used to model the spaces for social interactions in public spaces are very diverse; their variety and combination of soft elements of landscape (relief, plantings, pavements) in combination with universal design elements (microclimate, light, colours, materials, textures) allow different places to visually attract people, retain them by providing comfort and help to facilitate social activities to happen within the space (Stauskis & Eckardt, 2011).

Studies show (Gehl Institute, 2018) that other features such as site furnishings (benches, waste bins, shade, etc.) invite a diversity of users and increase use. Sites with a mix of features invite a mix of users from different racial and ethnic groups to use the space for socializing, spending time with family or friends, leisure, recreation, among other activities. Nevertheless, according to Bigdeli Rad & Bin Ngah (2013) although visual and aesthetic factors are necessary for the sociability of the space, functional features of a public space can be used to create special events like street theatres, public arts and such activities that will connect people and improve the attractiveness of the space. Whyte (1980, 94) argues that in process of this events, opportunities are created for communication and conversation which trigger real social mix regardless of their social backgrounds, origin, abilities, age ranges, etc (Espinola, 2020).

#### THERE IS MORE THAN MEETS THE EYE

According to Project for Public Spaces (2016) a successful public space generally needs to offer four qualities: it should be accessible, it should be comfortable and have a good image, people should be able to engage in an array of activities, and, it should be sociable. With these characteristics in mind, the possibilities to attract diverse users to the space can be successful, whether it's a street, waterfront, playground, market, or park.

Regardless of being a place to meet, a place for exchange, or a place of local or national pride, great public spaces can also be characterized by the presence of people remaining when they have no pressing reason to stay. Successful public spaces are also well-managed: this includes cleaning, offering food or services, or scheduling events, and such implementations can be managed the community, by individuals, by the city or district, or through local partnerships.

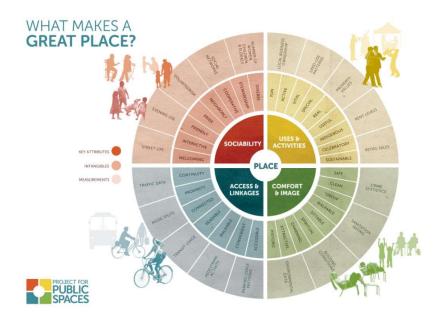
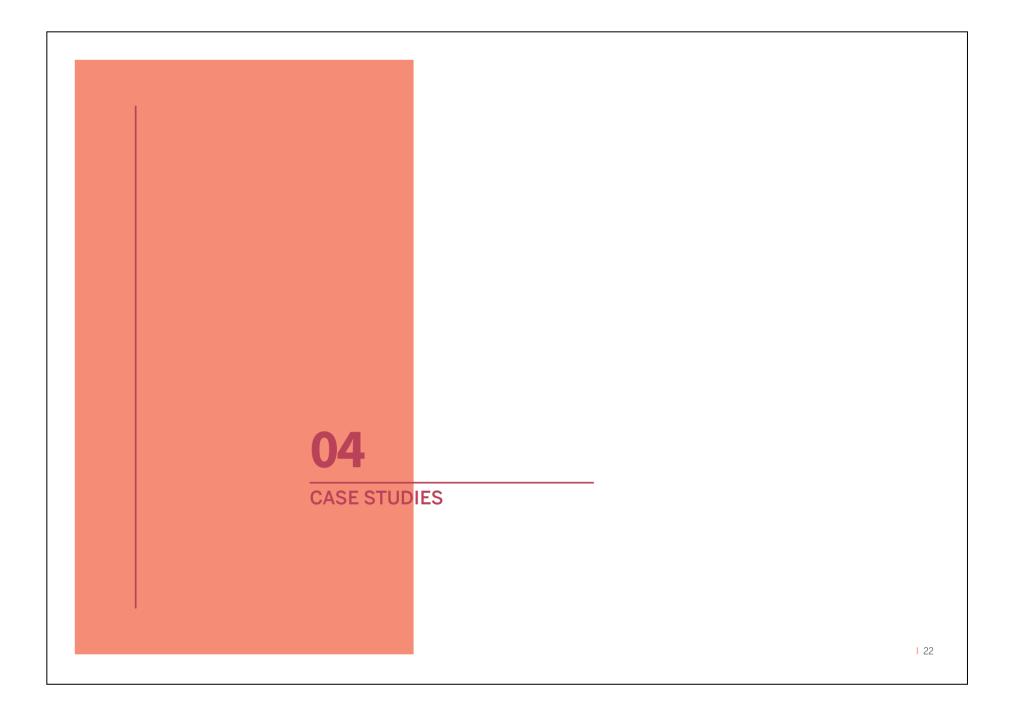


Figure 10. Place Diagram

### **SUMMARY OF FINDINGS** To Incentivise Squares Parks Should Allow the sensation when people who use a public space feel welcome, respected, safe, and accommodated. Incidental Open Spaces Outdoor spaces that don't require special ---> access Enjoy access basic, fundamental amenities and a space for recreation Microclimate, light, colours, materials, textures Figure 11. Findings 1 21



# ondon, England, United Kingdom.

### O1 | The neighbourhood in East London, Borough of Newham

Here, Dines et al (2006) explored public spaces as social arenas. According to a 2001 Census, Newham had the highest non-white population in the UK, 60.6% of its 237,900 residents were from Black and Minority Ethnic. More than 120 languages are spoken there. The principal ethnic groups are: Indian (12.1%); Pakistani (8.4%); Bangladeshi (8.8%); Black African (13.1%); and Black Caribbean (7.3%). According to Shresta (2011) the site was chosen because the area had a high ethnic diversity; and it counted with numerous forms of public space.

When parks are used on a frequent basis, people acknowledge their everyday encounters with others. "You might smile the first day you see them and you might the second day as well. And you do get to know people, not on a deep level, but if you saw them down the street you'd say hello. And that's the beginning of a community" (British woman, jogging).



Figure 12. Public Space Newham



Figure 13. Priory Park



Figure 14. Badminton

#### **KEY FINDINGS**

Parks and community events are important because they can bring members of a group together who might not otherwise remain in regular contact

Provide an important arena where ethnic diversity is routinely negotiated and experienced

Enable contact between different ethnic groups

For parents they represent an opportunity to meet peers

I 23

# O2 o-London, England, United Kingdom.

#### O2 | Lillington Gardens, London, Westminster

Lillington Gardens was designated a conservation area in 1990 and is now owned and managed by CityWest. It is known for its staggered elevations with red-brown brick and is regarded as an archetypal high-density, low-rise scheme (Scanlon et al 2018). One important feature are the generous courtyard style green spaces with planting around them (City of Westminster, 2012). Every resident has public access to the areas regardless of the social status; the communal space interlinks the whole complex and allows people to interact with each other (Espinola, 2020).

Previous research (Scanlon et al 2018) indicates that more than 70% of the inhabitants from the complex of buildings feel that they belong to their neighbourhood and more than 65% of the population agree that they don't have limited access to the outdoor space. This indicates that people feel included in this open space and perceive a sense of belonging (Espinola, 2020).



Figure 15. Landscaping



Figure 16. Gardens



Figure 17. Pathways

#### **KEY FINDINGS**

Public spaces open to everyone regardless of social status

Landscaping techniques to attract users

Trees and vegetation to bring comfort to users

Benches to invite people to stay

Sense of inclusion and belonging due to proper management of the space

## O3 Bukit Indah Town Park (BITP) and MutiaraRini Urban Forest (MRUF)

Both of the green spaces are situated and surrounded by mass housing development of new townships and are chosen out of the similar comparable size, green density and design character which represents the frequent usage by users.

The BITP is a town park part of Setia Indah Township which is a surrounded with matured and lush greeneries and comprehensive park facilities and green infrastructure, the place encourages communal activities. The MRUF is more like a urban forest consist of fruit trees, indigenous forest trees, palms, shrubs and manmade lake (Rasidi et al, 2012). In this study presented by the authors it is believed that frequent visits by users could contribute to higher level of social interaction regardless of the green space distance and aesthetic values.





Figure 18. Bukit Indah Town Par



Figure 19. Typical usage of BITP



Figure 20, Playgrounds

#### **KEY FINDINGS**

People like paved surfaces to do activities like basketball

Seats under trees attract to stay

Users look for visible places to be seen to feel safe

People looking for shades denotes a need for thermal comfort to stay

People are intrigued and attracted by unique characteristics or events such as complex playgrounds and kite-flying

People like to perform their own activities in the green areas if they are not disturbing or been disturbed by others

It is important to have some physical or natural character other than only green spaces to attracts users

## **Q4** Peavey Park Community Listening and Visioning Project

The need of this project came as an experiment to involve and engage community residents in dialogue. Located in the Phillips Neighbourhood/community the area represents a diverse population including native Americans, African Americans and immigrants from Latino, African and Asian countries and has a high concentration of poverty as well as a lack of affordable and stable housing.

The primary goal of the project was to identify and involve community residents who were sometimes under-represented in discussion regarding communities' issues and solutions. The transformation of the space allowed to overcome problems associated with drugs, violence and anti-social behaviors to create a space for socialization between different groups of people, allow them to gather at the park, provide them a sense of safety and a green space where their recreational needs were met (Hope community et al, 2000).





Figure 21 Peavey Park



Figure 22. Mosiac Benche



Figure 23. Playgrounds

#### **KEY FINDINGS**

Use parks to incentivize community socialization

Make social events to create interactions between residents

Listening and applying design ideas from users attract them

Users tend to look for the parks to have events, fairs, performances and cultural events

Parents look to have for their children places for fun, recreation and education

# Chicago, Illinois, Usa.

#### 05 | Albany Multicultural Park

The sculpture park was created as an opportunity not only to enhance the park's space, but also to embrace the experience of its community members and celebrate their differences. The place is known as one of the nation's most diverse communities where over 40 languages are spoken, Albany Park has historically served as an entry point for immigrants and refugees from Asia, Central America, Africa, Eastern Europe, and the Middle East.

Further reflecting the park's themes of building cooperative cultural bridges, the North River Commission has hosted free concerts which along with the sculptures, represent how the arts are being used as a tool to build community relationships, to provide and promote cultural connection; the events and physical elements and urban farming training also represent a tool for economic development. As the enhanced public space gains leverage as a cultural hub, it has the potential to attract more outside visitors and impact the community economically (Silva, 2008).



Figure 24. Sculptures



Figure 25. Concerts



Figure 26. Culture

#### **KEY FINDINGS**

Abstracted elements from cultures to reflect on the park

Park elements and activities to promote cultural connection

Welcome immigrants in the space

Use revenue from activities for economic development

Cultural hub, attract outside visitors to impact the community economically

Melbourne, Victoria, Australia.

#### O6 Carlton Public Housing Estate

Carlton is a gentrified inner-city neighbourhood, located in the City of Melbourne. At the 2011 Census the neighbourhood was home to 14,104 residents of these, 13.9% were public and social housing tenants (ABS, 2013). The project includes a large pub-lic housing building and two private apartment buildings with separate entrances and car parks (Levin et al, 2014).

The paper allows to know that the only internal communal open space is a small courtyard, containing an artificial grassed area, barbecue facilities. However, it is solely for the use of residents from the private buildings and to denote this, there is a wall that separates and shows a line of segregation with users from the public housing (Espinola, 2020).

"Like we feel like they show me like you are the second, like the lowest class, you know. There is upper class always by blocking you" (male, public tenant, African background).



Figure 27. Communal Space



Figure 28. Division

#### KEY FINDINGS

Physical barriers denote a strong line of segregation

Neighbourhoods should allow communal spaces to be free to access

Management is important to make people feel integrated in the same space

There is no interaction between users without an open space to share

Users perceive the social status difference in the space when they are divided



#### **O7** Mile End Park, London, Mile End.

Mile End Park is a linear park of some 32 hectares and was created on industrial land devastated by World War II bombing. Some of this land is separated by roads, railways and waterways (Government of Tower Hamlets, 2020).

Gardener Stewart Architects (2020) describe the park as a way to exploit the 'discovery experience' of the great outdoors. Intensification of its use has provided a basis for revenue generation, creating a unique demonstration project of social, cultural, environmental and financial sustainability. It contains lakes, mountains and earth sheltered buildings; physical activity and spiritual restoration along with leisure, education and entertainment.

- 5-mile route for play, sport, ecology, art and fun
- Mile End Stadium and Climbing Wall
- Skate park and Urban adventure base
- A children's park & earth sheltered nursery
- Ecology park & earth sheltered building
- An art park with earth sheltered building and sculpture mountain and lake
- A natural amphitheatre for 2,000 people
- Shops, cafes and restaurants
- · A garden of the senses



Figure 29. Temporary Markets



Figure 30. Playground-sculpture



Figure 31. Cycling Playground

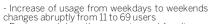


Figure 32. Picnic



Figure 33. Weekend





- During weekdays the space is used for diverse activities, during the weekends is mostly used for lying on the grass to relax
- Adults and teenagers are the main users Black people are the main users during weekdays while on weekends is white people

- Main users: males

- Increase of usage from weekdays to week-

- During weekday and weekends the place is

- Main users: white backgrounds on week-

during weekdays while on the weekends are

- White people are the main users

- Playground areas allow mothers from different

- Males are the main users

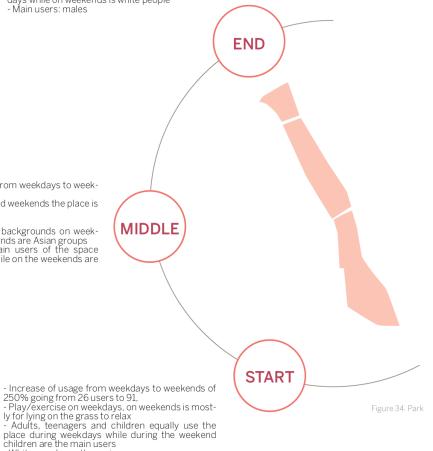
ethnic backgrounds to mingle

days while on weekends are Asian groups - Males are the main users of the space

ends of 50%

females

mostly used to walk - Main users: adults



#### **KEY FINDINGS (BY OBSERVATION)**

Mix of features attract wide range of users

Children create bonds between adults from different ethnic groups

On site soft-edges rock sculptures visually attracts people and is used by children as a playground

Increment of 300% usage from weekdays to weekends overall in the whole park

Most of the users of the park belong to the white ethnic groups and are adults

Cycling playgrounds allow children, teenagers and adults to mingle

Since the park is mostly flat, is more commonly used for relaxation and for playing/exercising

# Paris, île de France, France

#### 08 | Jardin du Luxembourg

Situated on the border between Saint-Germain-des-Prés and the Latin Quarter, the Luxembourg Gardens, inspired by the Boboli Gardens in Florence, were created upon the initiative of Queen Marie de Medici in 1612. The gardens, which cover 25 hectares of land, are split into French gardens and English gardens. Between the two, lies a geometric forest and a large pond. The garden has 106 statues spread throughout the park and it counts with a cultural programme characterized by free photography exhibitions on the garden railings and by concerts in the bandstand (Paris Official Website, N.D.).

By on site observation it was possible to note that are also many activities and facilities for children, teenagers and adults such as:

- Areas with playgrounds with spaces for adults
- Tables to play chess
- Tennis courts
- Pétanque courts
- Individual chairs all over the gardens
- · Rental of bridge or remote-control boats
- Shaded areas
- Benches
- Theatres
- Kiosks



Figure 35. Furniture



Figure 36. Pétanque



Figure 37. Retail

#### **KEY FINDINGS (BY OBSERVATION)**

Pétanque courts make elderly and adults have a place to coexist

The different mix of features in one place attract different age

People feel welcomed to stay for the individual chairs located in all the different areas of the park

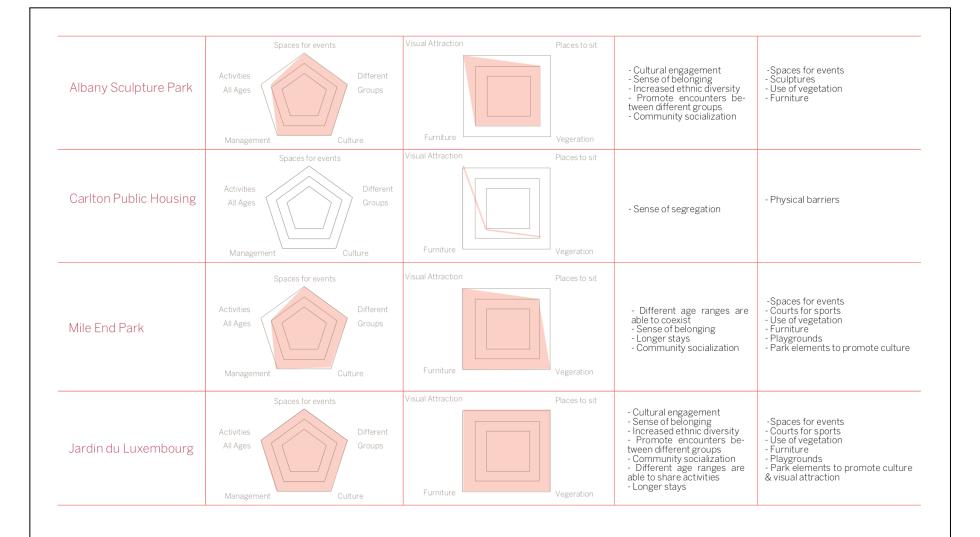
Having places to sit and the large amounts of vegetation and

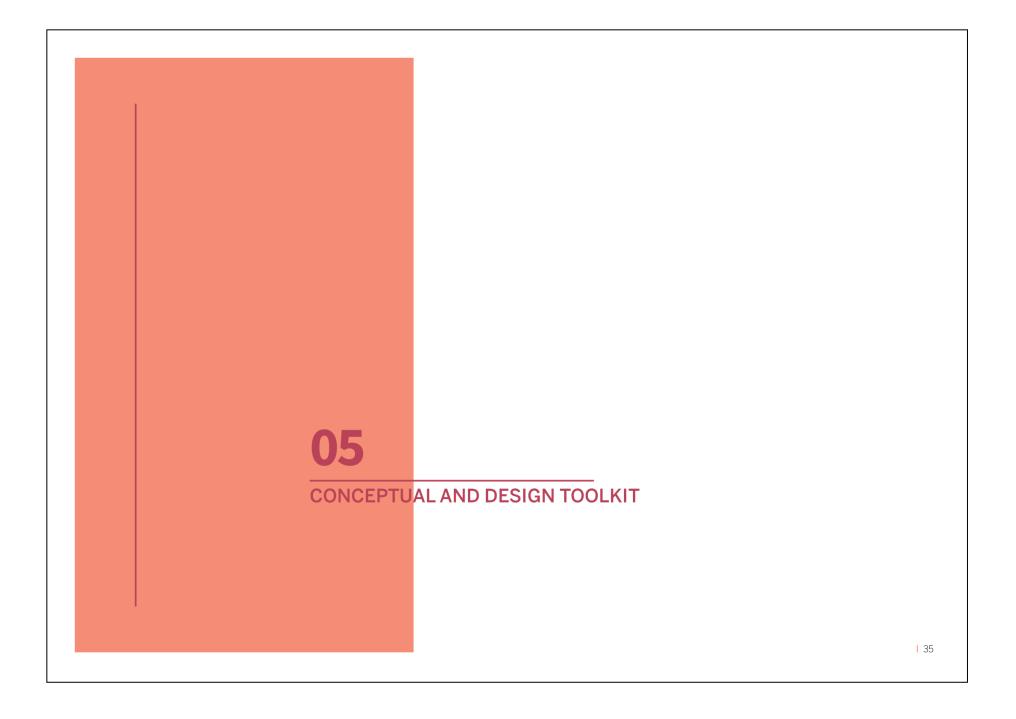
In the playground areas mothers from different ethnic backgrounds socialise

Areas with facilities to play chess allow elderly, adults and teenagers to mingle

Small shops allow to incentivize local economy and allow to contribute to the park's maintenance

	Strategies for Integration & Social Cohesion	Strategies for Long Stays & Environmental Comfort		
Case Study	O1 Spaces for events/meetings O2 Activities for all ages O3 Incentivise different groups to gather O4 Management of the place O5 Promote different cultures	O1 Places to sit O2 Vegetation O3 Visual Attraction O4 Furniture and other elements	Outcomes	Implementations
Borough of Newham	Activities All Ages  Management  Spaces for events  Different Groups  Culture	Visual Attraction Places to sit  Furniture Vegeration	- Increased ethnic diversity - Sense of belonging - Promoted encounters	-Spaces for events - Courts for sports - Use of vegetation - Furniture - Playgrounds
Lillington Gardens	Activities All Ages  Management  Spaces for events  Different Groups	Visual Attraction Places to sit  Furniture Vegeration	- Different socio-economic groups were able to coexist - Sense of belonging	- Use of vegetation - Furniture
BITP and MRUF	Activities All Ages  Management  Spaces for events  Different Groups  Culture	Visual Attraction Places to sit  Furniture Vegeration	- Different age ranges are able to coexist - Sense of belonging - Longer stays - Community socialization	-Spaces for events - Courts for sports - Use of vegetation - Furniture - Playgrounds - Park elements to promote culture
Peavey Park	Activities All Ages  Management  Spaces for events  Different Groups  Culture	Visual Attraction Places to sit  Furniture Vegeration	- Cultural engagement - Sense of belonging - Increased ethnic diversity - Promote encounters be- tween different groups - Community socialization	-Spaces for events - Courts for sports - Use of vegetation - Furniture - Playgrounds - Park elements to promote culture & visual attraction





### **FRAMEWORK**

The literature review provided an overview of the importance of open spaces, their role for social interaction, to understand the perceptions from different ethnic groups and how urban design strategies and space management can have a significant impact in allowing interactions to take place, creating social mix and a sense inclusion for the users of a space.

The following proposed framework identifies design principles and strategies from the literature review and case studies were findings of existing spaces combined with a variety of theories could lead to the creation of places where social interaction and integration could occur in open spaces.

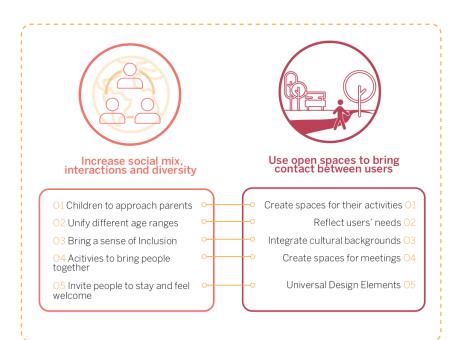


Figure 38. Framework

### **KEY PRINCIPLES**



#### O1 Design Flexible Spaces

Settings that allow children to interact with one another and approach parents from different ethnic and social backgrounds





#### O2 Implement Mix of Features

Different physical features, user-defined recreations and activities to attract different kinds of users



#### 03 Promote Cultural Diversity

Transfer features from the predominant ethnic groups to promote their different backgrounds



#### O4 Design Multi-use Spaces

Places that can be managed to promote different events to integrate and generate interactions among people

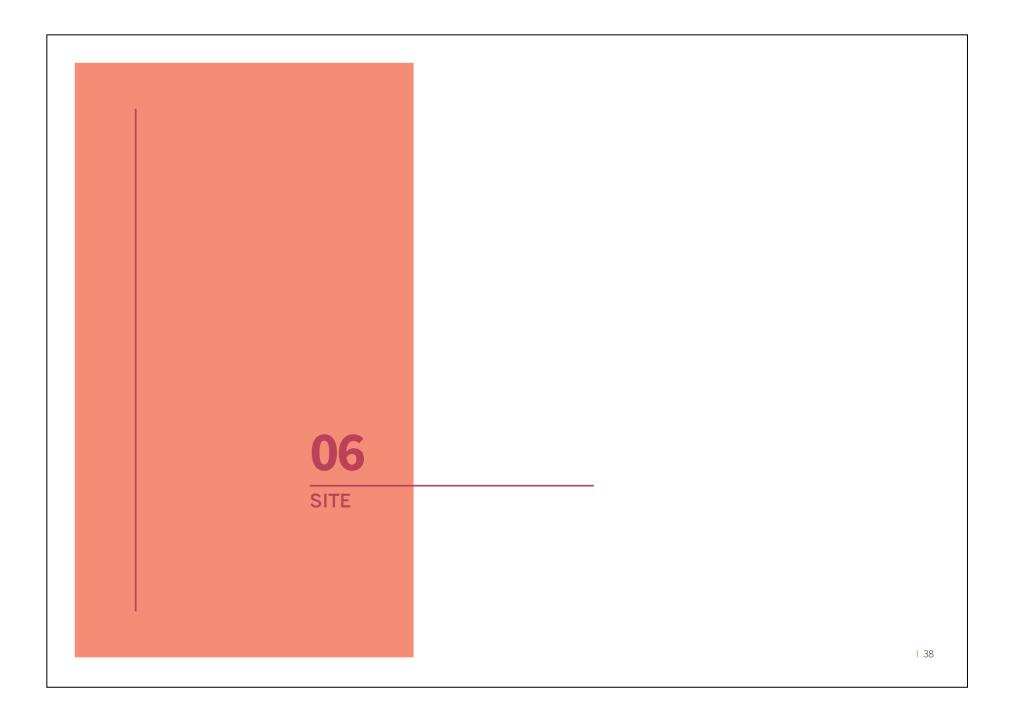


#### 05 Bring Visual and Environmental Comfort

Make people feel invited to spend long periods of time in the space by providing strategies of universal and visual design

TOOLKIT Figure 39. Toolkit

KEY PRINCIPLES	OBJECTIVES	TOOLS	CONCEPT
O1 Design Flexible Spaces	- Create spaces that can be used to attract younger generations  - Use the interactions of children to allow parents from different backgrounds have a first point of contact	- Flexible multi-functional play spaces that can also serve as visual elements, when not in use - Soft sculptures designs	Attract
O2 Implement Mix of Features	- Design different areas that could be used for different age ranges to come together  - Creative active spaces that foster inclusion  - Promote community belonging to the open spaces  - Encourage different age ranges to use the space	- Courts for different physical activities: Cycling, basketball, football, croquet  - Use architectural tools to provide facilities and furnishings	Space
O3 Promote Cultural Diversity	- Promote a sense of feeling welcome and accommodated in the neighbourhood  - Celebrate the cultural differences in the area  - Foster community belonging  - Transfer characteristics from other countries/cultures	- Temporary spaces to create markets for retail  - Visual elements that promote cultural exchange  - Elements of universal design: colors and materials	Cultural Diversity →
O4 Design Multi-use Spaces	- Encourage interactions from people of different backgrounds  - Connect people and improve the attractiveness of the space  - Create opportunities for communication and conversation which trigger real social mix	Design spaces for functional features for diverse events that can be adapted to have: concerts, meetings, talks, workshops and other cultural events.      Spaces to temporarily have screens, stages, chairs, tables	A ABC CA BC C
05 Bring Visual and Environmental Comfort	- Create attractive and comfortable spaces that invite users to stay  - Increase the frequency and presence of people in the open spaces	- Furniture: benches, tables, waste bins, etc.  - Soft elements of landscape: relief, plantings, pavement, water elements  - Universal design elements: microclimate, vegetation, colors, materials, textures	37



#### SITE SELECTION

### Why London?

The Mayor of London (2018) acknowledges that the city is one of the most diverse ones in ethnic and social groups in the world, however, unless there is social integration, diversity can become a source of division. There is a need to create better places for social integration, including the built environment and green space.

A census from 2011 showed that London is one of the most ethnically diverse region in England and Wales, where 40.2% of residents identified with either the Asian, Black, Mixed or Other ethnic group. out of all regions, London had the smallest percentage of White British people, at 44.9%, and the North East had the highest percentage, at 93.6% and with more than 300 languages spoken (UK Government, 2019).

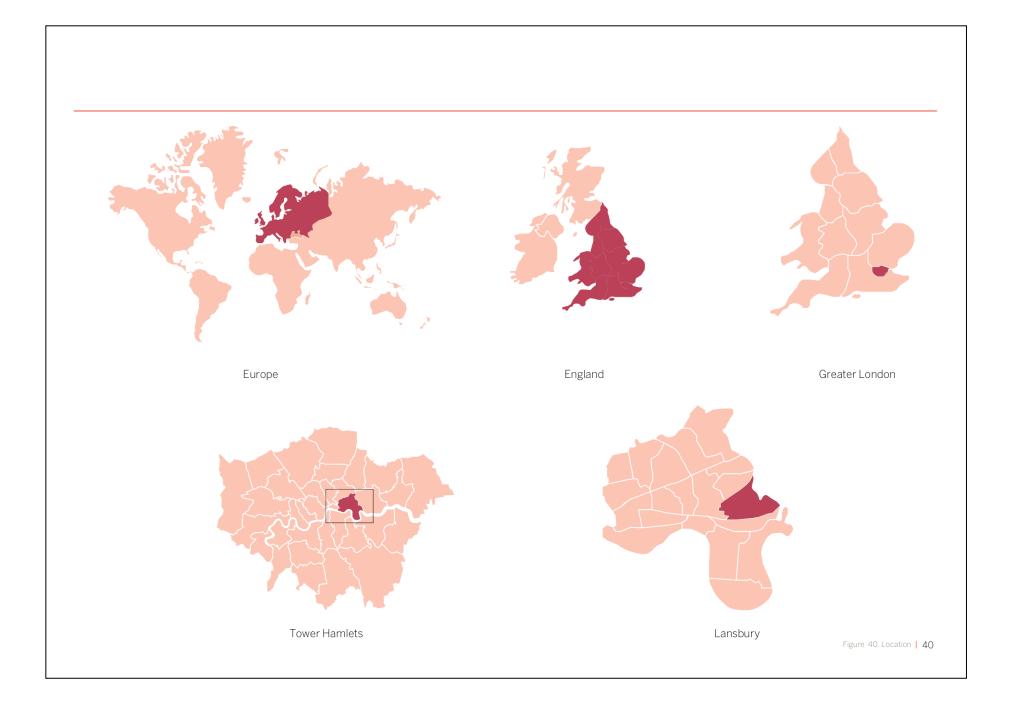




Figure 41. Tower Hamlets

#### Tower Hamlets's Population

The Office for National Statistics (ONS) estimated the usual resident population of Tower Hamlets to be 308,000 as at 30 June 2017. In the year to June 2017, the borough gained an estimated 7,000 additional residents. That is equivalent to 20 additional residents every day over the year. In terms of population size, Tower Hamlets is ranked 11th largest out of the 32 London Boroughs and City (Government of Tower Hamlets, 2018).

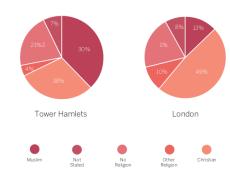


Figure 42. Faith Profile

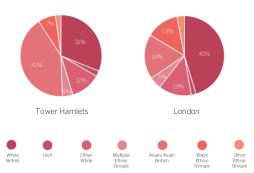


Figure 43. Population by Ethnic Group

#### LONDON, TOWER HAMLETS

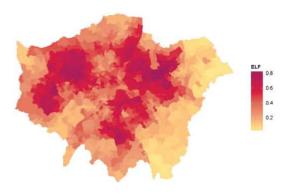


Figure 44. Ethnic Diversity in London.

By analyzing the maps of ethnic diversity and ethnic segregation from the studies of Sturgis et al. (2018), it was possible to delimit areas of London from which, the borough of Tower Hamlets that included both factors. The borough statistics also helped for the site selection since it ranks as the 16th most ethnically diverse local authority in England in terms of the mix of different ethnic group populations in the borough. More than two thirds, 69% of the borough's population belong to minority ethnic groups (i.e. not White British), while just under one third, constituting 31%, are White British, the fifth lowest proportion in England & Wales. From the minority ethnic groups, the Asian/Asian British group composes 41% of the population which majority is Bangladeshi, representing 32% of the total population in Tower Hamlets, making it its largest ethnic group (Government of Tower Hamlets, 2018).

Tower Hamlets is also the 4th most linguistically diverse area in England and Wales after Newham, Brent and Ealing. The 2011 Census identified at least 90 different languages be-

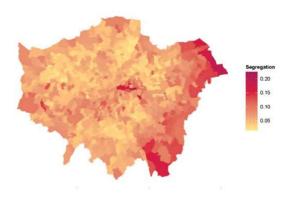


Figure 45. Segration Map

ing used in the borough. Around 66% of the residents use English as their main langue and 18 per cent use Bengali. After Newham and Brent, Tower Hamlets also has the third highest proportion of residents who use a main language other than English, 34 per cent compared to 22 per in London and 8 per cent nationally (Government of Tower Hamlets, 2017).

In terms of faith profile, the borough has the highest proportion of Muslim residents in the country. In 2011, 38% of borough residents were Muslim compared with 13% in London. Conversely, the borough had the lowest proportion of Christian residents nationally: 30%. Around 21% of residents had no religion and 7% chose not to state their religion on the Census form. Other smaller, but significant, faith groups represented in the borough include: Hindu 1.8%, Buddhist 1.2%, Jewish 0.6% and Sikh 0.4% (Government of Tower Hamlets, 2018).





### SITE ANALYSIS





# SITES AND LANDMARKS Langdon Park Brabazon Multi-use P.O.S Bartlett Park Jolly's Green Figure 58. Lime House Figure 52. Chrisp Street **-0** 1&2 Figure 57. Langdon Figure 53. Retail **6** 3 & 4 Figure 56. St Mary & St Joseph Church Figure 55. Clock Tower Figure 54. Chrisp Market Figure 51: Landmarks | 47

### SOCIO-ECONOMIC BACKGROUNDS SURROUNDING THE SITES

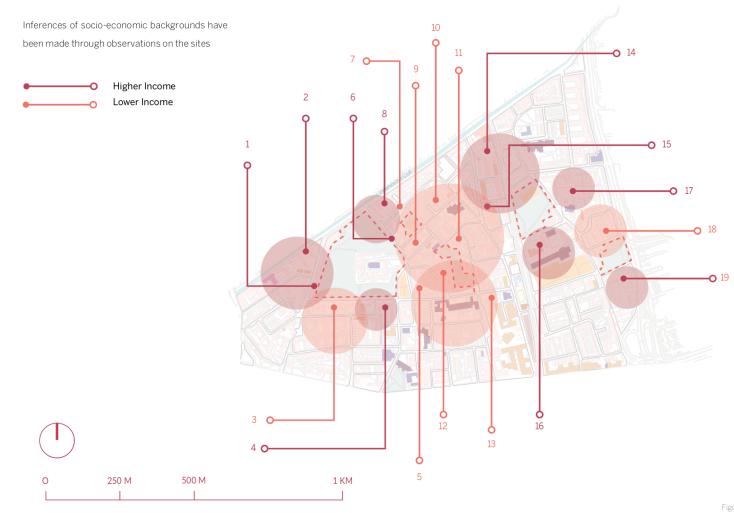


Figure 59. Socio-economic Background | 48



Figure 60. High-income Dwellings



Figure 63. High-income Dwellings



Figure 66. Low-income Dwellings



10 Figure 69. Low-income Dwellings



Figure 61. High-income Dwellings



Figure 64. High-income Dwellings



Figure 67. High-income Dwellings



Figure 70. Low-income Dwellings



Figure 62. Low-income Dwellings



Figure 65. High-income Dwellings



Figure 68. Low-income Dwellings



Figure 71. Low-income Dwellings







#### SITE ANALYSIS: WEEKDAY



### SITE ANALYSIS: FRIDAY



### SITE ANALYSIS: WEEKEND





- Increase of usage from weekdays to weekend to 270% going from 23 users
- are what residents use the most and during the weekends people are mostly on
- Parents use the space to play with their children during the weekend
- Adults and children are the main users
- White people are the main users of the space except on Friday where more Asian people were seen
- During weekdays males are the main users and females during the weekends



a space for transition

by Asians

main users

during weekends

- Most of the users are from

white background followed

- Adults and children are the

- Females are the main users

of the side of the park except



- The multiuse court has very low usage going from 1 to 4 people except when there is a match, which during weekdays is very unusual to take place
- Is mostly used to play/exercise during the weekends
- Adults represent 100% of the users
- Is equally used for white and Asian people
- space

play matches, ethnic groups of adults don't coexist









- The usage of the area remains steady with an average of 19 users per day - Is mostly used to walk, like
- Adults are the main users

  - Males and females use the

Note: Even with a court to

- -The usage of the area remains steady with an average of 21 users per day
- During the weekdays is mostly used as a space or transition and during the weekdays is highly used for lying on the grass and play with children
- Most of the users are from white background followed by Asian
- During the weekdays is mostly used for adults, but it shows a significant change during the weekends where children are the main users
- Is mostly used by males

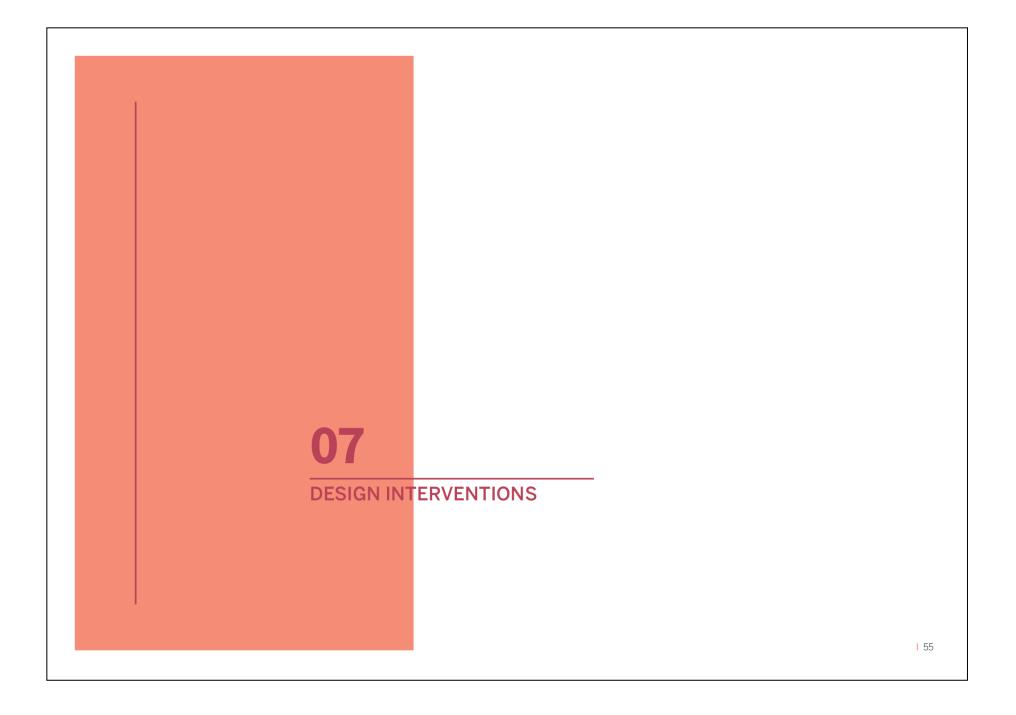
Note: The space is mostly used from residents that live in the surrounding area from low-income/social housing background

- The usage of the area remains steady with an average of 40 users per day
- During the weekdays is mostly used to play football and during the weekends is mostly used for lying on the grass
- The space is equally used from people of white, black and Asian backgrounds
- During the weekdays is equally used for children and adults and during the weekend is mostly used by adults followed by children
- Is mostly used by males during the weekdays and equally used for males and females during the weekend

Note: Bicycle parks gather people from many ages and the park is highly used when it comes to football matches from people of different backgrounds

- The usage of the area remains steady with an average of 18 users per day.
- The usage of the space changes in all the analysed days. During weekdays is mostly used for walking, on Fridays is almost equally for walking and sitting on the benches and during the weekends it shows many different activities including; walking, playing/exercising, using benches and lying on the grass
- The space is equally used by adults and children during weekdays and during the children is almost equally used by children, adults. teenagers and elderly peo-
- During the weekdays is mostly used by people from white backgrounds and during the weekend is mostly used by people of Asian backgrounds followed by people form white background
- Is mostly used by females

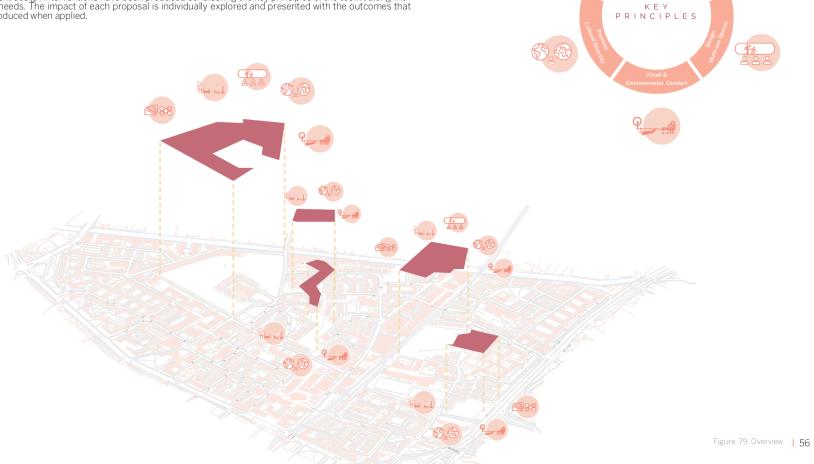
Note: It showed an interesting interaction of a woman of Muslim background with a white woman by the contact of their children



### **OVERVIEW**

After a meticulous analysis of the sites with all the in-situ observations and previous research of the focus area in the ward of Landsbury, it was possible to understand which principles of the toolkit could be applied and tested to achieve social cohesion and integration among all the different ethnic and social groups of the neighbourhoods.

In this section, design interventions have been produced considering the key principles of the toolkit along with each site's needs. The impact of each proposal is individually explored and presented with the outcomes that could be produced when applied.



## SITE 1: BARTLETT PARK



## APPLICABLE PRINCIPLES PUBLIC SPACE & URBAN CONTEXT **OVERVIEW &** SITE **CHALLENGES** - The residential area has both apartments/dwellings of high and lower income which denotes a mix of socio-economic backgrounds Design Flexible Spaces - The site is mostly flat with very little vegetation - From the site analysis it is also known that it has different ethnic backgrounds; also supported by observations Implement Mix of Features - From the table of observations, it is reflected that the park is highly used, especially during the week-Area: 56,800 m<sup>2</sup> - Even if there are many users, they don't coexist a lot between groups - Located in a mostly residential neighbourhood - Lack of furniture and spaces to do Promote Cultural Diversity activities - The site is surrounded by blocks of apartments in all its perimeter - It also counts with some dwellings in the middle Design Multi-use Spaces Bring Visual & Environmental Comfort



## **PROPOSAL**







Figure 88. Retail + Sculpture

Figure 89. Sport Facilities 3

Figure 90. Flexible Spaces

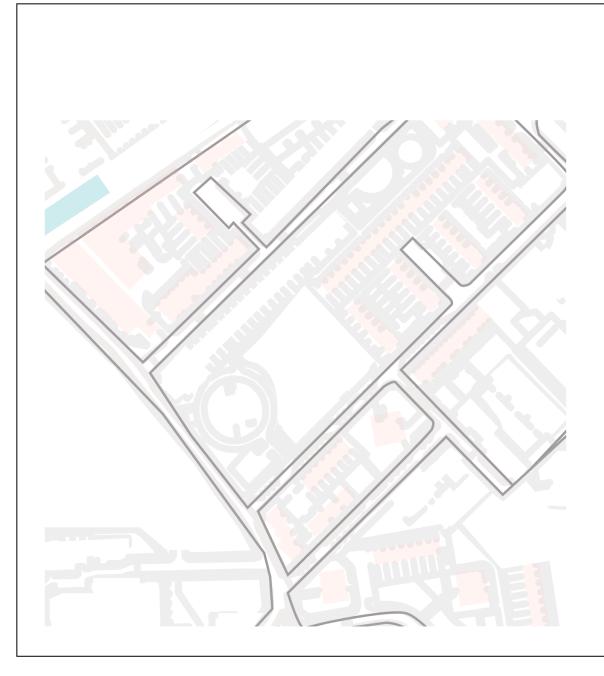




Figure 91. Multi-Use Spaces

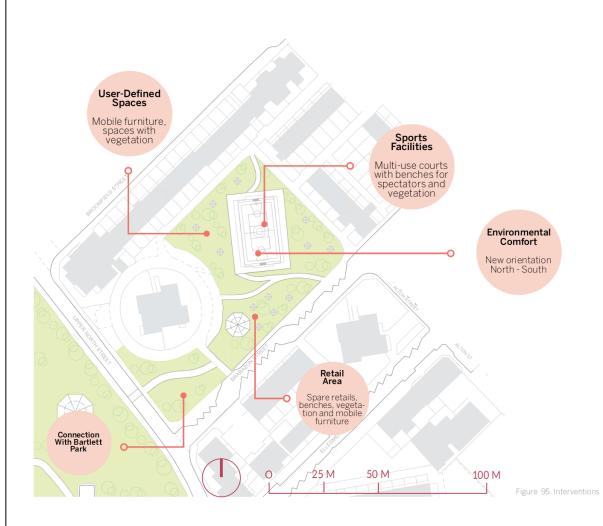
Figure 87. Proposal

**I** 60



## **APPLICABLE** PUBLIC SPACE & URBAN CONTEXT **OVERVIEW &** SITE **PRINCIPLES CHALLENGES** - The residential area has both apartments/dwellings of high and lower income, but mostly from the latter, there is a mix of socio-economic backgrounds Implement Mix of Features - The site counts with a multi-use court. Nevertheless, it is oriented from West to East when it should be North to South, this can have an impact with the user's performance when having a match Promote Cultural Diversity - From the table of observations, it is reflected that the park has low Area: 3,190 m<sup>2</sup> usage - From the site analysis it is also known that it has different ethnic backgrounds; also supported by observations Bring Visual & Environmental Comfort - Located in a mostly residential neighbourhood - Lack of furniture, there is no envi-ronmental comfort and few vegeta-- The site is surrounded by blocks of apartments in all its perimeter 1 62

### SITE 2. BRABAZON MULTI-USE: BRINGING CONFORT AND COEXISTANCE



The interventions aim to encourage users from different socio-economic and ethnic backgrounds by improving existing shared spaces to promote integration and longer stays. The new configuration of the park will re-orient the multi-use sport facility, add mobile furniture to facilitate gatherings and coexistence for residents. Cultural exchange will be fostered with the sports facility, user defined spaces and retail areas, the latter will also have an impact on the local economy.

#### Tools:

Multi-use court, mobile and static furniture, spaces for functional features, landscaping elements, vegetation, textures, materials., bioclimatic design

Taking into account the actual conditions of the site with the new implementations could allow people from all backgrounds and ages to generate more encounters. New bioclimatic design can encourage users to stay longer periods of time and coexist.

## **PROPOSAL**



Figure 97. Retail



Figure 98. Sport Facilities



Figure 96. Proposal



## **APPLICABLE** PUBLIC SPACE & URBAN CONTEXT **OVERVIEW &** SITE **PRINCIPLES CHALLENGES** - The perimeter of the park is mostly a residential area of lower income but with proximity to towers Implement Mix of Features of higher income - The site is mostly flat with very little vegetation - From the site analysis it is also known that the prevailing ethnic backgrounds are white and Asian; also supported by observations Promote Cultural Diversity - From the table of observations, it is reflected that the park is equally used during the weekdays and Area: 8,461 m<sup>2</sup> weekends - The space is mostly used as tran-sition and is almost equally used by all ages - Located in a mostly residential neighbourhood Bring Visual & Environmental Comfort - Neighbors do coexist but don't spend a lot of time - The site is surrounded by blocks of apartments in all its perimeter - Lack of furniture, vegetation and spaces to do activities



## **PROPOSAL**





Figure 105. User-Defined Spaces



Figure 104. Proposal

Figure 106. Sculpture

## SITE 4. LANGDON PARK



#### SITE

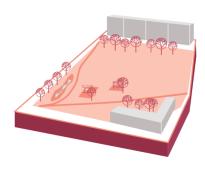
# PUBLIC SPACE & URBAN CONTEXT

# **OVERVIEW & CHALLENGES**

# **APPLICABLE PRINCIPLES**



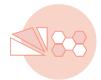
Area: 16,640 m<sup>2</sup>



- Located in a mostly residential neighbourhood
- The site is surrounded by blocks of apartments in all its perimeter

- The residential area has both apartments/dwellings of high and lower income which denotes a mix of socio-economic backgrounds
- The site is mostly flat with very little vegetation
- From the site analysis and observations, it is also known that is equally used by different ethnic backgrounds
- From the table of observations, it is reflected that the park is highly used during the weekend and it has a lot of activity during weekends when match are organised
- Even if there are many users coexist when their children play or when there are matches
- Good level of furniture but can be improved along with the space for sports since it is not a proper court

Design Flexible Spaces



Implement Mix of Features



Promote Cultural Diversity

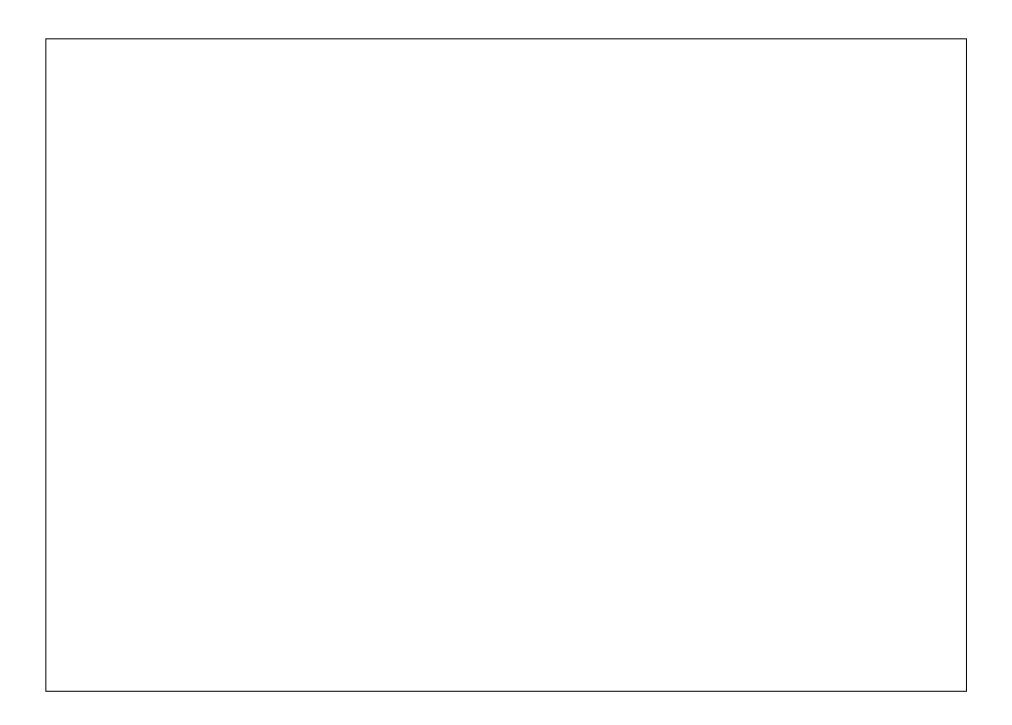


Design Multi-use Spaces



Bring Visual & Environmental Comfort





## **PROPOSAL**







Figure 114. User-Defined Spaces



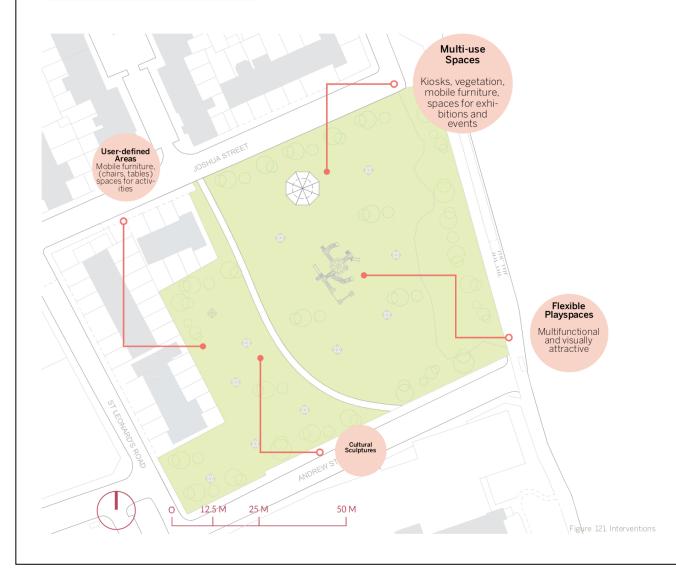
Figure 115. Flexible Spaces

## SITE 5. JOLLY'S GREEN



# APPLICABLE PRINCIPLES PUBLIC SPACE & URBAN CONTEXT OVERVIEW & CHALLENGES SITE - The residential area has both apartments/dwellings of high and lower income which denotes a mix of socio-economic backgrounds Design Flexible Spaces - The site is mostly flat with very lit-tle vegetation but good levels of fur-niture - From observation it is known that it has different ethnic backgrounds and the percentages varies almost every time Implement Mix of Features - From the table of observations, it is reflected that the park is equal-Area: 8,230 m<sup>2</sup> ly used during the weekdays and weekends with small amounts of people - User coexist because of the chil-- Located in a residential neighbourhood Promote Cultural Diversity dren - The site is surrounded by blocks of apartments and houses in all its perimeter and a high road on the right Bring Visual & Environmental Comfort

### SITE 5. JOLLY'S GREEN



The proposals of the park aim to encourage interactions between users from different socio-economic and ethnic backgrounds by promoting more interactions through games and user-defined areas. The latter will allow people to facilitate encounters. Cultural exchange will also be stimulated by adding sculptures.

#### Tools

Mobile and static furniture, multi-functional play spaces, vegetation, and sculptures.

The new implementations of the park could allow people from all backgrounds and ages to generate more encounters. Environmental comfort and facilities can encourage users to stay longer periods of time and coexist.

1 75

## **PROPOSAL**



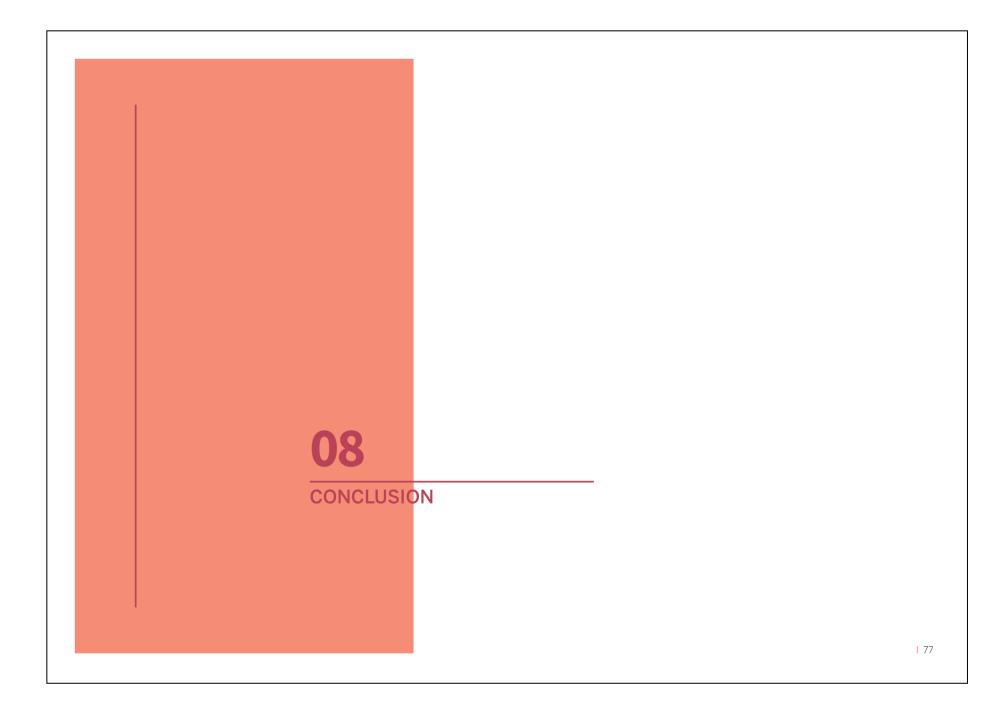
Figure 122. Proposal



Figure 123. Flexible Spaces



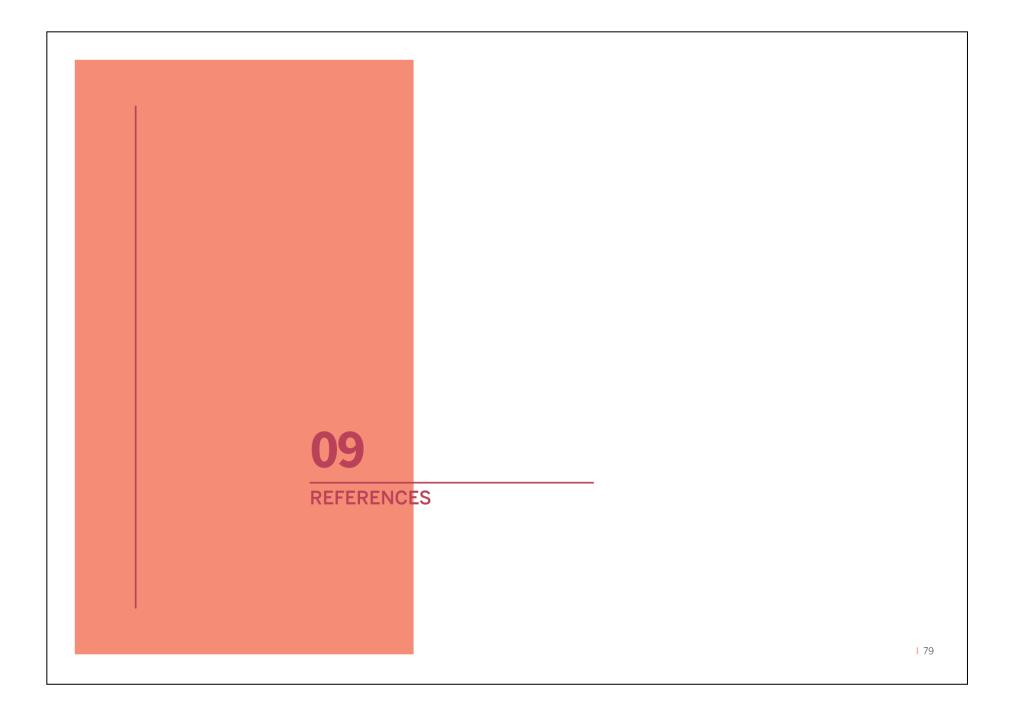
Figure 124. User-Defined Spaces



Cities have been facing rapid changes in its urban form where human scale has been forgotten leading to spaces where human interactions are lost. This has been seen more often in global cities where, if the richness of its multi-cultural background is not used to create bonds for social integration, this can lead to the perception of segregation and mark strong divisions rather than a sense of belonging to the place. This has been having a strong impact on ethnic and socio-economic groups in London where, even if the important step of integrating housing of different groups has entered into force, inhabitants don't coexist.

The public realm plays a significant role in societies since it becomes the only arena where people will have contact with different groups and have face-to-face interactions for longer periods of time, bringing a positive perception of the environment as well. Well-handled public realm in both use and design has the potential to create new bonds of trust that daily brief activities (such as walking) alone wouldn't possibly achieve.

This project presents an exploration on how to use public space to promote social cohesion in areas with problematics of segregation or places with highly diverse ethnic and socio-economic backgrounds. Through exhaustive online and in-situ research of different case studies mixed with literature review, it became clear how the urban design of public spaces could have a positive impact on bringing different groups together and make them mingle between each other regardless of their backgrounds. The toolkit proposed and tested in this project aims to rethink the configuration of current spaces to celebrate diversity and provide different approaches to achieve social cohesion.



### **REFERENCES**

#### MAIN TEXT

- 1. ABS (2013), 2011 Census QuickStats: Carlton. Retrieved on March 17, 2020 from: http://www.censusdata.abs.gov.au/census\_services/getproduct/census/2011/quickstat/206041117?open-document&navnos=220
- BBC (2020). 'BAME coronavirus deaths: What's the risk for ethnic minorities?' Retrieved or July 15, 2020 from: https://www.bbc.co.uk/news/av/explainers-52969054/bame-coronavirusdeaths-what-s-the-risk-for-ethnic-minorities
- Bigdeli Rad, V & Bin Ngah, I. (2013). 'The Role of Public Spaces in Promoting Social Interactions'. Retrieved on March 17, 2020 from: https://inpressco.com/wp-content/uploads/2013/11/Paper26184-188.pdf
- 4. Bird, J.H., Li, Y; Rahman, H.Z.; Rama, M, Venables, A. (2018). Toward Great Dhaka; a new urban development paradigm eastward. World Bank Group.
- 5. Cabe Space (2003). 'The Value of Public Space How high quality parks and public spaces create economic, social and environmental value.' Retrieved on May 11, 2020 from: https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-public-space1.pdf
- 6. City of Westminster (2012). 'CONSERVATION AREA AUDIT Lillington and Longmoore Gardens'. Retrieved on March 17, 2020 from http://transact.westminster.gov.uk/docstores/publications\_store/adopted%20conservation%20area%20audit.pdf.
- 7. Carmona m., De Magalhães C., Hammond I., Blum R., Yang D., with Happold B., Caulton J. Fitchett C. and Clifford K. (2004). 'Living Places: Caring for Quality'. Office of the Deputy Prime Minister. London
- 8. Dawodieh, E. (2017). The Impact of High Population Density on the Built Environment and the Behavior of Individuals in Amman. Retrieved February 4,2020 from:
- https://globaljournals.org/G.IRE\_Volume17/3-The-Impact-of-High-Population.pdf
- 9. Dines, N., Cattel, V., Gesler, W. & Curtis, S. (2006). Public space and wellbeing. Public spaces and social relations in East London Joseph Rowntree Foundation. Retreived on May 7, 2020. From: https://www.irf.org.uk/file/37153/download?token=b0l9dFZr&filetype=full-report
- 10. Dempsey, N. (2008). 'Does quality of the built environment affect social cohesion?. Proceedings of The Ice Urban Design and Planning'. 161. 105-114. 10.1680/udap.2008.161.3.105.
- 11. Ecosistema Urbano. (2018). 'Rethinking Public Spaces in Dhaka: an Urban Design Scheme.' Retrieved on Jun 19, 2020. From: https://ecosistemaurbano.org/english/5-things-you-can-do-in-dhaka/#ln3
- 12. Ecosistema Urbano. (2018). '5 Things You Can Do in Daka's Public spaces.' Retrieved on Jun 19, 2020. From: https://ecosistemaurbano.org/english/public-spaces-dhaka/
- 13. Espinola, C. (2020) Public Space: Achieving social mix and inclusion by interactions with physical features of the built environment. Literature Review.
- 14. Garau, P. (2014). 'Public Space: Think Piece'. Retrieved on May 12, 2020 from: https://www.uclg.org/sites/default/files/uclg-public\_space-think\_piece.pdf
- 15. Gardener Stewart Architects (2020). 'Mile End Park'. Retrieved on July 10, 2020 from: http://gsa-studios.com/portfolio/project/mile-end-park
- Gehl Institute (2018). 'Inclusive Healthy Spaces: A Guide to Inclusion & Health in Public Space Learning Globally to Transform Locally'. Retrieved on March 12, 2020 from: https://gehlinstitute.org/wp-content/uploads/2018/07/Inclusive-Healthy-Places\_Gehl-Institute.pdf
- Government of Tower Hamlets. (2017). 'A Profile of the Migrant Population in Tower Ham-

- lets'. Retrieved on May 27, 2020 from: https://www.towerhamlets.gov.uk/Documents/Borough\_statistics/Diversity/A Profile of the Migrant Population in Tower Hamlets.pdf
- 18. Government of Tower Hamlets. (2018). 'Household Income 2019'. Retrieved on June 19, 2020 from:
- https://www.towerhamlets.gov.uk/Documents/Borough\_statistics/Income\_poverty\_and\_welfare/income 2019 Lpdf
- 19. Government of Tower Hamlets. (2020). 'Mile End Park. Retrieved on June 29, 2020 from https://www.towerhamlets.gov.uk/lgnl/leisure\_and\_culture/parks\_and\_open\_spaces/mile\_end\_park/mile\_end\_park.aspx
- 20. Government of Tower Hamlets. (2018). 'Population'. Retrieved on May 27, 2020 from https://www.towerhamlets.gov.uk/Documents/Borough\_statistics/Research-briefings/Population 2 BP2018.pdf
- 21. Hagen, B & Nassar, C & Pijawka, K. (2017). 'The Social Dimension of Sustainable Neighborhood Design: Comparing Two Neighborhoods in Freiburg, Germany'. Urban Planning. 2. 64-80 10 17645/ ur v2i4 1035
- 22. Hope community and the office of the mayor Minneapolis Park and recreation Board. (2000). Peavey Park Community Listening and Visioning Project'. Retrieved on May 22, 2020 from: http://page.community.org/wn-content/uploads/2017/02/Park-Listening-Report-2001 pdf
- 23. Islam N. (2005). Dhaka Now. Contemporary Urban Development. Dhaka, Bangladesh: Bangladesh Geographical Society (BGS). [Google Scholar]
- 24. Levin, I & Arthurson, K & Ziersch, A. (2014). 'Social mix and the role of design: Competing interests in the Carlton Public Housing Estate Redevelopment, Melbourne'. Cities. https://doi.org/10.1016/j.cities.2014.04.002
- 25. Mayor of London. (2018). The mayor's Strategy for Social Integration. Retrieved on February 7 2020 from: https://www.london.gov.uk/sites/default/files/social\_integration\_strategy.pdf
- 26. Mojanchevska, K. (2018). 'Accommodation of Cultural Diversity in Public Spaces: The Case of Skopje (Macedonia)' Retrieved on May 10, 2020 from: https://www.researchgate.net/publicacion/326632678\_Accommodation\_of\_Cultural\_Diversity\_in\_Public\_Spaces\_The\_Case\_of\_Skopie Macedonia
- 27. NHS (2020). 'Who's at higher risk from coronavirus'. Retrieved on July 15, 2020 from https://www.nhs.uk/conditions/coronavirus-covid-19/people-at-higher-risk/whos-at-higher-risk-rom-coronavirus/
- 28. Rasidi, Mohd & Jamirsah, Nurzuliza & Said, Ismail. (2012). Urban Green Space Design Affects Urban Residents' Social Interaction. Procedia Social and Behavioral Sciences. 68. 464–480 10.1016/j.shsnro.2012.12.242
- 29. Paris Official Website (N.D.). 'Jardin du Luxembourg'. Retrieved on July 11, 2020 from https://en.parisinfo.com/paris-museum-monument/71393/Jardin-du-Luxembourg
- 30. Project for Public Spaces. (2016). 'YOU ASKED, WE ANSWERED: 6 EXAMPLES OF WHA MAKES A GREAT PUBLIC SPACE'. Retrieved on June 30, 2020 from: https://www.pps.org/article.you-asked-we-answered-6-examples-of-what-makes-a-great-public-space
- 31. Scanlon, K & White, T & Blanc, F. (2018). Residents' experience of high-density housing in London. Retrieved on March 17, 2020 from: https://www.london.gov.uk/sites/default/files/residents\_experience\_of\_high-density\_housing\_in\_london\_lse\_-\_final\_report\_july\_2018.pdf
- 32. Sherman, D. (2005). 'Participatory parks planning: exploring democratic design as a tool to mediate cultural conflict over neighborhood green space'. Retrieved on May 22 2020 from: https://core.ac.uk/download/pdf/4398459.pdf

- Shrestha, S. (2011). 'THE VITALITY OF PUBLIC SPACE: CONSIDERING DIVERSITY'. Retrieved on May 8, 2020. From: https://edepot.wur.nl/176717
- 34. Silva, C. (2008). 'Albany Park Multicultural Sculpture Park and Healing Garden'. Retrieved on May 22, 2020 from: http://www.placemakingchicago.com/places/albany-park-multicultural-sculpture-park-and-healing-garden asp
- 35. Stauskis, G. & Eckardt, F. (2011). 'Émpowering Public Spaces as Catalysers of Social Interac-
- 36. Stolle, D. & Soroka, S. & Johnston, R. (2008) 'When Does Diversity Erode Trust? Neighbor hood Diversity, Interpersonal Trust and the Mediating Effect of Social Interactions', Political Studies 56(1), pp. 57–75. doi: 10.1111/i.1467-9248.2007.00717.x.
- Sturgis, P & Brunton-Smith, I & Kuha, J & Jackson, J. (2014). Ethnic diversity, segregation and the social cohesion of neighbourhoods in London, Ethnic and Racial Studies, 37:8, 1286-1309, DOI 10.1080/01419870.2013.831932
- 38. The Economist Intelligence Unit (2018). 'The Global Liveability Index 2018.' Retrieved on June 19, 2020 from'
- http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=The\_Global\_Liveability\_index\_2018 pdf&mode=wp&campaignid=Liveability2018
- 39. UK Government (2019). 'Regional ethnic diversity' Retrieved on June 29, 2020 from: https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/regional-ethnic-diversity/latest
- 40. Vaughan, C. A., Cohen, D. A., & Han, B. (2018). How Do Racial/Ethnic Groups Differ in Their Use of Neighborhood Parks? Findings from the National Study of Neighborhood Parks. Journal of urban health: bulletin of the New York Academy of Medicine, 95(5), 739–749. https://doi.org/10.1007/s11524-018-0278-v
- Whyte, W. (1980). 'Social life of small urban space: Conservation Foundation'. New York Project for Public Spaces. P. 94

#### FIGURES REFERENCES

Figure 1. Espinola, C. (2020).

Figure 2. Espinola, C. (2020)

Figure 3 Espinola C (2020

Figure 4 Espinola C (2020

Figure 5. Espinola, C. (2020

Figure 6. Ecosistema Ùrbano. (2018). Google Street View. Available at: https://ecosistemaurbano.org/english/5-things-you-can-do-in-dhaka/#ln3

Figure 7. Ecosistema Úrbano. (2018). An ephemeral installation for a celebration in Azimpur Road, Dhaka, Bangladesh. Available at: https://ecosistemaurbano.org/english/5-things-you-can-do-in-dbaka/#lp3

Figure 8. Ecosistema Urbano, (2018). A cricket game in a playground in Dhaka, Bangladesh. Available at: https://ecosistema.urbano.org/english/5-things-you-can-do-in-dhaka/#ln3

Figure 9. Ecosistema Urbano. (2018). Rokonpur girls high school, Dhaka, Bangladesh. Available at https://ecosistemaurbano.org/english/5-things-you-can-do-in-dhaka/#ln3

Figure 10. Project for Public Spaces, (2016), Place Diagram, Available at: https://www.pps.org/arti-

cle/you-asked-we-answered-6-examples-of-what-makes-a-great-public-space

Figure 12. London Government. (N/A). Newham. Available at: https://www.london.gov.uk/in-my-area/newham

Figure 13. Green Dreams Landscape Architects. (N/A). Priory Park. Available at: http://www.green-dreams.org.uk/project/priory-park/

Figure 14. Black Arrows Badminton Club. (2018). Available at: http://www.blackarrowsbccom/2018/04/coco-cola-parklives-badminton-in-central-park-newham/

Figure 15. Manchester History. (2017). Available at: https://manchesterhistory.net/architecture/1960/lillington.html

Figure 16. Municipal Dreams. (2014). Available at: https://municipaldreams.wordpress.com/tag/westminster/

Figure 17. Alchetron. (2018). Available at: https://alchetron.com/Lillington-and-Longmoore-Gardens

ijgure 18. MLA Landscape Architects. (N/A). Bukit Indah Town Park. Available at: https://www. naliklin.com.mv/project-hukit-indah-town-park.php

Figure 19. Rasidi, Mohd & Jamirsah, Nurzuliza & Said, Ismail. (2012). Typical usage of BITP. Avai able at: https://www.researchgate.net/publication/257718525\_Urban\_Green\_Space\_Design\_Aifects\_Urban\_Residents'. Social Interaction

Figure 20. Rasidi, Mohd & Jamirsah, Nurzuliza & Said, Ismail. (2012). Green space quality and typcal usage of MRUF. Available at: https://www.researchgate.net/publication/257718525\_Urban\_ Green, Space, Design, Affects, Urban, Residents', Social, Interaction

Figure 21. Chris Juhn/MSR News. (2018). Thrones Plaza sits deserted on a sunny afternoon. Avai able at: https://spokesman-recorder.com/2018/07/05/from-thrones-plaza-crack-still-rules-ir peavey-park/

Figure 22. Minneapolis Park and Recreation Board. (N/A). Mosaic Bench. Available at: https://www. minneapolisparks.org/parks destinations/parks lakes/peavey field park/

Figure 23. Minneapolis Park and Recreation Board. (N/A). Playground. Available at: https://www.minneapolisparks.org/parks\_destinations/parks\_lakes/peavey\_field\_park/

Figure 24. The Official Website of Chicago Park District. (N/A). Available at: https://www.chicagoparkdistrict.com/parks-facilities/multi-ethnic-sculpture-park-and-healing-garden#Multimedia

Figure 25. North River Commission. (N/A). Available at: http://www.placemakingchicago.com/ places/albany-park-multicultural-sculpture-park-and-healing-garden.asp

Figure 26. North River Commission. (N/A). Available at: http://www.placemakingchicago.com/places/albany-park-multicultural-sculpture-park-and-healing-garden.asp

Figure 27. Levin, I. (2012). The private courtyard enclosed between the three buildings. Available a https://doi.org/10.1016/j.cities.2014.04.002

Figure 28. Levin, I. (2012). A closer view of part of the wall and the locked gate. Available at: https://doi.org/10.1016/j.cities.2014.04.002

Figure 29. Espinola, C. (2020)

Figure 30. Espinola, C. (2020)

Figure 31. Espinola, C. (2020).

Figure 32. Espinola, C. (2020)

Figure 33. Espinola, C. (2020)

Figure 34. Espinola, C. (2020)

Figure 35. Espinola, C. (2020)