



**Planing & design
of public space**

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This chapter is based on literature related to planning and design of public space in urban environments. Together with a number of other literatures, the two the two main sources are namely; *Public Space* by Stephen Carr, Mark Francis, Leane G. Rivilin and Andrew M. Stone and the second source being *Peoples places* by Clare Cooper Marcus and Carolyn Francis.

Planning and design of urban public space, or any kind of urban space, concern many interrelating factors that make the task complex. These factors are factors and variables such as functions and space use, architectural form and style, location, size, physical structure and connections to other spaces. These factors determine space and space typology. Based on reviewed literature related to the topic, one can generalize and group these factors into three main variables; use of space, space form and context. The latter one includes connections and spatial structure.¹⁶

Use of space

Function

The function of a space refers to the use it serves for, meaning how it is used and the kind of activities that takes place within it. Different spaces serve for different functions and different kinds of activities. There are recreational spaces such as parks and squares, spaces for commerce such as markets, spaces for movement and transportation such as streets as well as spaces for sports and spaces for public gathering, manifestation and entertainment. Different functions serve for different groups of people and attract different amount of people over different periods of time. For example, places for work are populated during working hours and shopping areas during open hours. A vital space has a variety of functions that draws people for different reasons at different times.

A space seldom has one single function. A market place is not only a place for getting necessities but also a place where people go to meet, as well as a public square is a place for socializing, recreation, gathering and manifestation. A plaza is often a node in the urban space structure, where streets intersect and many people pass by. A space has both permanent and temporary functions. The permanent use of a square is as public space

Parque Central, Antigua



for all kind of daily life. Temporary activities occur with celebrations, festivals, parades and other public occasions and meetings.

It has since long been demonstrated that spatial separation of functions and uses create dead neighbourhoods, bedroom communities and uniform enclaves that tend to house uniform social groups, with social polarization as consequence. In modern cities, throughout time, production, trade and housing has been spatially separated, in contrary to the pre-industrial city, which had a compact form and a mixture of functions. The growth of cities, the change in physical and spatial patterns and privatization of life has made many grounds for public life to change or disappear. For example, in North America, downtown centres have for a long time been deserted as a response to the spatial separation of functions.¹⁷

A diverse and lively urban neighbourhood contains a mixture of functions, activities and people - a mixture of housing, commerce, public facilities, working opportunities, and entertainment, i.e. all kinds of functions necessary for human activities. When facilities can be reached within the neighbourhood less transportation of people and goods is required. Mix use development is essential for cities and urban neighbourhoods to become integrated and lively.

Public functions are important for a well functioning community, people's well-being, health and safety. Not only social public functions, such as healthcare, are important. Cultural and social public functions and services that flourish public life and personal engagement in the own community are as important. Libraries, places for youths, community centres, theatres and exhibition halls are places for community development and community engagement.

Public life and activities

The life and the activities that take place in space determine how space is used and for what purpose, or function, it serves. Main factors that influence the use of public space and the relationship between public and private life, are space form, location, physical and spatial structure and the culture and nature of community.

There are different types of activities that serve for different purposes. Activities can be categorised into two general categories, with each having sub-categories.¹⁸ The two main categories are functional, or necessary, activities and optional activities, which include social activities and symbolic or ceremonial activities.¹⁹ The necessary or functional activities serve for basic needs. These are activities such as waiting for the bus, going to school and shopping for necessities.

Optional activities are activities that do not arise out from necessity, such as promenading or relaxing on a park bench. Optional activities also include social and symbolic activities. Social activities refer to the social life and interaction between people. Symbolic and ceremonial activities develop from

the shared meanings people have for physical settings, rituals and activities in public, such as celebrations, festivals and spiritual and religious activities. Optional activities can arise spontaneously. For the optional activities to occur, a higher demand on the quality of space is required. The space has to encourage them to take place. Also, there has to be an efficient amount of people within the space that create opportunities for activity, action and movement.



If functional activities for basic survival take up most of the daily life, the social functions of public spaces may not be as significant. Under such conditions public life is essentially functional. This can also be the consequence of poverty or life in modern societies, where a considerable amount of the day is spent for transportation, work and other activities brought out of necessity.

Activities in public space involve different levels of engagement with the environment and surroundings, ranging from active to passive involvement. Passive engagement is indirect involvement, such as observing and relaxing. Seemingly, watching the urban scene and other people is a frequent and popular activity in urban plazas, parks, outdoor cafés and other urban spaces. People seem to be drawn to watch events such as street performances, artists, sports, games, festivals and celebrations. Providing for opportunities for passive engagement is therefore vital for populating public spaces.



Active engagement is a more direct involvement with or within the space. Social interaction between people, directly or through sports, games and mutual objects of interest seem to be the most frequent and popular form of active engagement. Small squares and plazas are important places for social interaction. In many cities and towns in Europe and Latin America, especially in warm cultures, where public life tends to be more pronounced, these are spaces where people gather in the urban community life.²⁰

Different functions and activities create and require different types of spaces. Parks, with spacious areas are well suited for more active activities, such as sports, but also for relaxation and quiet recreation. Urban plazas might also work as recreational spaces, but most of all they are social spaces, for both active and passive social engagement.

Cultural factors influence on the function and form of spaces. The nature of public life and what activities occur in public and private, differ between cultures. Activities that in some regions are located to the private sphere could in others be a vital part of the public life. There are different patterns of space use between men and women. Studies made in the United States indicate that males tend to dominate in number in most urban public open spaces. Women prefer quiet and secluded places, while men prefer front location places. Women often come in groups or as one of a couple.²¹





Needs and rights

For a space to become populated and utilised, other important factors than its function and opportunities for activities matter. Crucial, when planning and designing public spaces, is the concern for basic human needs and basic human rights.²² Successful public spaces are designed to address basic human needs, which we all have. Spaces that do not meet these basic human needs and rights will be underused. Often spaces are designed to address other purposes, such as commerce, symbolism or aesthetics, while neglecting the importance of qualities addressing to human needs and rights.

Basic human needs in public space refer to the need of comfort, safety and possibility for passive and active engagement as well as discovery.²³ Comfort is a feeling arrived from when needs for food, drink, safety, relaxation and shelter from weather and is satisfied. If an individual cannot feel physically or psychologically comfortable in a space, the space will most likely not be used to its full potentials.



Physical comfort in public space concerns access or relief from sun, shelter from rain and wind as well as sufficient and comfortable seating. Social and psychological comfort concern the sense of security and the feeling of being legitimate in the space, but also the nature of the space. Unattractive or stressing environments can be uncomfortable to use.

Design tools for reducing threats and crime can improve security. Sufficient lighting, visual access, presence of other people and eyes watching enhance safety. Spaces that are frequently used are less likely to be troubled by crime and vandalism. Management is also important for the safety. Management is the control of the space, referring to the maintenance and guidelines for change and reconstruction. Well-managed and well-maintained spaces enhance safety and space experience.

Relaxation is a state of psychological comfort, a sense of ease of mind and body, which many people in cities seek for in public spaces, such as parks. When seeking for relaxation, natural elements, like water, plants and trees are appreciated elements that have retreating qualities. Public spaces for relaxation are important in low-income areas, where people often have less opportunities and access to out-of-city recreation.



Basic human rights refer to the freedom of using public space - to access, freedom of action, space claim, and space control and space disposition between different people or groups of people. There are three components to space access; physical, or the ability to enter space, visual and symbolic access.²⁴ Visual access is the ability to view into the space from outside for judging whether the space is safe enough to enter or if one is welcome. Symbolic access, suggest invitation, threat or comfort for entering the space. It is indicated through design elements or people. For example, guards and signs suggest who is desired and who is not.

Freedom of space use with responsibility enables coexistence of different people and groups of people within a space, without abusing the rights of others. The freedom of action of one group of users may threaten the possibility to action of others. Access to space should be allowed for everyone at every time in a way that enables every person to find a legitimate purpose of being in the space, no matter of belonging or religious and ethnic background. Naturally, this is not only an urban planning issue.



Most types of activities concern claim of space on a temporal basis. Claim over space goes down to two basic concepts; privacy and territoriality. People claim space for being able to have privacy, but also for being able to “own” a space. To some degree the need of spatial control and claim is necessary for satisfying desires, which means that space claim might involve restrictions of use for others. One argument is that solely the existence of a person in space is a claim of space.

Space form and context

Form of space refers to space disposition and space character, which is determined by space design. Space form influences the experience of space and how space is used.

Space context refers to its environmental and cultural context. The environmental context can be seen in the perspective of the surrounding landscape, the region or the city within which it is situated. The cultural context concerns the cultural parameters and dialectics that influence space function, space use and space character. Cultural context is closely connected to cultural and community identity, to which identity of space is connected.



Space form

Space form influences use of space and vice versa. Space form also influences the experience of space, which, while moving with it, is a constant change of details and perspectives.

Character of built and un-built space in the large and detailed as well as space scale, shape of space, texture, materials solid-to-void relationship are factors among others that determine space form and character. Traditionally, the form of space and buildings has often been the product and response of their function and context in which they are situated, such as geographic location, climate and topography.

Space is defined by edges and boundaries that separate spaces from each other or create sub-spaces within a space. A boundary or an edge can be a level change, tree, bench or a wall. People tend to be drawn to edges of spaces. In an open public space people need “anchors”, to which they can attach themselves, either physically or symbolically, by sitting at, leaning to, standing by or looking at. By creating edges, boundaries and sub-spaces, denser use of space could be encouraged and large open spaces could





be brought down to a more intimate scale. Subdivision of space should be subtle, so that people will not feel segregated to a particular area. The sub-space should not be as small as when entering, giving the feeling of entering a private zone, or so that it can be taken over as the territory of a group.²⁵

Open spaces without clear spatial boundaries, or attracting elements are less likely to be used than those with an interesting content and clear spatial distinctions. Busy open spaces are often utilized with furniture, attracting focal elements and defined edges. Studies confirm that highly used plazas are those with greater variety in colours, textures, sitting places and landscape elements.²⁶

Open spaces and buildings do not end at their perimeters. The “transition zone” has a great influence on how spaces are perceived. Location of entrances and their design are important for the access to space. A strong focus on the entrance such as those to monumental buildings could determine the use of the whole open space outside it.



Connections to streets and sidewalks are essential. More people enter spaces that have longer direct connections to sidewalks and those that help cut a corner. Spaces in the direct adjacent to sidewalks and with multiple entries and exits are popular because of their easy access and the flow of people passing by to watch. Spaces that are not thoroughfares, cause users to stay longer within the space, most likely because people come there for the purpose of staying.²⁷

Physical and esthetical qualities encourage passive and active engagement. Natural elements, such as trees, plants and flowers, have restorative qualities and support public life. Green features attract passers-by, soften the space, provide with shade and bring positive effects on the microclimate, with their capacity of absorbing air pollutants.

Public art and other interesting physical features, especially water, tend to attract and encourage interaction. The concept of public art has a wide range. In historic places public art is often represented as monumental sculptures or statues, as symbols for nationalism, celebration and awe. In modern places public art is more diverse, with art for delight, surprise and interaction.



Different users of space have different requirements on the design of space. Children have other needs and requirements on the environment than adults. A child needs opportunities for play and recreation, as a root of learning and basic personal development. Play bases on free choice, intrinsic motivation and spontaneity. A good space for play contains elements and features that enables social interaction, access to nature, involvement, privacy, physical and mental recreation and adaptation to changing demands in the dynamic play. Public provision for children's play is often stationary equipment, with hard surfaces of concrete or asphalt. These kinds of equipment rarely

encourage environmental and experiential stimulation. So called “adventure playground” are considered to be more stimulating for children.²⁸ Concerning safety and children, the most important issues are safety in traffic and on streets and safety from crime and abuse.³⁹

Elderly and people with movement disabilities require environments and space design that meet their special needs such, as a park bench to rest at, even surfaces, safe street crossings, entrance ramps and so on.

Space context, identity, culture and meanings

Development of space form is highly congruent with its cultural and environmental context. Space evolves out from patterns of use, which differ between cultures and environments. Therefore space form, space character and space typology varies between cultures. Some regions and cultures have space types that do not exist or existed in earlier times in others, such as the public outdoor laundry devices in Guatemala.

Identity of space and community is closely connected to public life of citizen, their relations, cultures and traditions. Often, public space is the context within which and through which, concepts of culture evolves and within which both individuals and groups construct, define and defend their identity. Through symbolic and collective activities, which often take place in public space, the sense of community can be confirmed, and also enable people to feel belonging to a larger group. Public engagement encourages development of a lively neighbourhood and strengthens relations in between neighbours and the identity and integrity of the community.

The community relations are an important part of the public identity. If people can feel pride for their community the community spirit will increase, which could work as a fuel for people’s well-being, but also as something that makes it attractive as a place to live in or start a business in. Another part of the community identity could also be the trust between people, which would signify the community as a place where people can count on each other’s support. A flourishing public life also makes the community more integrated and culturally rich.

The contextual environment, the physical surroundings and spatial settings, such as the landscape, spatial structure and architecture, also constitute identity of space and community. Memories connected to places arise from the context and its uniqueness. The context refers to the surrounding natural landscape, to its regional and local characteristics and the typical qualities that can be found in particular materials, colours, species, elements and landmarks. The context is also the surrounding built environment, which, in an urban environment, is the city with its different urban characters, buildings, landmarks and people. Environmental memories could also arise from history and the development of qualities and associative meanings that are unique for the time being, the place and the experience of culture. These memories are evoked by historic elements, events, ceremonial and sacred places.



Meanings refer to the connection between people and their surroundings. For spaces to become meaningful and for people to be able to develop connections to them, some fundamental requirements must be met. Space has to be congruent with the culture in which it exists, for being able to be understood and evoke feelings, symbolic meanings and connections that resound with the memories and experiences of an individual or of group of users. Every individual is through time exposed to an array of activities and happenings that all connect to environmental memories.³⁰ The social and cultural context must not be ignored in the planning and design of public spaces.

The understanding and impressions of space differs depending on whether one is visiting, working, or living in it. In the public space both locals and strangers meet. They have different relation to the spaces. The personal relationship to a place affects how a person experience and remember it. Features, landmarks, reference points, boundaries, familiar faces and other symbols of everyday experience may be unseen by outsiders, but for inhabitants they give their community meaning and identity.

Diversity and change

Diversity of both function and form is vital for populating public spaces and in an urban context it is an important part of its meaning. Separation or gathering of functions determines the frequency of spontaneous and arranged meetings between people. The greater diversity of functions and activities there is and the more multi-functional a space is, the greater variety of different people is attracted to it. Commerce, services and public facilities are important and tend to attract many kinds of people.

The more a certain space is used, the more generous it is and the greater variety there is of different users. Generous space allows various activities to take place. Generous structures, buildings and open spaces are flexible and have the capacity to change uses over time. Although a space needs to be generous it cannot acquire for all kind of purposes. Some spaces serve for relaxation and privacy such as tranquil parks and gardens, while some serve for sport and active uses, such as playgrounds and neighbourhood parks. Others are public scenes, as the town squares and central plazas.

The denser an area is, or the finer grain it has and the more potential it has to become diverse and integrated. Grain refers to the relation between urban solid and urban void and the scale and density of the urban voids, i.e. the street system and other open spaces. When discussing density one must recognise the distinction between density of built structures and population density, which are not the same. The density of the built environment is the density and of urban solids, their mass, height and land coverage. Population density refers to the amount of people per land area unit. The optimum scale of density, for a lively urban neighbourhood and for reducing transportation, would be when all functions and facilities are reachable within walking distance. Clearly, in large cities there are facilities and

function that require large spaces and are therefore also located on a longer distance.

People search for visual complexity and activity for participation or observation. A complex view can sometimes be a great attraction. The ability to discover and the desire for stimulation are attracting and drawing people to spaces. Discovery includes the opportunity for observation and experience of changing activities, which can be provided through careful, diverse and imaginative space design.

When the nature of space use and functions change, the change also influence on how physical structures and spaces are used. For example, when the amount of traffic on a street increases, it could lead to a change of how buildings and open spaces are used. Development of structures and open spaces should be adaptable to future change. Sufficient flexibility should be retained in the design of buildings to enable future conversion or the accommodation of alternative uses. This has to be considered in the planning and design of buildings and open spaces and applies to design of any kind of space.

Public space in Guatemala and Guatemala City

In Guatemala design and planning of public space have two main origins; the colonial and the modern cultures. The colonial open spaces, its street grid system, squares and plazas have clear spatial definitions. As supposed to modern spaces that are more varied in form and have less clear spatial definitions comparing to colonial spaces. One example of this is the Civic Centre in the capital. Another one, developed during more recent time, is the development of the shopping mall areas with their so-called non-spaces³¹, along CA1, the panamerican highway that cross the city.

In Guatemala City the access to green areas is sparse. Larger, park-like public open spaces are rare. Public space is mainly restricted to streets, which are commonly dominated by traffic. Streets often lack sidewalks. Sidewalks are often uneven or discontinuous. Consequently, pedestrians have little space and possibilities to move safely.

Promenading or walking for leisure is traditionally not very common in the city.³² The reasons could be that few places are enjoyable for strolling. Traffic, air pollution and lack of comfortable and continuous pedestrian paths and sidewalks as well as insufficient public lighting make promenading dangerous and unpleasant. The city in general and some areas in particular, such as Zone 1, are considered to be dangerous and unsafe. Strikingly is also the high level of traffic noise is high from early morning until the evening.

During the 1990s many semi-public spaces has been provided by new commercial developments, such as large shopping mall complexes. The arrangement of those places speaks a clear language of who is welcome



Shopping district, Zone 10, Guatemala City



Parque Central, Quetzaltenango

and who is not. The clientele of these kinds of spaces are naturally people of high-income households and people without financial abilities to shop might be restricted to use these spaces as public spaces.

There are certainly differences in how men and women use public spaces. The largest difference is that men tend to enter public spaces for optional and spontaneous activities more than women do.³³ Women tend to enter the public more due to necessity than for optional activities. Women are also less likely to do sports in public, such as go jogging or participate in games. Children are a large population group in Guatemala. Public playgrounds are rare to find. Often the streets are used as playgrounds.

The climate conditions in Guatemala City vary. Provision of both shade and sun are desired depending on the time of the day or the season. The temperature varies relatively little over the year, but more over the day. During the rainy season the mitigation can be very intense. Protection from rain and wind is motivated but often not consciously provided for.

In Guatemala and most other countries in Latin America, plazas are distinctive and well-known monumental features of colonial heritage. Traditionally plazas have been foci of political, religious, cultural and commercial life in Latin America. They are often the size of one block in the street grid system. Every colonial city or larger village in Guatemala has a “*parque central*”, such as Parque Central in the historic centre in Guatemala City, or Parque Central in Antigua and Quetzaltenango.

Quetzaltenango has, besides Parque Central, one other large plaza; Parque Benito Juárez. The plaza is vividly furnished with, benches, grass sections, planted flowers and a pavilion in the centre. The classical colonial style is evident in its geometrical layout of plantings and paths. The plaza lies adjacent to the municipal market and a large church. It is frequently populated by students, passers by, church visitors, vendors and people who just come there for watching and passive enjoyment of the thronging life on and around the plaza.



Parque Benito Juárez, Quetzaltenango

The two plazas in Quetzaltenango both work as focal points. They have different character and functions. While Parque Benito Juárez is more of a recreational space, Parque Central is a ceremonial space where one can find the city hall, banks and the tourist office. Parque Central is the kind of place that houses demonstrations, celebrations and religious parades. The two plazas both work as places of foci, because they differ in character and function. Two plazas of the same kind would not have balanced the focus of urban public life in the same way. One of them would have dominated. Also the distance in between them and the population size of the city are factors of significance in this case.

Parque Benito Juárez in Quetzaltenango is an example of a space with many sub-spaces within it. The plaza has spaces of two scales; the plaza as a whole, which is visible from all points, and the sub-spaces within the plaza that act as small plazas within themselves. The pedestrian circulation channel on the plaza is effectively used. The plant material and furnishing make up boundaries, dividing the plaza into sub-spaces that are used for all kinds of activities. The sub-spaces are especially popular for watching and pausing. The activities on the plaza are not focused to one or a few spots. The advantage of being in such a space is that one can be in a more intimate space, in one of the sub-spaces, at the same time as being in the larger open space of the plaza. If the plaza had been bare, the middle sections would probably not be used by as many people. The sub-spaces provide with many boundaries and edges to attach to.

In Antigua, Parque Central is the only plaza of its significance. Parque Central in Antigua is a place where all kind of people, locals and tourists, mix. The plaza is strongly characterized as a focal point. Tourists and vendors selling crafts, textiles and other souvenirs are permanent features on the plaza. Also Parque Central in Antigua is, with its geometry, planting and furnishing, a plaza of colonial style.

Summary

Planning and design of urban public space concern many aspects. In this chapter the focus has been put on space use, space form and context. Space use refers to the function of space and activities that take place within it. Space form refers to space's physical shape and character, while the context is referring to the situation in which the space is located in, such as the physical surroundings and the cultural and social environment.

Activities that take place in public vary in nature and purpose. There is a distinction between functional and optional activities, which are activities with different purposes. Functional activities are brought out from necessity. They include activities such as waiting for the bus or going to work. There is also a distinction between passive and active involvement with the surroundings. Passive engagement is indirect involvement with the environment, such as observing and relaxing. Active engagement is a more direct involvement with or within the space, such as social interaction between people, which is the most frequent and popular form of active engagement.

A space's function and the activities that take place within it depend on its form. Space form suggests how space is intended or could be used. Different spaces serve for different functions and different kinds of activities. Diverse and lively urban neighbourhoods contain a diversity of functions, activities and people.

The context, in which the space is situated, also includes parameters that form and use of space depend on. Context is closely related to identity of space and identity of community that, in turn, are connected to public life of citizen, relations between community members, cultures and traditions. Public space is an important part of public identity. The contextual environment, the physical surroundings and spatial settings, such as the landscape, spatial structure and architecture, is a part of the identity of the physical space and of the community.

When planning and designing public spaces, the concern for basic human needs and basic human rights within the space is crucial. Basic human needs in public space refer to the need of comfort, safety and possibilities for passive and active engagement. Design of space can be used as a tool for defining purpose of the space or how it will be used. Factors that are important to consider, when planning and designing public spaces, are physical and psychological comfort. Physical comfort refers to the ability to be relaxed, to find seating and places with agreeable climate conditions and so on. Psychological comfort refers to factors such as security, visibility, the right to access the space and also physical and esthetical qualities.

Spaces are defined by edges and boundaries, such as level changes, trees, benches or walls. Edges and boundaries create so-called sub-spaces, which are smaller entities of defined space within the larger open space. Highly used spaces are those with many edges and boundaries that people can

relate to when are staying within the space. Frequently used spaces also tend to be those with greater variety in colours, textures, sitting places and landscape elements. It is important that the space can fulfill the requirements of groups with special needs. Connections to other spaces and other types of spaces are also essential for the use of the space.

In Guatemala design and planning of public space have two main origins; the colonial and the modern cultures. In Guatemala, traditionally the plaza, the "*parque central*" have been the public arena for political, religious, cultural and commercial public life and activities. Public spaces created during modern times are of other types and characters. For example, during the 1990s many semi-public spaces were developed through new commercial developments, such as large shopping mall complexes. These kind of semi-public spaces are spaces that are privately owned, but are used as public space. In Guatemala City many areas in the periphery that have been developed during modern times, contrasts to the historic and colonial city centre.

The theories on planning and design of public space will work as a framework for the development concept and proposals together with the analysis of La Florida. The intention is to develop a concept that will work as a base for the proposals and strategies for implementation.

The contextual landscape and the regional and local space typology and scale of spaces will be guidelines for the development proposals concerning the space form and character of the proposed spaces. In La Florida the surrounding landscape such as the ravine La Guacamaya and the streetscapes demonstrate qualities and characteristic that could be taken into consideration in the proposals. Space types that are typical in the context often originate from the colonial urban structure, with centrally located plazas and boulevard streets as common space features. The intention is also to develop spaces taking into account the spatial distribution, composition of sub-spaces, edges and boundaries and connections with other spaces. Factors that are to be considered are comfort, safety and the possibilities for passive and active engagement within the space.

In La Florida comfort in public space means offering possibilities of both exposure and protection from weather and seating spaces at suitable spots. Important is also to make the space accessible diverse so that all kinds of people can find use for it and feel legitimate within the space. Safety issues concern the improvement of, for instance, public lighting and visibility. Activities that take place in public space important to consider are social interactions and meetings between people, passive observation of the surroundings, ball sports, relaxation and children's play.