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Universal Urban Language

COLLECTIVE SOCIAL BEHAVIOR IN URBAN PARKS



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Master of Science Thesis

Faculty of Built Environment

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Universal Urban Language: *Collective Social Behavior in Urban Parks*

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Abstract

Urban park or city park is an institution which expands social, culture, and wellbeing esteems within a city. Additionally, urban park is considered as a place of relaxation, sports and tourism. It increases the quality of living in an urban environment additionally associates the area to profit the general public. Parks everywhere throughout the world convey a comparable example with regards to its user behavior, and additionally it doesn't make a difference whether it is in an extremely hot and humid district or it is in the furthest north of globe where it is cold and dry. Human in a gathering behave likewise with regards to visit or take a break in a city park or urban green region. The purposes of the park is also same anywhere in the world. Parks from around the globe has an equal character imparted to set of patterns. This example of the collective behavior and how each element of a specific place cause the users to behave in such manner, is basic to demonstrate an urban park have similar qualities and personalities. Subsequently makes it a Universal Urban Language.

Keywords: Urban Park, Collective Human Behavior, Urban, Language, Patterns.

The originality of this thesis has been checked using the Turnitin Originality Check service.

Preface

During my studies in architecture, I have always been fascinated by urban studies and planning. Because of this I liked to travel to different cities and towns. Once I was traveling with my wife to Maldives, where we got the opportunity to visit a local urban plaza. The design attracted me a lot and there I saw how everyone approaches a design element. For further studies of human behavior in urban space, I contacted my teachers and professors in Tampere University. My professor introduced me with the idea of language and suggested a book by Christopher Alexander, Pattern Language. Later on, discussion after discussion with professor lead me to this Thesis project which, was not only a good opportunity to learn my interests in detail, but also I get to travel to different parks in different cities in Asia and Europe.

Acknowledgement

I am thankful to many people who have kindly helped me with my thesis and provided me with the knowledge to complete this research. Their constant help, advice and encouragement helped me to facilitate the development of this thesis. I convey my heartfelt gratitude to my supervisor Professor Juho Rajaniemi who have been extremely patient with me and guiding me through this design process and aiding me with their extensive knowledge and advice. Also, to Minna Chudoba who have given me her guidance and encouragement. Also, I express my gratitude to my friends, and colleagues, for all their struggle and efforts and prayers that helped me complete my thesis, who gave me immense support, help and co-ordination. Last but not the least, my parents whose constant prayers, support and care helped me to survive this difficult phase in finishing my thesis project.

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Chapter One: Introduction

1.1. Brief

The world we are living in today, exists because of the creativity of each human being. Humans create and use parks according to their needs, like needs of surviving in this vast world. Architecture and urban planning play a big role in the existence of human race. From the dawn of mankind to the post-modern civilization people have created architectural and urban environment for shelters, for social, cultural, and recreational purposes. Throughout the history people have created architectural environments which influence human behavior and human experience. Environment seems, by all accounts, to be incredibly powerful on social behaviors which the relationship with urban area has turn out to be practically imperceptible; despite the fact that the human characterizes the space at the absolute starting point of its reality (Ngesan, Karim, & Zubir, 2012).

The environment we are living in is either built or natural. When built environment and urban development suppresses nature or natural elements of certain area, designers and planners created a place which reflects the natural environment. These places are known as urban parks or city parks. They not only reflect the nature in the city but also improve the health and quality of living within a city.

Urban parks all over the world are very popular among the residents of the respective cities. People use parks for their recreational, cultural, social needs. The cultural and social needs that serves for the benefits of the residents of a city. Therefore, it is quite curious to think about if the urban parks all over the world have the same patterns of a language. A Language that has its own definition in urban and architectural context. Language is made of different types of patterns and each pattern talks about a significant problem (Alexander, et al., 1977). These patterns appear in our environment from time to time.

Understanding these patterns is very important while designing or developing an urban park. As the parks are used by living beings, especially humans, the behavioral pattern is one the most important pattern to understand in this language. Collective human behavior or social behavior determine how an urban park is used by its user. According to Moneim (2005), designers and planners who design the architectural environments should consider human needs and emotions and predict their behaviors for perceptual system and emotional process and response.

This thesis will try to determine how urban parks all over the world carry similar patterns when it comes to its user behavior, and it does not matter whether it is in a very hot and humid region or

in the north of globe where it is cold and dry. Humans in a group behave almost similarly what comes to visit or pass time in a city park or urban green area. Besides, the designer's intention and how user uses and the use of the design elements also important factor in order to determine a universal language for urban parks. Affordances are patterns seen by a person or group of people. Affordance is an activity-based viewpoint (Zhang, 2017). Therefore, it describes how user perceives or uses a certain design element. To utilize the aim of this research, few case studies of urban parks from different countries will be conducted. Case studies from Europe and Asia will try to determine if park around the world have the same patterns concerning collective human behavior.

1.2. Definitions

1.2.1. Urban

The term 'urban' according to urban dictionary means, related to or concerned with a city. Urban areas are basically a place of dense social settlements and build environment. As urban areas are full of high amount of pollution comparing with other areas in the country, incorporating environmental advances such as parks, plazas, gardens etc. can be helpful to the people living in these areas or regions. In this paper, the meaning of the word urban is area that is relating to a city. Urban areas or regions are characterized by cities, towns, suburbs and the term contrasts with rural areas and natural environment. While discussing about the different urban areas, one term always pops up. The term known as 'Identity' or 'Urban Identity' is constantly changing and developing dynamic events, restricted not only to artificial or non-natural elements like buildings, roads and squares, but also to active involvement of all the people as a group and individuals who exist within that region. (Beyhan & Gürkan, 2015). 'Identity' indicates mainly to the individual or collective pattern of residents or users in an urban area or atmosphere, not to the unique features of those areas or places but they are interconnected. (Haapala, p. 13).

1.2.2. Language/ Urban Language

Language can be described in form of natural language and artistic language. Natural language deals with writing and spoken language whereas artistic language can be viewed as sign language. (Remizova, 2016). Also, Remizova (2016) stated that, the architectural language has methodical features with basic spoken and written language, but it also has its own features, related to how an architect handles it. This language is not similar to the poetic language, nor different mechanical

or methodical languages, although architectural language contains some features which are similar to other natural or artistic languages. (Remizova, 2016). According to Alexander (1977, p. 11), in various context language can be divided into various elements or in other way it can be said that small elements or components together can in different combinations create language.

The components of architectural or planning or urban language are called patterns. (Alexander, et al., 1977, p. 10). Furthermore, according to Alexander (1977), these patterns can be described as problems in our surrounding environment that later can be solved. So, a pattern in a language deals with a context, a problem, and its solution. These patterns are a very effective way to explain or to understand any language dealing with architectural and urban elements.

In this paper, language will be defined as sets of patterns which create an identity. In urban context the ideals of a certain urban area creates its identity. (Beyhan & Gürkan, 2015). Haapala (n.d) mentions that, Identity of any urban park or area have common behavioral patterns of those who are using it, or one can say the opposite, that, urban atmosphere shows what human requires. This urban language will be explained with different patterns (with-in the language itself), patterns of the collective behavior and how each feature of a certain place make the users behave in such way, to prove whether the selected urban areas or places have the same values.

1.2.3 Parks/ Urban Parks/ City Parks

Cities around the world are very much separated from natural environment which creates a great need for urban green spaces so that people can get a feeling of natural environment among the infrastructure of the built environments. (Kothencz & Blaschke, 2017). These green parts or areas of a city are important for health and living quality, (Lee & Maheswaran, 2011), and so the human insights and perceptions of these environments are very important. (Kothencz & Blaschke, 2017).

Urban parks or city parks can be described as an open space, full of water elements and vegetation, and mainly used by the public or people of the city. (Annerstedt, Nielsen, Maruthaveeran, & Konijnendijk, 2012). As cities lack somewhat natural environments and full of built environments. This requires places of green and places for relaxation in which people can spend as much as time possible.

Urban park or city park is a dynamic institution which increases social, culture, historical and health values within a city. Also, park is interpreted as a place of recreation, sports and tourism. These areas in a city have psychological and physical benefits because of the effects parks put on people. (Lee & Maheswaran, 2011). In general, parks can create the foundation of community or neighborhood ties in cities and contribute to the people residing in urban cities with sense of protection and adjustment. (Kuo, Sullivan, Coley, & Brunson, 1998). In short, urban parks are

institutions which can satisfy and fulfill the recreational and social needs of inhabitants within a city or urban area and also give a visual and psychological relief in dense city area. (Loukaitou-Sideris, 1995).

1.2.4 Behavior/ Collective Behavior

The term collective human behavior is defined as the activities which are not organized or synchronized by mass public (Blumer, 1951) and is not like group behavior in ways that involves social interaction and creates not strong but weak unconventional standards. (Smelser, 1963). In this research, collective human behavior is discussed as crowded types considering everyday situation in an urban park. The term “crowded” sociologists use to discuss and define or refer to a various and random behavioral pattern in which small group of people to large numbers of people participate or engage. (Minnesota Library, 2018). Collective behavior, all the time is motivated by group or collective dynamics, inspiring individuals to involve in actions they consider unlikely under given normal social conditions (Locher, 2002).

Locher (2002, pp.39-40) in his value added theory describes about few key understandings about group or collective behavior, that it is not driven by mysterious forces, nor by psychology of individual, rather than it is more of a social setting with happens within a institute, organization, happening etc. and there should be some sort of determinant such as generalized public belief, environmental influence or social control.

To simplify the above, it is a group of people in presence of each other and somewhat influencing each other in an unstructured and spontaneous fashion within a social setting.

1.2.5 Behavior Mapping

In this paper, behavior mapping is organized in an inconspicuous observational study that records or tracks collective human behavior in relation to the factors and the aspects of the urban built environment (Cosco, Moore, & Islam, 2010) which is urban parks. This paper will discuss about the observational studies or behavior mapping in urban parks in order to justify its hypothesis. Also, according Cosco et al. (2010), the result from behavior mapping will help to recognize and understand the collective behavioral dynamics of the urban built environment.

1.3 Purpose and Goal

The objective of this thesis is to get a good insight of parks around the world and how the characteristics and design features of urban park contributes to social behavior, in this research more specifically collective social behavior. Language plays a key role of understanding city parks. This thesis discusses the patterns concerning human behavior in urban park environments. According to Kader (2005), Designers and planners who design the architectural environments should consider human needs and emotions and predict how people behave, in terms of perceptual system and emotional process and response. Many approaches exist for assessing people's behavior in the built environment but learning of people's reaction in social and physical environment is very dynamic. (Serageldin, 1996).

The main goal or the key hypothesis of this thesis is, justifying city and urban parks as a universal language by studying and comparing social behavior or collective human behavior in city parks in different places around the world. This thesis will try to answer few questions about built urban environment, in this case urban parks and human experiences and behavior. The study of this collective human behavior is the main focus of environmental psychology. (Kader, 2005). Knowledge and information about built urban environment can be gained through interpretation of psychological steps that are guided by plans and motivated by needs and requirements of people. (Lang, 1987). It is very important to understand the reason behind a group of people acting in a certain urban environment and how this environment forces or directs him or her to behave or act in a certain way.

To reach its goal, this thesis needs to address few key questions; questions like why parks are urban? Secondary objective of this thesis is to emphasize the consideration of collective behavior in the design development and understand the significance of it mainly in the urban environment. This thesis will discuss about the situation of parks in few locations around the globe to have a better understanding of their purposes and how they influence people to behave.

1.4 Methodology

The primary method of this research is qualitative, (Taylor, Bogdan, & DeVault, 2015) the method is to evaluate the parks chosen for this study based on their characteristics that influence collective social behavior by on-site observations and talking with people using the parks. The observational studies will help to understand the patterns in the language of urban and city parks. These patterns in all the chosen parks or case study sites are mainly based on how group of people will interact or engage in social conduct. It is very important to understand the reason behind how people act in an urban environment and how this environment force or direct them to behave in certain way. Secondary research is mainly literature review and understanding the key elements required for the primary research.

The thesis will be divided into three sections, first is the background studies or literature review required to conduct the observational studies, second will be the case studies of real life urban parks from Europe, South Asia, and Middle Eastern conducted by on-site observations, and finally the data analysis which will help to understand the hypothesis.

Chapter Two: Review

2.1 *Why parks are urban?*

Urban parks are places in the city or an area and characterized as an open region or area, full of water and vegetation, and usually used for the people in the community. (Konijnendijk, Annerstedt, Nielsen, & Maruthaveeran, 2013). Konijnendijk (2013), also stated that city parks are typically larger, but also they can be smaller in shape, ‘pocket parks’, and are generally described by the authorities as parks. According to City Parks Alliance (2019), park is a dynamic institution which serves a crucial role in the physical wellbeing of people of urban areas contributing also to the social, cultural and economic wellbeing.

The question that may arise while studying urban parks, is: why parks are urban? One of the main answers to that question is that parks are designed as a natural entity. As the population increases all around the world, more and more habitats develop for accommodating people and thus reducing the number of natural places. Now, almost every ecosystem on the planet Earth are affected by human pressure either in a direct or indirect manner. (Banaszak-Cibicka, Twerd, Fliszkiewicz, Giejdasz, & Langowska, 2018). Thus, people have started to incorporate nature in their habitat by the means of park just to increase the quality of living environment.

The idea of urban park as an open space for network use emerged only in the nineteenth century, however nowadays they are imperative to such an extent that they are in almost every towns and urban communities around the world. Urban parks are not only a green space in a city but much more than that. They are very important resources that contribute major roles in many areas within a city and its authority. (Ellis & Schwartz, 2016). There are four major roles a park plays on a city. (Tuffelmire, 2013). These are wellbeing of public health, social, historical, and cultural connections, increasing quality of living environment and positive influences on the local economy. (Tuffelmire, 2013).

City parks entice and bring together individuals of different ages and cultural backgrounds from various neighborhoods who take part in the improvement of their environment. (Alliance, 2019). Not only that, urban parks also can also be habitats for other species. Studies by Banaszak-Cibicka, Twerd, Fliszkiewicz, Giejdasz, & Langowska, (2018) show that diversified urban parks can be favorable habitats for many groups of bees, similar to natural habitats. Thus, it can be said that parks replicated the natural features for the benefit of an urban region or area.



Figure 1. New York Central Park. Untapped Cities by Nicole Saranterd.

Figure 2. Puolalanpuisto, Turku. Photo from Google Maps.

Both figures show the contrast between green and concrete.



2.2 Evolution of Urban Parks

Parks all around the world evolved in their own unique way as the social, cultural, and climatic conditions varying from places to place all around the world. The earlier stages of unused large landscape in city areas served many purposes of adjacent communities (Sadeghian & Zhirayr, 2015). The development of parks throughout decades can be seen in the design, which is mostly concerned with human use and behavior (Cranz G. , 2000). According to Williams (2002), the purpose of urban park was recreation and betterment of health and the parks delivered urban places with many benefits and serves more than just a channel for physical and mental enjoyment. Improving cities' living conditions and enhancing people's experiences in a city required developing more naturalistic park (Takyi, 2016).

In history, the urge of improving living situations of people in a city resulted in developing urban parks as a substitute of natural environment (Takyi, 2016). In 19th century, cities in the United States had an idea to use empty lands for the development of 'Open Space' system (Loukaitou-Sideris, 1995). Motivated by this system, landscape architect Frederick Law Olmsted started designing these public spaces in a way that the residents of the cities can relieve stress of everyday urban life (Takyi, 2016). Thus, these public spaces started to put impact on the behavior of people.

As stated by Cranz (1982), urban parks evolved in four stages, they are: 1. the large landscape also known as the pleasure grounds, 2. the small park movement, 3. the recreation institute, and 4. the open space system. These stages of development were based on user's behavior characteristics, design features, and architectural elements, which was significant in the development of parks throughout history. Urban parks first developed like a large landscape area or pleasure grounds to increase the value and the quality of life of the dwellers' in the city (Sherer, 2003). Cranz (1982) stated that, parks were considered as pleasure grounds in order give a feeling of fresh air, lakes, and sunlight like countryside to the towns and cities and their residents.

Later on, park designers and landscape architects concentrated on turning these places into places with recreational facilities. According to Cranz (1982), sports and exercise was the primary focus of Reform Park. Planner and designers were attempting to utilize the park as an approach to reform the city culturally and socially, essentially in light of the fact that they were managing so much movement. Designers wanted to unite everyone with the goal that they would communicate in a similar language in terms of user behavior (Cranz G. , 2008). The goal was recreational needs to be designed in areas close to the residents, instead of trips to the outskirts of the city. The two thoughts of the requirement for play areas and the requirement for neighborhood parks met up

thus created the idea of reform park (Cranz G. , 2000). A large quantity of playgrounds and field houses were placed in urban parks in order to please the people and fulfilling the recreational needs (Sherer, 2003). Also, the layout of these urban or city parks were symmetrical (Marcus & Francis, 1998). Open space park design system changed from more active to passive uses where designer's primary concern was on people's recreational experiences in parks (Cranz G. , 1982). This system can be seen also in the modern-day parks. The core philosophy or concept is that city is a unique art style that deserves protecting (Cranz G. , 2000). This new concept or philosophy developed exactly when the city was considered as decaying because of massive urban development, construction and destruction, where the residents of the city suffer from its' physical and social consequences. This system made every piece of public open space development as a valuable asset in a network of cityscape (Cranz G. , 2000).

Future development of urban parks will focus more on the sustainability, and technological advancement will be a very important issue. Parks will have more ecological value and they will merge with in everyday city activities. Parks might be a source of food cultivating as cities are growing and agricultural lands decreasing. Present day China, authorities are using parks to produce income and to harvest crops like bamboo. Still parks will remain the main hub of social and cultural interaction as city dwellers are becoming busier than before. Parks in the future centers have possibilities of using urban parks as a place for education and learning or teaching people how to live in a more sustainable way (Cranz G. , 2008). Urban parks can start to overcome an historic division between production and consumption of resources and aim for the option of being creative and productive in their own identities and values (Cranz G. , 2008).

According to Alexander, et al., (1977, 297), cities' communities and neighborhoods provide places for users to experience relaxation and places to renew themselves. These places can be considered as city parks. The evolution of parks throughout the history teaches us that urban parks always reflects on social and cultural values. Sets of patterns of the user behavior and how parks make the users behave in such way, create the city identity from their part. Identity of urban parks is based on social behavioral patterns of those who are using it, and developed to fulfill the social need of residents in a city. This pattern creates an activity node by its existence (Alexander, et al., 1977).

2.3 Collective Human Behavior

Behaviors are components of actions started by participation and they generate outputs as a result of its activity. Human behavior consists of psychological factors that represent social and cultural aspects in a physical environment (Moore, 1979, p. 18). The term environmental psychology in a very early age was described as the connection between individuals and the physical environment (Bell, Greene, Fisher, & Baum, 1984). Behavior drives from the social and cultural aspects of a place (as Moore mentioned), thus physical or built environment becomes a very important tool to manipulate or shape human behavior.

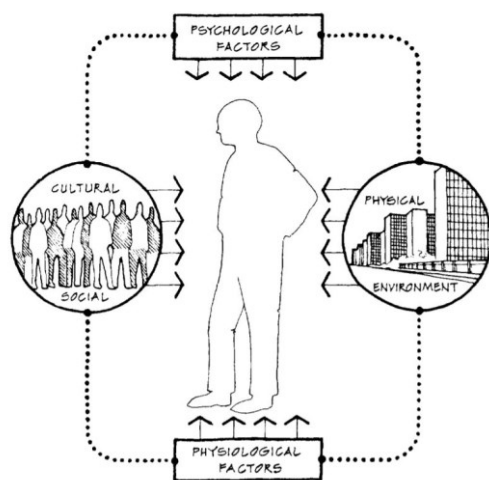


Figure 3. Moore's Diagram of Understanding of Human Behavior. (Moore, 1979)

This diagram indicates how a person is motivated by his/ her social and cultural aspects to behave in physical environment. These factors or aspects put impact on a person's psychological factors. Thus, whenever someone experience changes in environment, he or she also experiences changes in the other mentioned factors.

Rybczynski (1989) describes designing space as social art, while architecture is a parts of a larger context of an urban environment, and of everyday life of human being (p. 67). By understanding environmental psychology, one can tell the significance of this mutual relationship and use this information for answering different architectural problems (Dent, 1998) (Gifford, Steg, & Reser, 2011). Human behavior in physical environment is also influenced by the senses. When a person enters a certain urban environment, first he or she starts to notice and recognize it and later tries to evaluate it (Moneim, 2005, p. 1). These systems affect our senses in the space and help to produce an opinion about the space. The main function of human senses is to help us to perceive environment around us.

The urban environment has a huge impact on the people using it, psychologically and physically. Humans use urban space among themselves according to their strong preferences (Gifford, Steg, & Reser, 2011). They do not always have to be conscious; their value becomes clear when these preferences are compromised. According to Gifford and Steg (2011), the main aspects of urban

social space are basically territoriality and public gatherings. So, in urban places like parks human behave in a collective way which is not the psychology of each individual but the specific social structure and setting, which primarily is driven by the strain that people experience (Locher, 2002, pp. 39-40).

Collective behavior is a group of behaviors where big number of individuals participate in a specific area (Barkan, 2012). Barkan (2012) also states that, the collective behavior is unstructured and spontaneous patterns by a group of people being affected by one another. Relative spontaneity ensures that the action and behavior is usually natural but to some degree planned or intended. Relative unstructured patterns mean that they are to some extent structured and even foreseeable but unorganized. Also, several types of this collective human behavior are less unstructured and spontaneous than other types.

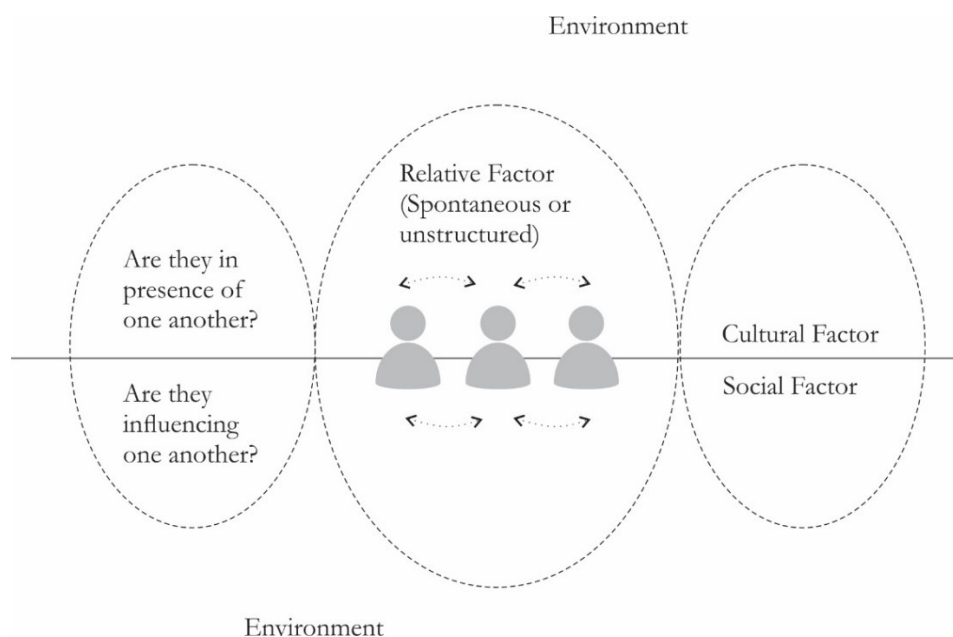


Figure 4. Factors of Collective Behavior

People gathering in a place start to influence on each other to behave in certain manner. Obviously, the social setting is very important for a group of humans to act in collective, spontaneous, and unstructured way. In a city, especially in public places such as parks and plazas, these behavioral patterns are very visible, in way can be considered as crowd types, relative factors and other socio- cultural factors are present.

Collective human or social behavior is random or mixed set of group behaviors (Barkan, 2012). It includes, unlike group behavior, inadequate social or communal interaction, which is very natural and fluid, and it is very unconventional (Qazvinian & Radev, 2011). Sets of behavioral patterns

very often do not have similarities with each other, even if they can be categorized as collective behavior. There are many forms of collective human or social behavior such as crowd, mobs, riots etc. but this thesis will focus on crowds as they are very much visible in urban parks.

Crowd is a group of countless individuals who assemble with a typical present moment or long-term purpose. It includes individuals who are generally spontaneous and unstructured. Herbert Blumer (1969) built up a well-known typology of crowd's dependent on their motivation and elements. The four types he recognized are casual or easy-going crowd, conventional or traditional crowd, expressive crowd, and acting crowd.

It takes a big number of individuals in closeness to frame a crowd. Casual crowds comprise of individuals who are in a similar spot simultaneously yet who are not generally interfacing. Conventional crowds are the individuals who meet up for a booked occasion that happens routinely. Expressive crowds are individuals who combine to communicate feeling, regularly at memorial services, weddings, or something like that. The last sort, acting crowds, centers around an objective or activity (Blumer, 1969). This thesis will discuss casual, conventional and expressive crowd.

2.3.1. Casual or Easy-going Crowd

A casual crowd is an assortment of individuals who appears in a related location simultaneously. Each person in this kind of crowd has no genuine connection, long-standing reason, or collective identity. A casual crowd is, for instance, a social affair where people are anticipating to go across the road at a bustling convergence in a town or a city. People are generally holding back to cross the road and have a shared objective; however, this objective is brief, and this specific assortment of individuals rapidly vanishes once this objective is accomplished.

In urban parks, the passersby have similar characteristics. They walk from one place to another and stay in the presence of each other. Individuals from casual crowds shares a bit with the exception of their physical area (Goode, 1992, p. 22). Goode also mentions that casual crowds do not generally carry on aggregated conduct, since their conduct is moderately organized, and follows customary standards for acting in such settings.

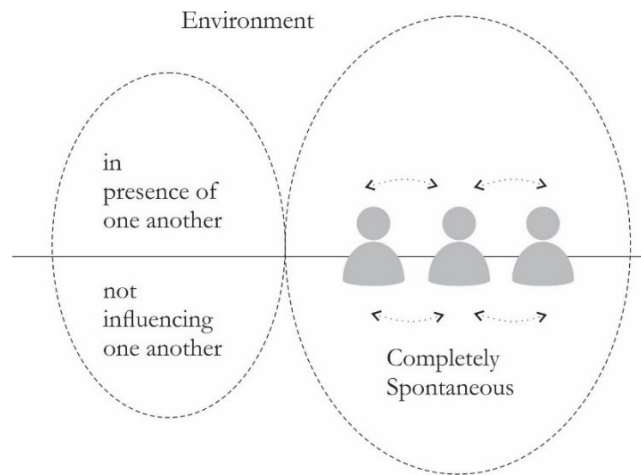


Figure 5. Causal Crowd

Not being influential to each other is the main factor of casual crowd considering spontaneous presence of people among each other. The diagram above tells that the individuals framing the crowd have almost no collaboration from the outset and are inexperienced with one another.

2.3.2. Conventional Crowd and Expressive Crowd

Conventional crowd is a mixture or gathering of individuals where they assemble because of a reason. The aim or the reason may be going to a motion picture, an act, or a show. Goode (1992) also imagines that the conventional crowds don't generally carry on collective conduct or behavior; as they indicates, rather than their conduct is conventional and along these lines moderately structured. In the context of an urban park, people gathering for concert or any specific event may consider as conventional crowded.

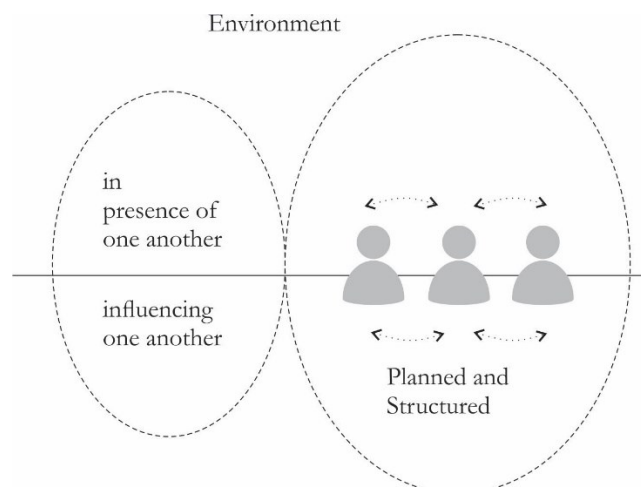


Figure 6. Conventional Crowd

This crowd results from progressively purposeful arrangements with standards that are characterized and followed by the circumstances. The gathering is always planned and structured and people have influence on each other to behave in a certain way.

An expressive crowd is an assortment of individuals who accumulate principally to be energized and to express at least one feeling. Crowds such as a strict religious restoration or revival, a political convention. Expressive crowds' structure around an occasion that has an enthusiastic intrigue and emotional response. That might be the reason this crowd is always growing and developing.

A conventional crowd might occasionally turn out to be an expressive crowd when the crowd at a motion picture begins yelling if the movie is interrupted by any means. This model demonstrates, the distinction between an expressive crowd and conventional crowd is not in every case obvious. In conventional crowds, people need to see the concert and hear them singing; being a piece of the crowd is optional or unessential. In expressive crowds, the crowd additionally needs to get involve in the crowd and take an interest in crowd conduct—to shout, sing, cheer, and applaud. In any occasion, since passion and emotion are characterizing highlights of this type of crowd, people in an expressive crowd are taking part in collective behavior. On certain events, such expressions of happiness quickly change into terrible structures: people yell, sing, and move, yet they likewise bother the passers-by and even venture to such an extreme as a plunder. The expressions of anguish and distress over some shocking mishap or occasion additionally show the attributes of crowd behavior.

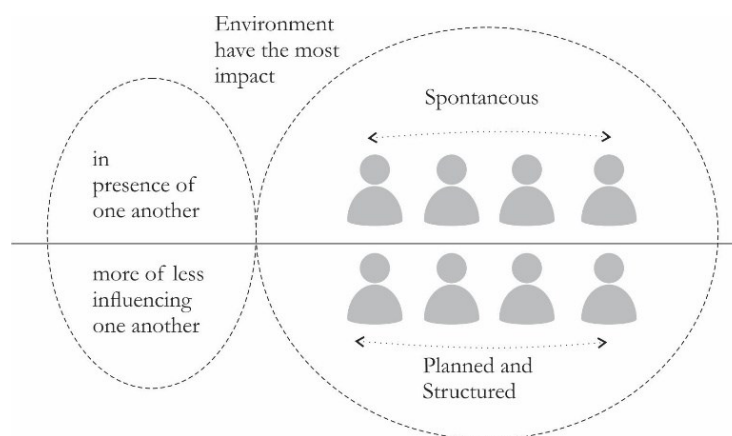


Figure 7. Expressive Crowd

This crowd is usually formed in a bigger gathering compared to any other crowd mention above. The gathering is always of a specific purpose and is always planned and spontaneous. People participating in the crowd feel the presence of the others and have influence on each other to behave in a certain way. Expressive crowd is a structure around an occasion that has a passionate intrigue.

2.4 *Affordance*

James J. Gibson presented the idea of 'affordances' in his book "The Senses Considered as Perceptual Systems" (1966). He recommended that, affordances of the earth are what it suggests the living and anything that outfits for good or bad. According to Gibson (1979), the components and highlights in open air spaces aren't just objects, yet miniaturized scale environments that manage the cost of individual's conceivable outcomes. Every part of a situation, like surfaces, objects, others, creatures, and so forth have affordances. The potential outcomes of the earth and the lifestyle of the its animals go together indistinguishably. (Gibson, 1979).

These affordances could be certain or negative contingencies upon our recognitions and capacities. (Sanyal, 2016). For instance, a large arrangement of steps can be seen as a constructive affordance by an abled person while being an antagonistic affordance for a baby or a disabled individual. Affordances are patterns seen by a person or a group of people. More affordances make a space progressively human, by permitting individuals to split their lack of involvement and be open to one another. At the point when an area is intended to have numerous affordances, it requests individuals through signs, so that they can communicate through their bodies. These hints or signs are not in every case just visual physical pieces of information (steps, inclines, seats), but also other senses like sound, smell and haptic and so forth. Affordance is about the basic and compound properties that include connections between components in nature, some of which happen to be individuals. Isolating what a structure manages from the impact on the perceiver's personal matters, causes us to recollect that not all circumstances are the equivalent starting with one perceiver then onto the next. When investigating plan choices in an urban design process, the plan proficient must envision future actors and structures, physical and behavioural. This is regularly underlined in structure training to accomplish a progressively straightforward and informative plan process (Kopljar, 2016).

On this premise of our comprehension of affordances, placemaking can be comprehended as an all in all arranged pattern of procedure of sustaining and developing a space's identity. At the point when all partners meet up, talk about and deliver their needs and desires from a specific spot, the odds of there being negative affordances in the space are diminished or even wiped out. Placemaking is a ceaseless procedure, and as individuals and spots change, the affordances of a spot must develop as well. In the present setting, where technology such as wireless internet is an affordance, a pattern offers to the individuals in it (Heras-Escribano & Pinedo-García, 2018). Every single psychologist shares the possibility that we people change our environments once we

exploit what exists, since our environment can be reconfigured by our effect on it. Along these lines, the seeing and taking of affordances shape biological specialties. Affordance also improves human behaviour. Each space offers open doors for behaviour and conduct, use, feeling or importance, which are seen and realized on that very space or place.

The idea of ecological affordance is utilized to examine connections between urban park attributes. Few fundamental classifications of affordances can be distinguished in urban parks. These are individual and group physical movement, collective behaviour, social cooperation, and sitting and resting. These affordances might be bolstered or compelled by design components, people and their behaviour. Affordances furnish a structure with three entwined measurements, including the recognitions and interests of individuals, park attributes, and park uses. Since affordance is an activity-based point of view, it might advance urban park planner and designers to re-evaluate green spaces as spots of activity rather than still visual images. (Zhang, 2017, p. 131).

Chapter Three: Case Studies

3.1 Brief

This paper tries to understand the identity of urban parks and why parks all over the world speak the same language by its intriguing patterns. As mentioned in the paper, these patterns or language elements give these urban parks an identity. To conduct the case studies and proving the main thesis statement and hypothesis of this paper, four parks from Europe, the Middle East and South Asia has been selected. Koskipuisto in Tampere, and Kungsträdgården in Stockholm from Europe. Al Ittihad park in Dubai from the Middle East Asia and lastly Fazle Rabbi park in Dhaka from South Asia. Also, during the case study process a park in Colombo, Srilanka, and a park in Beijing, China was visited and studied briefly, which will also be mentioned in this chapter of the thesis.

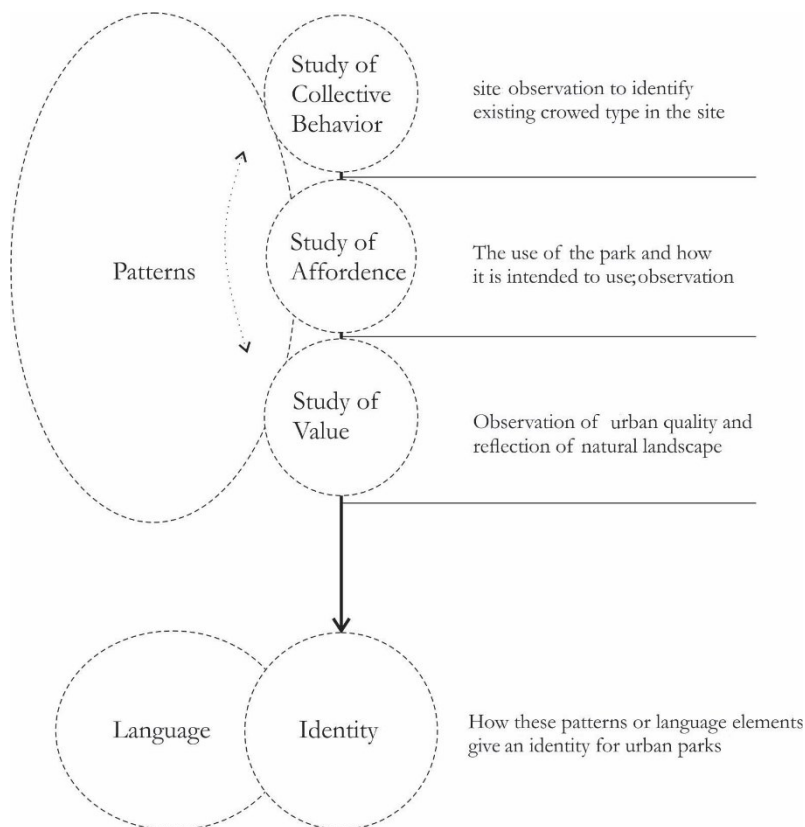


Figure 8. Case Study Methodology

The case studies are conducted by on-site observation about several key patterns mainly based on collective human behavior, affordance, and value of these urban parks. On-site observation is backed by photographs of the sites in specific time. The data is collected from these photographs. Behavior mapping techniques are being used to follow the collective behavior of individuals in the park. The goal is to identify if people react as Casual, Conventional or Expressive crowd. Also, the

observation of park uses and how it is intended to be use will give an idea of affordance. When discussing the affordance, the case study is targeting the use of park as a collective purpose, not how an individual see and use the features of the parks.

And lastly, the park's urban quality and reflection of natural landscape observations will judge the urban quality of these parks. Reestablishing the open area towards the city life that notwithstanding thoughtfulness regarding the part of aesthetics and enhancing the nature of urban space is one of the primary objectives of urban parks. Also, parks improve ecological aspects and expand urban health. (Rouhi, Monfared, & Forsat, 2017, p. 457).

To reach the goal of this thesis, the study of collective human behavior will play the biggest role following by affordance and urban value. The result of the case studies will determine whether parks all over the world speak the same language. Not all the parks will have same features and are accessed by same type of people, but every park has its own uniqueness. In the end, this thesis justifies why urban parks have a universal language. This is done by studying/comparing social behavior or collective human behavior in city parks different places around the world.

3.2 Case Studies: Europe

3.2.1. Koskipuisto, Tampere

Koskipuisto or central park is in the heart of Tampere city center on the bank of Tammerkoski Rapids. Koskipuisto is the place where people celebrate Vappu (1st May) by the traditional dipping ceremony. Also, this park is used for basic activities like walking, jogging, picnics, and other communal events. For the case study, the park is observed on the day of Vappu and the day before Vappu. Koskipuisto park is appropriate for occasional use. It stays in full sprout during Summer, it is similarly beautiful during the Festival of Light in Winter. It is a place for communal events, and sports and games also. The whole park can be divided into 4 sections. These four sections of the park have its own role to play within the city.



Figure 9. Four zones of Koskipuisto

First zone is the street vendors zone, where temporary stalls in the summertime are set up. This zone is located along the main road. Second zone is the restaurant/café zone. And third and fourth zone is the green area on both side of the riverbank, which is the main park zone. Collective Behavioral patterns change in each section of the park, as the uses of these zones vary from each other.

As mentioned before in this paper, study of this park will be conducted in 3 categories. These are a. the study of Collective Behavior, b. the study of Affordance, and c. the study of Value. Methods of behavior mapping and on-site observation techniques are used to conduct the case study.



Figure 10. Koskipuisto during Vappu.

Study of Collective Behavior, Affordance and Urban Quality in Koskipuisto

Behavior mapping is composed by observational examination that records or tracks people's behavior, in this paper, human behavior corresponding to the elements and highlights of the urban build condition, in this case Koskipuisto. The process was conducted on the day of Vappu and one day before Vappu. The study will try to determine the whether the crowd existing in the park is casual, conventional or expressive. Series of observational pictures and their description will determine the outcome of the study.

This paper researches the connections among affordances and affordance highlights, which are critical to helpfully permit human behavior or practices. The study of how a collective user uses the elements of Koskipuisto and purposes of these elements. In other words, how these are intended to use will be conducted by observing people behaving in a collective manner in this park. Pictures of the observational studies and descriptions of these picture are provided as the affordance studies.

Koskipuisto is one of the oldest parks in Tampere, and it contributes its value in the heart of Tampere city center. This study will try to figure out if Koskipuisto reflects natural landscape.

Koskipuisto has a very active east section, and it is very clear that before any event like Vappu, east section of this park swarms with people. People, mostly student but not restricted to other age groups, gather in the celebration of the traditional Vappu event from the day before May 1st. The day before Vappu, there is a more relaxed and peaceful crowd. It is quite clear that the crowd is more conventional rather than expressive. Also, casual crowd is visible in Koskipuisto the day before. Images 1, 2, 3, 4, 5,7 and 8 show how the crowd is behaving in a conventional way. Everyone is in the proximity of each other and having a great influence on each other. They are not very expressive, like shouting, singing, cheering etc. Images 6 and 9 show the casual behavior of the crowd as they are just passing by and in the mix with the people.

1. Students and locales gather to celebrate Vappu, creating a conventional crowd.

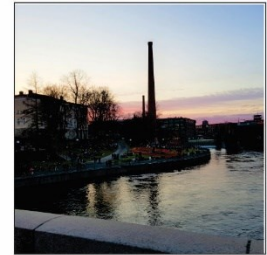


1.

2. Even people are not in a group, they are somehow getting influenced by the festive people around.



2.



3.

3, 4, 5. People preparing for the event on the following day.

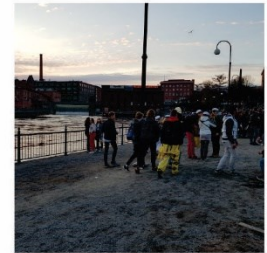


4.

6. Even if the number of people gathering is huge, there are still casual crowds walking from one place to another.



5.



6.

7. There are many student groups present at the park on the day before Vappu. They might not know each other, but celebrating for the same reason. This is an example of conventional crowd.



7.

8. People celebrating



8.

9. West side of the park



9.

Figure 11. Collective Behavior Day Before Vappu

10. People gathering near the event area.



10.

11. People getting involve in the celebration.



11.

12. People watching the Wappu event from the east side of the parks.



12.

13. People watching the Wappu event from the west side of the parks.



13.

14. People gathering and walking towards the main event area. They are as Expressive as they can be.



14.

15. Like the characteristics of expressive crowd, even though people are not directly participating, they are still involved in small groups to be a part of it.



15.

16. Wappu main Event area.



16.

17. Small group among the crowd.



17.

18. Dipping crane.



18.

19. On the west bank people who don't know each other are walking towards a common gathering.



19.

20. Wappu main Event area from west section.



20.

21. Actively participating in the event. .



21.

Figure 12. Collective Behavior at the Vappu day.

Vappu gives the people an event to celebrate. People from all over the Tampere, majority of them being students, gather and participate directly and indirectly to the Vappu dipping ceremony. Music, shouting, cheering and everything else become a part of human activity. On this day, after observing for several hours, it is quite clear that the crowd that exist in Koskipuisto is an Expressive crowd. Here, an assortment of individuals who accumulate principally to be energized and to express at least one feeling. Everyone is in a close proximity of one another, putting influence over one another to act in a similar way. The picture 11, 12 and 16 show the perfect example of

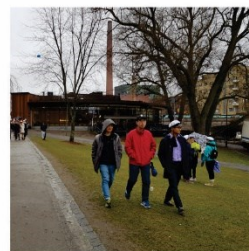
expressive crowd. They are spontaneous yet planned and structured, while environment control their behavior. Also, the cheering, shouting, jumping and all these sort of things happening near the main event area shown in image 13, 15, and 17. Another point to be noticed from the image 19 is on the west bank of the river, where the crowd forming is casual as people passing by in a festive environment but not putting any influence on the other people yet they are in presence of one another. More or less in Koskipuisto on the day of Vappu, all three types of crowd discussed here can be seen. There are conventional and expressive crowds participating in the event and causal crowds greatly influencing the event but not directly participating.

1. The paths inside the park used for it's intended purpose.



1.

2. People sometimes prefers to take a shortcut instead of the intended path.



2.



3.

3. The sloped green area invites the user to sit on and relax, hangout. People using the space as such.



4.

4. Using the big tree as rain shelters.



5.

5. People not involving in any wappu day activity.



6.

6. Sloped area used for audience viewing purposes.

7. Main area for the audience



7.

8. The flatter part of the park is being used by few temporary shops or shelters during the event.



8.

Figure 13. Study of Affordance of Koskipuisto

People tend to always use the most convenient option. That is why affordance performs a very important role in understanding the patterns of a certain urban place. In Koskipuisto, collective human behavior in the day of Vappu plays the most important role in the affordance study of the park as a lot of people gather and the atmosphere is very festive. The images in the Figure 12 show

examples of park features and how people behave or use these elements. Design features of Koskipuisto park can be separated into few sections, the sloped landscape, flat landscape, big old trees, paths within the park and benches near the river. As the survey was conducted on a day of a big event, it was easier to understand how these sections were used by the people.

During the event, the main area for the audience was near the shore, so it gave an opportunity for the sloped landscape to work as an audience's platform for viewing. Images 3 and 6 provide evidence to such use of the sloped landscape. In a park design usually, a sloped landscape gives the users a place to sit down and have a focused viewing area. In this example, we can see the same thing happening. On a regular day, this element of the park becomes a place for a picnic and such. Also, Koskipuisto have very old big trees along one of the paths inside the park. These trees not only increase the aesthetic values but also give a feeling of nature in the urban atmosphere. People use these trees as shading and shelter from weather. Image 4 in Figure 12 show people using trees as rain shelters. Also, people standing there are talking with each other and acting as casual crowd in this festive day of Vappu.

The park also has walking pathway of gravel to go to the other side or walk around the park. These pathways take people to different places among the park as they work as a guide way for the users of Koskipuisto. Still sometimes people take the shortest route to go to point B. In image 2, it is quite clear that people are using the sloped landscape for going closer to the Vappu dipping area. On the other hand, image 1 shows that people do use the pathways as intended. Koskipuisto also has a flatter landscape, which during event was used to set up temporary stalls or stores. Image 8 is a good example of this. In the day of Vappu people set up their stalls and tents in the flatter landscape for more stability. This landscape is mostly grass but, on the edge, there are some shrubs.

Lastly, Koskipuisto reflects the nature in the heart of Tampere city, in other words the study of value. For this, study of the location and surrounding buildings of Koskipuisto is important. As mentioned before, Koskipuisto park is in the downtown of Tampere, and also close to the bus terminal, bus station and train station. There are lot of offices and residential buildings surrounding it. Though, there might be trees on the promenade, roads, and courtyards, this park stands out because of the design and the river factor. In the Figure 13, the park stands out from the surrounding concrete jungle.

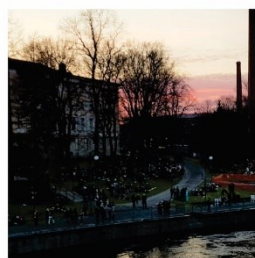


Figure 14. Koskipuisto and its surroundings

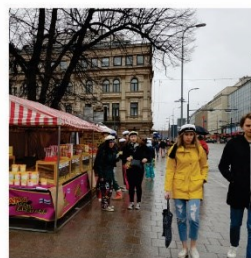
The park is incorporating a factory building and a lot of buildings surrounding it. Though this is a man-made park, it still has a natural reflection when someone observes it. The park stands out with its' old trees and green vegetation.

This park creates a contrast between green and concrete. In image 1 of the Figure 14 the factory building, and the apartment building are connected to each other with the green of the park. Because of this, even though there is a big factory building, people residing nearby does not feel the impact of the factory. This park is a sort of a buffer. Also, one of contrasting facts of the park is that the change from concrete to green is very sudden. The entrance points of the park are all roads and buildings and it seems like just one line is separating the park from the city. Image 2 is a good example for this.

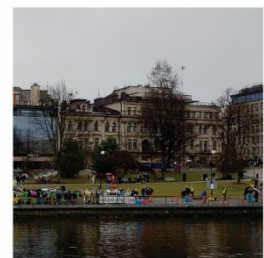
- 1. Contrast between the factory, the park and the river.
- 2. Entrance of the park is not so green as inside of the park.
- 3. Concrete vs. green.



1.



2.



3.

Figure 15. The contrast of the Green and the Concrete.

And lastly the green vs the concrete is very much visible in the image 3. The residents of these buildings have a very good and healthy view of the surrounding. This park brings a sense of nature among the residents of nearby residents. Koskipuisto is a significant piece of Tampere city space, and it is likewise an irreplaceable space which brings a small reflection of nature in the heart of Tampere.

3.2.2 *Kungsträdgården, Stockholm*

Kungsträdgården is one of the most significant and the oldest urban parks in Stockholm. The name, generally signifying "The King's Garden", is from the territory's regal history. Somewhere in the range of 1643 and 1825 it was the site of the glorious Makalös Palace, and an excellent French garden was assembled. After Makalös burned to the ground, the site was utilized for military activities. At last, in 1875, the recreation center arrived being taken care of by the Stockholm City Council, which thusly opened it for people in general. (Kungsträdgården - Visitstockholm, 2020).

Kungsträdgården is not a typical natural landscape but more like a man-made garden, where trees lined up to create borders and walking paths and the ground is concrete with seating and provides other activities. The place gives the public a sense of relaxation as the park feels a part of the city yet very separate from the city. Kungsträdgården draws attention to the public not only in the summertime but also during wintertime, when the focal point of the garden is transformed into an ice arena.



Figure 16. Aerial Photo of Kungsträdgården. (Captured by Jan Ainali)

Like in Koskipuisto, Tampere, this case study of Kungsträdgården will be conducted in three categories. These are: a. Study of Collective Behavior, b. Study of Affordance, and c. Study of Value. Methods of behavior mapping and on-site observation techniques are used to conduct the case study.

Study of Collective Behavior, Affordance and Value in Kungsträdgården

Behavior mapping is composed by observational examination that records or tracks people's behavior, in this thesis, human behavior corresponds to the elements and highlights of the urban environment, in this case Kungsträdgården. The process was conducted in a warm summer day, in mid-June. The study determines whether the crowd existing in the park is casual, conventional, or expressive. Series of observational pictures and the description of these will determine the outcome of the study.

This study will show how a group of people utilizes different features of Kungsträdgården and what are the purposes of these feature. In other words, how these are intended to use will be conducted by observing people behaving in a collective manner in this park. Pictures of the observational studies and descriptions of these picture are provided as the affordance studies.

Kungsträdgården is one of the oldest parks in Stockholm, and it contributes it's value in the heart of Stockholm old town. This study will try to figure out if Kungsträdgården reflects natural landscape and increases the quality of living in this urban region.

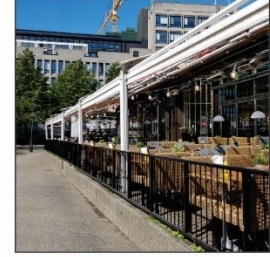
For this case study, behavior mapping was done in a warm weekday in early June, from 10:00 in the morning to 15:00 in the afternoon. It was an interesting day to observe as people from schools and offices were coming to the park at lunch time. There are mainly three part in the park. One is the big fountain/plaza area, surrounding by bicycle and pedestrian pathways, food courts and beautiful cherry tree line separating the both paths. The second one is the area where the Statue of Charles XIII is located. This area consists of artificial grass and an octagonal shape boarder which is mainly used as seating platform with shrubs as backdrop. And last part is the area after the statue until the waterbody. This part consists the fountain of Molin. Last part is the least popular as it is the furthest from the main road, only tourists are attracted towards this part.

The whole observational study can be divided into three-time sections, morning, noon, and afternoon. In morning the place has less users as the food courts are kept closed till 11:00. In the images 1 and 3 from Figure 17 we can see that shops are closed and people who arrive before 11 waiting under the cherry trees. At this time of the day, the most common crowd was the joggers and people strolling their babies. Image 4 shows the people strolling their babies and jogging, making them a causal crowd, not influencing one group of people to the other group but being in presence of one another.

1. People waiting for shops to be open, time is about 11 am.



2. Young people gathered around playing and enjoying the sun.



3. Restaurant along the park

4. People taking their baby for a stroll. Using the path beside the large fountain.

1.

2.

3.

5. People sitting in the concrete stairs alone, still somehow getting influenced by other sitting people



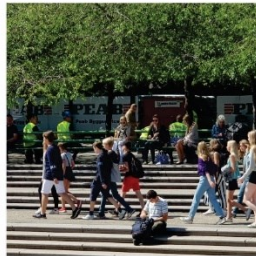
6. Walking from the point A to the point B.

4.

5.

6.

7. Children coming to the park to pass their time after school, creating more or less conventional crowd.



8. Food court. Not opened yet.

9. Hanging out in a big group on the concrete stairs.

7.

8.

9.

10. Pedestrian and bicycle pathway.

11. Group of individuals walking near the fountain.



12. The restaurant is open and people enjoying the park.

13. Walking along the park.

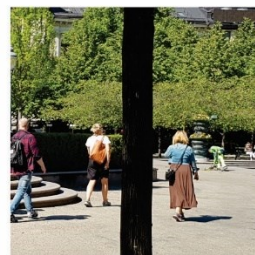
10.

11.

12.

14. People using the plaza in front of the statue to go to the other side of the park.

15. Few people cycling.



13.

14.

15.

Figure 17. Collective behavior in Kungsträdgården

As the day goes by, more people start to come to Kungsträdgården. During the noon, people come here to eat and spend a relaxing time. Image 5 shows that people are sitting on the benches and concrete steps around the park eating and relaxing. Also, in image 12, we can see the same thing happening. This is a good example of casual crowd as they all are in the presence of each other but not influencing on another. During this time, many people prefer to sit on the bench under the cherry trees because of the sunlight. Image 10 shows people sitting and relaxing on the benches under the shade, no one seems to be jogging or walking during this time of the day. Also, tourists come to take pictures as they walk by the statues and fountains in the part 2 and 3 of the park. In images 13, 14 we can see that people, mainly tourists, come to Kungsträdgården and go through it. These types of crowd are more conventional than casual.

Afternoon and early evening the busiest time of the day. School children come to the park after finishing their classes, also the restaurants become more active as people start to flood in. In the images 6, 8 and 11 we see that kids and teenagers are walking through the park, either to join a group or to pass by the park to go elsewhere. Also, in image 7, there is a group of teenagers gathered around in the fountain area to play, relax and hangout for social bonding. In this time, some of teenagers starts to do tricks and play with football. Image 2 tells this story.

These groups of teenagers are in presence of one another and influencing each other a great deal as the crowd type is more conventional. Some kids went down to the concrete stairs and into the dry fountain to play football. The locals on the park told that this fountain is the very versatile during each season. During the early summer it stays dry and sometimes the fountain is activated to have a feeling of an artificial pool. During the winter/ it becomes a giant ice rink. To summarize the daytime in Kungsträdgården there are mainly two types of crowd, casual and conventional. Also, the behavioral mapping or observational studies were not conducted in a day of any event.

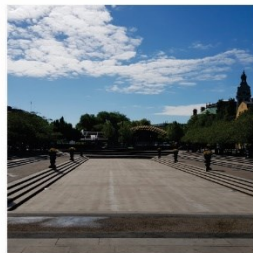
Study of affordance in Kungsträdgården can be divided into two parts. One will discuss the zone near the fountain and plaza and other part will discuss the rest of the park. The fountain area or the plaza area is the most versatile area in the whole park. It is used by people in many ways. When the fountain and plaza is dry, people tend to play, entertain, and do all kinds of interesting things. And during winter, the area becomes an ice rink as mentioned before. Also, there are concrete steps all around the big area which all sort of people uses as seatings.

Image 1 in the Figure 17 shows the whole area totally empty although it is taken early morning. As the time passes during the day, people come in and start doing all kinds of activities in the plaza and fountain. Image 2 shows people playing football in a friendly manner. In the image 3, we can

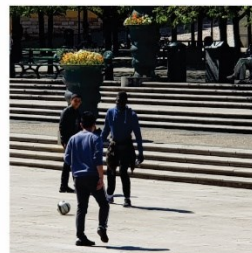
see people are using these concrete stairs for seating. The plaza which is very active during the daytime, is surrounded by pedestrian and bicycle pathways.

In Image 3, we can see that bicycle parking for this area is placed around the tree. The parking is full because of heavy use. This design element saves space for separate bicycle parking area. Also, the benches are placed under the cherry trees. During the summer people use these benches to sit on, thus enjoying the shade in hot sunny days. Image 4 tells the same story. As mentioned before, the statue of Charles XIII is surrounded by planters and groomed bushes. People sometimes use the planter or low high wall as a place to sit on. In the image 6, a group of kids are using this space for sitting and using the bushes as a backdrop. We can see that the design elements in the park that are in used the way they are. The most interesting place on the whole park is undoubtedly the fountain and the plaza area. The users use it differently every season, which makes it very versatile.

1. *The fountain area is empty in the morning.*



2. *People playing in the fountain in the afternoon*



3. *Trees has been used for bicycle parking.*



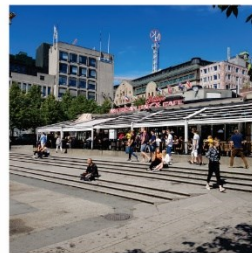
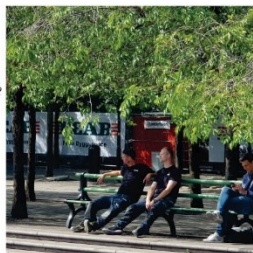
4. *Benches under the trees are very good places to sit during the summer.*

1.

2.

3.

5. *This restaurant is one of the most active places in the park.*



6. *People using the vegetation planter box boundary to sit.*

4.

5.

6.

Figure 18. Study of affordance in Kungsträdgården

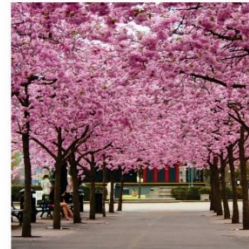
Kungsträdgården has more man-made elements than natural elements, but it still provides a unique sense of nature in a very urban context. This park does not create a concrete vs green situation but blends the natural elements in the concrete of the city. Though there are many elements which do not create a feeling of nature. These elements are such as the artificial grass under the statues, the stone pathway and bicycle route. The big plaza is made out of stone and concrete, as almost a half of the park, but still it provides a touch of nature through few elements.

One of the most significant elements is the cherry trees. They are lined up in two rows, both sides of the plaza area. As the trees changes their color in every season, it gives a unique experience. Figure 19 shows the colors of Kungsträdgården in different seasons. The uniqueness of the colors attract the users to come to the park and feel a sensation which is hard to get in a city life.

Atmosphere of the park changes in every season, as the color of the cherry trees changes.



Winter.



Autumn.



Summer.

Figure 19. The colors of Kungsträdgården.

Also, this park is a very activity-based park. Along the boarder there is a food court and restaurants, there are also jogging/pedestrian pathways and landmarks attracting the tourists and a big versatile plaza. These design elements attract the people of Stockholm; thus, it increases the quality of living in the city.

3.3 Case Studies: Asia

3.3.1 Al Ittihad Park, Palm Jumeirah, Dubai

Al Ittihad or Palm Jumeirah park is an open park situated on the territory of the island of Palm Jumeirah located under a monorail flyover. The park is surrounded by residential apartments and stores. It is known for its' long jogging track which extends almost three kilometers. The recreation park is completely detached from a very noisy highway with wall of lodging structures and residential buildings. That is the reason the atmosphere is constantly quiet and calm here. There are many species of trees, bushes and shrubs in Al Ittihad park. But most importantly, the park is very much based on recreational facilities.



Figure 20. Panoramic view of Al Ittihad park. Photograph by Siobhan Downes (2017).

Many designers believe that parks should be alluring to people and have facilities proper to the principle objective. The term Catalog of ideas, which was originated in Denmark, is meant for open spaces or urban parks, and includes proposals for giving suitable settings and amenities to support physical action or need. The catalog approaches to advance exercises, for example, play and open air sports, like outside training (Konijnendijk C. C., 2008). Al Ittihad park is extremely advantageous for exercises, strolling with kids, unwinding and visiting with individuals. Directly in the focal point of the recreation center, one can discover a bicycle rental station. This park hosts people all over Dubai but mostly residents near Palm Jumeirah area.

Study of Collective Behavior, Affordance and Value in Al Ittihad

Like the case studies in Europe, the study of Al Ittihad park is be done by the same behavior mapping technique, which is composed by observational examination that records or tracks people's behavior corresponding to the elements and highlights of the urban environment. The research was done in a warm summer day of May. The study determines whether the crowd existing in the park is casual, conventional, or expressive. Series of observational pictures and the description of these will shows the outcome of the study.

This study will also clarify how a group of people utilizes different features of Al Ittihad park and what are the purposes of these features. In other words, how these are intended to be used will be conducted by observing people behaving in a collective manner in the park. Pictures of the observational studies and descriptions of these pictures are provided as the affordance studies.

Al Ittihad park is a very modern park with many recreational facilities. This study tries to figure out if Al Ittihad park reflects natural landscape and increases the quality of living in this urban region.

The collective behavioral studies were done on an early summer day in May. Because of the hot climate in Dubai, users and visitors in the park mostly come in the late afternoon and during the evening. Al Ittihad park is an activity-based park as mentioned previously. So, the observations were done by categories. There are two types of crowds that were present during the time of the study, casual crowd, and expressive crowd. In the sitting areas and jogging track, we can see that crowd is very causal. In image 1, 2, 5, 6, and 9 from Figure 21, we can see the casual crowd. People either just sitting with their dog or babies or sitting individually or jogging or walking on the running track. They are all in the presence of one another, but not influencing one another. Families with members of all ages come to Al Ittihad park and enjoy their time.

Also, in the park, in few specific places, the crowd that exist is expressive, especially in the playgrounds and open small fields. People are all in the presence of one other and influencing each other. In the playground, I observed children playing with each other even though they did not know each other before. They were screaming, shouting, laughing, and running around. In the image 7, we can see a playground for children full of kids doing all sorts of fun activities. And around it there are benches for parents or caretakers to site on and keep an eye on the kids. In the image 8, parents come with their toddlers and kids to play in the playground. Also, many tourists come to this park whenever they visit the Palm Jumeirah area. Image 3 shows tourist family blending with the causal crowd in the park. Another thing to observe is the cafés and stores. People

uses these places even if they are not using or visiting the park. People also stop and buy water or other drinks while jogging. Image 4 shows that these shops have a good number of people entering or going out from the store. They are also a good example of casual crowd.

1. In the playground people come with their babies, kids and dogs, sit and relax.



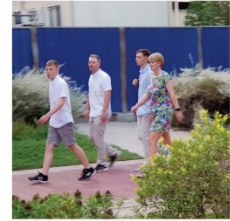
1.

2. Good park for a Family recreation time.



2.

3. Tourists and locals come to the park and spends their evening. Making them casual crowd.



3.

4. People are attracted toward the small stores and cafés during their time in the park.



4.

5. Jogging is one of the main activities in this park. Here we can see that many people are jogging on the running track.



5.

6. People come with their babies and walk them around the park.



6.

7. Crowded playground. In this part of the park the crowd is more conventional than casual.



7.

8. People walking and jogging.



8.

9. People using the park to walk through.



9.

Figure 21. Study of collective behavior in Al Ittihad park

The main design feature in the Al Ittihad park is the jogging and walking track which connects the whole Palm Jumeirah region. By observing the park, it was quite clear that this track is the most convenient way for people to go from a place to another. During the study, I did not come up with a single person using the green space for going to different places using shortcuts. Image 1, 2, 4, and 5 from Figure 22 show that people always use this pathway which also connects the other design elements. The pathway exists on the both sides of the park, which are also connected with a long garden with desert plants and shrubs.

1. The walking/jogging tracks are the most convenient walkway to go from place another in Palm Jumeirah.

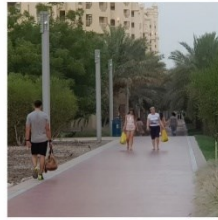
2. Also, this track used for jogging and running.

3. Areas for sitting near the walkway, are used for sitting, relaxing and resting.

4. The pathway leads to the playground and the outdoor gym.

5. Children with scooter using this track to ride.

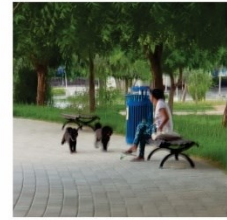
6. Visitors using the stores and cafés during their visit.



1.



2.



3.



4.



5.



6.

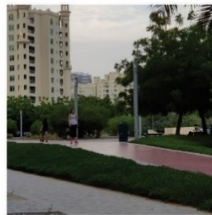
Figure 22. Study of Affordance in Al Ittihad Park

The jogging and walking track connects the playground, sitting areas and the cafés and stores. Images 3 and 6 show the sitting area and a store. People come with their dogs and babies to sit in these areas to rest for a while. Also, the stores and cafes are very popular. They do not only serve just the users of the park but also nearby residents. The designers of this park were successful as people use these design elements as intended.

1. Grass and trees on the edge of the jogging track.

2. Different types of bush, trees and shrubs to make a good natural park in the desert.

3. Good use of urban negative space.



1.



2.



3.

Figure 23. Natural aspects of Al Ittihad park

Palm Jumeirah is an artificially created desert oasis. Designers have used more than fifty different kinds of trees, bushes, and shrubs. They used the place underneath the monorail and converted it into a user friendly, active park. This park is surrounded by hotels and residential buildings as mentioned before. The designers focused the jogging track, and they put all the green elements to surround it. From Images 1 and 2 we can see that the green area starts just after the track ends, which gives the users an experience of walking or running in the nature. Also, the garden between the tracks give then a feeling of the nature as it is full of local plants and bushes. In the image 3 we

can see that the path blends in the sand and the plants, thus gives a more natural atmosphere with an urban twist. These design elements attract the people of Dubai; thus, it increases the quality of living in the city.

3.3.2 *Fazle Rabbi Park, Dhaka*

Fazle Rabbi park, also known as Gulshan South park, is located along Gulshan 1 main road, one of the busiest areas of Dhaka. This park is surrounded by commercial buildings, like banks and offices and Gulshan lake behind the park. There is a boundary wall around the park and gates both on frontside and backside. People usually use the park during early morning, office lunch time or late afternoons and evenings. The park entertains all demographics. It always seems to have a normal amount of people, not too many and not too less. The main reason for this is that Fazle Rabbi park does not host any events or concerts.



Figure 24. Aerial view of Fazle Rabbi park. Image taken by Google Earth.

This park is one of those, where the designers create a very rough natural landscape resembling the forests and woods in the South Asian region. All the trees, bushes, shrubs and herbs used in the park are native. All the trees that grow in Bangladesh have a large canopy and their leaves fall during a very short period of time, like in one or two weeks, when winter starts. As the city is densely populated and contains mostly built environment, Fazle Rabbi park is one of the most significant parks with almost natural features. So, it attracts users from all over the Gulshan area.

Study of Collective Behavior, Affordance and Value in Fazle Rabbi Park

Like in the previous studies, Fazle Rabbi park's behavior mapping technique is composed by observational examination of people's behavior corresponding to the elements and highlights of the park. The study was conducted in a warm summer day of May. It tries to determine whether the crowd existing in the park is casual, conventional, or expressive. Series of observational pictures and the description of these will establish the outcome of the study.

This study will determine how a group of people utilizes different features of Fazle Rabbi park and what are the purposes of these features. In other words, how these are intended to be used is conducted by observing people behaving in a collective manner in this park. Pictures of the observational studies and descriptions of these pictures are provided as the affordance studies.

Fazle Rabbi park is a very modern one with many recreational facilities. This study tries to figure out if Fazle Rabbi park reflects natural landscape and increases the quality of living in this urban region.

The observation was done in May during the afternoon and early evening. The design consists of several design nodes acting as attractors. The main activity happens in these nodes. The park has a main big node and few small nodes, and these are connected by pathways. Also, all around the boundary there are pathways. These nodes are mainly used by people to sit and relax. Also, hawkers sell food and other stuff near these nodes. The crowd that exists in the park is mainly casual, even if in the playgrounds as not a big number of people use this park as mentioned before. Image 1 and 6 from Figure 25 show that hawkers move around and sell peanuts to the users of the park. This type of crowd is casual as the people do not know each other but are in the presence of one another. In image 2, 3, and 5, we can see benches near the nodes on the grass. And these benches can be accessed by walking on the grass. The benches are full almost all the time.

In image 4, we can see that people using the pathways to go the main gate, just a casual crowd walking from a place to another. In the image 7, we also can see that the casual crowd is mostly attracted towards the main node, making the node the busiest node in the park. Also, there is small playground in the park next to a node. Image 8 shows that kids come here to the playground taking photos and selfies. Also, residents nearby use this park for jogging purposes. In the image 9, we can see few women jogging along the pathways. The crowds that exist in Fazle Rabbi park are mostly casual, as they are all in presence of one other, while having no influence over each other.

1. People buying peanuts from a hawker .



1.

2. People sitting in the benches and relaxing.



2.

3. Different groups of people sitting in different nodes.



3.

4. People using the pathways to go to the main gate.



4.

5. Different nodes of the park and how people are using them.



5.

6. The main node is the most active with users. People gather here to pass their leisure time. This node also attracts the hawkers to sell different stuff.



6.

7. Pathway toward the main node



7.

8. Kids enjoying their time in the play ground.



8.

9. People jogging in the pathway .



9.

Figure 25. Study of collective behavior in Fazle Rabbi park

1. Different nodes of the park and how people using them.



1.

2. Smaller nodes.



2.

3. Benches with a group of people.



3.

4. The guard dogs are resting in a smaller node.



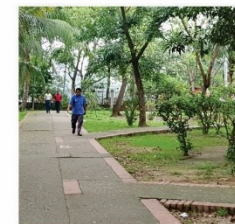
4.

5. The main node of the park.



5.

6. The pathways of the park are connecting all the nodes.



6.

Figure 26. Study of Affordance in Fazle Rabbi park

As mentioned before, the park is divided into smaller nodes with a big main node from its center. Images 1, 2, 4, and 5 from Figure 26 show the nodes and people using them to sit, to hang out with friends and to enjoy the nature. These nodes are connected by pathways. Because of the way the park is designed, pathways are the most convenient way to go from a place to another. During this study, I did not come across any people walking on the grass. Image 6 in the Figure 26 shows that people always use the pathway. Also, benches of the park are places where people like to go to sit and hangout. After careful observation it was clear that people use each design element as intended to.



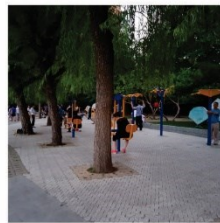
Figure 27. Natural feature of Fazole Rabbi park

The plants, trees, bushes, shrubs, and herbs are landscaped in the same way they grow in the natural setting in Bangladesh. Also, Fazole Rabbi park is a great escape for people as Dhaka is very densely populated and Gulshan is a very busy area. The park reflects the natural landscape of the forests and woods of Bangladesh. Also, it is not an activity-based park, but still people come to jog here. In Figure 27, we can see that there are different kinds of grass to give a rougher natural feeling. Also, it is clear that this park reflects the natural landscape and improves the quality of living.

3.3.4 Other Asian parks case studies

When I was writing the thesis, I also visited two other parks, one is Viharamahadevi park in Colombo, Sri Lanka and the other one is Tuan Jie Hu Gong Yuan park in Beijing, China. Because short duration of the trip, in-depth analysis was not possible, but I still managed to capture in pictures of how people use these parks. The pictures are mainly about collective human behavior. Viharamahadevi park is in the center of Colombo and Tuan Jie Hu Gong Yuan park is also located in the center of Beijing. These are among the most crowded park in these cities.

1. People using the outdoor gym in the park. This is an example of casual crowd.



2. People are dancing in the plaza of the park. The crowd here is more conventional.

3. People sitting around, hanging out and few are playing at the plaza. Here the crowd 1. is casual.

4. A great example of casual crowd.



5. Sitting on the benches and rowing a boat blending in the atmosphere.

6. Another example of a casual crowd.

7. Group exercise in the entry plaza. People here are very conventional, as they are influencing each other a great deal



8. People walking around the lake using the pathway.

9. Group of people jogging along the pathway in the presence of each other.

Figure 28. Collective Human Behavior study of Tuan Jie Hu Gong Yuan park.

1. Horse riding activity took place along the main road of the park. Also there is a temporary market place set up in the park.



1.



2.



3.

2. Café is the most active place in the park. These are all casual crowds.

3. People sitting around, and reading books under the big trees of the park in a sloped landscape.



4.



5.



6.

4. Pathway to go to one places to other

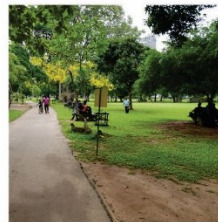
5. Picnic in a sloped landscape.

6. Example of a casual crowd.

7. Another example of a casual crowd, where people are sitting together under big trees.



7.



8.



9.

8. People walking on the pathway inside the park.

9. Picture of temporary market place and food court.

10. Expressive crowd in play grounds as kids are screaming, shouting etc.



10.



11.



12.

11. Example of an expressive crowd.

12. The conventional crowd in market place during a small festival.

13. A group of people sitting together.

14. A casual crowd cycling in the bicycle track.



13.



14.

Figure 29. Collective behavior study Viharamahadevi park.

Chapter Four: Conclusion

4.1 Findings and Discussions

The goal of these case studies from all over the world was to identify if the urban parks spoke the same language. The study was based on three patterns: Collective Human Behavior, Affordance and Value. This chapter summarizes all the findings from the case studies and determine if the study confirmed the hypothesis. First, let us talk about the collective human behavior in each site. As discussed before, this thesis focuses only on three types as they are mostly visible in any urban park. The types are casual, conventional, and expressive crowd. These crowd types are also the patterns of the language.

In Koskipuisto, Tampere, all three types of crowd were present as the study was done on the day of Vappu. The reason behind the date was Vappu, one of the main festival events in Finland. So, 1st of May was very important for the study. All the people who were passing by and having a glance at the main event belonged to casual crowds, and people participating in the event directly and indirectly belonged to conventional and expressive crowds. Then the study took place in Kungsträdgården, Stockholm. After the behavior mapping and observation, we found that the crowds in Kungsträdgården were mostly casual, also there were conventional crowds at one point.

	<i>Collective Human Behavior</i>		
	<i>Casual Crowd</i>	<i>Conventional Crowd</i>	<i>Expressive Crowd</i>
<i>Koskipuisto</i>	✓	✓	✓
<i>Kungsträdgården</i>	✓	✓	
<i>Al Ittihad</i>	✓		✓
<i>Fazle Rabbi</i>	✓		
<i>Colombo Park</i>	✓	✓	✓
<i>Beijing Park</i>	✓	✓	

Figure 30. Analysis of the case studies

Al Ittihad park had casual and expressive crowds present at the time the study was done. Mainly because this, the park is an activity-based park with many features. The playgrounds contain more expressive crowds and rest of the park more casual. Among the case studies, only in Fazle Rabbi park in Dhaka had just one crowd type, casual, as the park is protected with a border and stay

closed during the night time. Also, events, festivals or concerts never take place in this park. People just come there to relax and pass their leisure time. In Viharamahadevi park, the study shows all sorts of crowd visible, as this big park is divided into quiet and festive parts. The quiet part of the park consists of one casual crowd and the festive part had all kind of crowds as there were food festival and temporary market stall were set up. And finally, Tuan Jie Hu Gong Yuan park in Beijing had both casual and conventional crowds.

From the study, we see that the pattern of collective human behavior exists in all the park that was studied, especially casual crowd exists in the all the parks. The conventional and expressive crowds only occurred when there was any type of special feature in the park, or an event. We can easily see that all around the world in different parks people use them almost in the same way, even though cultures, weather and environment are different for each other.

The other section of case studies was the study of affordance and value. According to the study, the pattern of collective human behavior, especially casual crowd, existed in all studied parks. The affordance study was conducted based on the design features in the parks and if they were used appropriately. The studies came up with some features where people used convenience over intended purpose. For example, in some parks the pathways were not properly used, and some walls or seatings were not as they were intended to. But most of the design features were used as intended. From trees to benches, people used them how they should be used. And finally, the study of value revealed that all the studied parks were different from each other and brought uniqueness. But all the park increased the living quality of the people in the city. The pattern of value is the same in every studied park.

As a conclusion, patterns are a very effective way to explain or to understand any language dealing with architectural and urban elements (the urban element in this thesis is an urban park). The question is if urban parks all around world speak the same language? The case studies that were conducted show similar patterns though not exactly in all parks. When the patterns are similar in respective of the users and context, it can be said that the parks around world speak the same language. Thus, this confirms the hypothesis of this paper. To summarize, urban parks form a universal urban language.

4.2 Further Studies

This research can be extended in the future to clarify the patterns of the urban park language with more case studies across the globe and how they are connected to the study of the landscape architecture and urban planning. Urban parks are important in making and keeping up decent urban territories, and the cooperation in these places energize residents' interests in the city. In this manner, it is significant for urban designers, planners, and landscape architects to recognize what sorts of park qualities are important to make an open city park or urban park and see how these attributes work.



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