Introduction

In the past there have been great public squares, as there are today. San Marco, the well-known Venetian piazza, is surrounded on three sides by a labyrinth of buildings and pedestrian paths and on its fourth by the glittering expanse of the lagoon. The horizontal expanse of the sea and the sky creates a strong sense of continuity. That horizontal quality is translated into the architecture of the buildings surrounding the square. These buildings are a collection of different architectural styles that blend together beautifully. The oblique angles of the piazza and the piazzetta create astonishing views, as Sitte (1979, p. 38) describes: “There are more than a dozen popular views of each square, taken from various points.” The location of the square at the entrance of the Grand Canal makes it a great urban location.

A more recent example of a public square is the Beaubourg Square, adjacent to the Center Georges Pompidou in Paris. The transparent box of the Center and its exposed frame of tubular steel columns contrast sharply with the historical buildings that surround the square. The mid-rise height of these buildings constitute the walls that enclose the square. The giant vertical white tubes parallel to the tree-lined sidewalk opposite to the Center create a strong sense of an outdoor room. All year long this square is animated by spontaneous street performers who attract crowds of people. The idea of Président Pompidou to bring art and culture to the “man in the street” has certainly been accomplished with the Center and its square.

If we consider the public square to be an outdoor room, it can be defined by the floor, the walls, and the imaginary
ceiling—the sky. The room is an enclosed space, its walls act as a boundary between the inside and the outside. The articulation between the inside and the outside of the room is assured by the door and windows, which are the openings of the room. In the case of the square, the exterior walls of the buildings surrounding the square constitute its boundary. How the walls of the buildings stand on the ground and how they rise to the sky give the vertical quality and dimension of the square. The openings of the square are made by the streets and the pedestrian paths that connect to it.

The atmosphere of a square is directly influenced by the space and the character of the man-made environment, which is related to the natural forces. To get an understanding on how we experience a place beyond its functional aspects, it is helpful to study the phenomenology of place. In Part One I will describe the concept of place, both the man-made place and the natural place, by using the definitions suggested by Norberg-Schulz in his book, *Genius loci: towards a phenomenology of architecture*. Another aspect of the built environment is that it reflects the social-cultural conditions of a given society. New advances in technology continually challenge the existing city structure for adjustments. Similarly, the design of a public square also needs to address the social and cultural environment of a society. A design of a public square that addresses today’s social and cultural circumstances will be presented in Part Two; this is a public square at the village at Shirlington in Arlington County, Virginia.
A civilization can best be understood by its architecture because of the way buildings show the interests of a society, its organizational skills, affluence or poverty, the kind of climate and the attitude towards technology and the arts. In towns and cities the general structure of society can be understood through the medium of architecture, so it becomes the most pervasive mirror of man’s presence.

Baker (1989, p. xix)
PART ONE

URBAN ENVIRONMENT
WHAT IS THE MEANING OF PLACE?
At the local library, I came across an article published in the Washington Post on 11.01.1986, entitled *In Shirlington, Main Street Revisited*. The journalist, Benjamin Forgey, writes:

“Place” is indeed the crucial word in any discussion of the Shirlingtonons of this world. It strongly suggests that the nondisembodied virtues they have to offer—open air, friendly service, a variety of nonfranchised goods, an intimate sense of scale and a strong feeling of location—is neither irrelevant nor unimportant in our ever-changing metropolis.

As he says beautifully, the place should reflect “a strong feeling of location” but what does it concretely mean?

The urban fabric is made of buildings, streets, public squares and parks. These elements constitute the man-made environment combined with the natural environment. That is what we experience daily in an urban setting. Now what does it mean in concrete terms to have “a strong feeling of location”? Norberg-Schulz turning to philosophy for an explanation, suggests it is the discipline of phenomenology that studies things as we experience them in our “lived” world.

The Phenomena of Place
The Stanford Encyclopedia of Philosophy presents the following definition:

The discipline of phenomenology may be defined initially as the study of structures of experience, or consciousness. Literally, phenomenology is the study of “phenomena”: appearances of things, or things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience. Phenomenology studies conscious experience as experienced from the subjective or first person point of view.

Every day we encounter multiple concrete phenomena such as houses, streets, trees, automobiles, towns, and forests, and many others. It includes also the sun, the clouds, the moon, and the stars. To know them as abstract things is an important knowledge for our lives, but their significance in human experience go far deeper than their functional aspects, says Norberg-Schulz (1980, p.6). Furthermore he writes that a forest consists of trees and a town is made up of houses, which is called a comprehensive phenomenon or “environment” and is defined in concrete terms as “place.” He addresses the meaning of the word “place”, saying:

Obviously we mean something more than abstract location. We mean a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an “environmental character”, which is the essence of place. In general a place is given such a character or “atmosphere”. A place is therefore a qualitative, “total” phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight.
The Phenomena of Natural Place

Norberg-Schulz (1980, p. 24) suggests that in order to understand the meaning of the natural environment, we may look at five basic mystical modes that make up the phenomena of natural place. About the first one he writes:

The first mode of natural understanding takes the forces as its point of departure and relates them to concrete natural elements or “thing” 4. Most ancient cosmogonies concentrate on this aspect and explain how “everything” has come into being. Usually creation is understood as a “marriage” of heaven and earth.

Ancient civilizations developed similar mythologies between the union of earth and sky; however, each civilization has its own way to describe a meaningful representation of the world’s existence. The earth was conceived where life engenders and where the existence of the mortals takes place, whereas the sky had cosmic implications and had a creative power. The philosopher Heidegger (1971, p. 147) gives a modern interpretation of the duality between earth and sky:

Earth is the serving bearer, blossoming and fruiting, spreading out in rock and water, rising up into plant and animal.... The sky is the vaulting path of the sun, the course of the changing moon, the wandering glitter of the stars, the year’s seasons and their changes, the light and dusk of day, the gloom and glow of night, the clemency and inclemency of the weather, the drifting clouds and blue depth of the ether.

Since earth and sky were believed to be complementary of each other, then, there must exist a connection between them. In fact, observations of the night sky showed a bright star in the northern part of the celestial vault, and it was believed to be the center for the sky rotation. For centuries the North Star was considered to be the middle point of the sky and that it should have a corresponding one on earth. From this stemmed the idea that there should be a connection between these two distant locations (Kauhsen, 1990, pp. 14-15). This was the departure for a further symbolic interpretation of the universe. Conforming to nature, high mountains belong to earth but rise high to the sky. These locations were imagined to be meeting places where the two elements would join together. Therefore, mountains were considered to be terrestrial “centers” (Norberg-Schulz, 1980, p. 25).

Another symbolic representation of the earth’s center was the navel or “omphalos”, the Greek name for navel, which constitutes the central location of the human body. Its function is associated with the origin of life. One among several symbolic representations of the earth’s navel was through a distinct stone where the communication among the earth, the sky, and the underworld could take place. These places were identified as being “sacred” places. For instance, the ancient Greeks believed Delphi to be the center of the world. They built the temple for Apollo where the god sits in the center of the earth’s navel; on the temple floor was placed a white marble stone which symbolized the omphalos (Kauhsen, 1990, pp. 19-20). These “sacred” places witness how the ancients understood the universe. They played an essential role for ancients’ orientation and to make their life meaningful.
Norberg-Schulz’s description of the second mode of natural understanding is as follows:

The second mode of natural understanding consists in abstracting a systematic *cosmic order* from the flux of occurrences. Such an order is usually based on the course of the sun, as the most invariant and grandiose natural phenomenon, and the cardinal points (1980, p.28).

Norberg-Schulz (1980, p.28) explains that the local geographical structure of a country can be of primary importance, for instance in Egypt where the south-north direction of the Nile provides man with a sense of orientation. In ancient Egypt, the meaning of the east direction, where the sun rises, was the domain of life and birth, whereas the one of the west direction, where the sun sets, was the domain of the death. From that description, it can be seen that they interpreted the world as a structured space. It can be concluded that the belief in a cosmic order is usually related to a concrete image. In Nordic countries, where the sun loses much of its importance, the ancient imagined a “heavenly axis” running north-south, around which the world turns. For ancient Romans the *axis mundi* was imagined to be the heavenly *cardo* that runs south from the Polar Star and crosses at a right angle the *decumanus*, which represents the course of the sun from east to the west.

About the third mode Norberg-Schulz (1980, p.28) writes:

The third mode of natural understanding consists in the definition of the *character* of natural places, relating them to basic human traits.

This concept is best be illustrated with the Greek landscape, where mountains of moderate height clearly define the space of valleys and the plains. A unique characteristic of this landscape is that it is composed of various distinct sites that change their appearances with the course of the day. Scully (1979, p.10) describes the characteristic of the Greek landscape:

With the changing of the light, the mountains advance or recede; their eclefs flatten out or yawn, while the plain slides away to the sea with its island. The relationships are inexhaustibly changing, but the forms are simple and few.

Norberg-Schulz (1980, p.28) explains that the pronounced properties of some of the Greek landscapes were imagined by ancient Greeks as “personified” character that resulted in sacred architecture.

The fourth mode of natural understanding is:

But nature also comprises a fourth category of phenomena which are less palpable. *Light* has of course always been experienced as a basic part of reality, but ancient man concentrated his attention on the sun as a “thing”, rather than the more general concept of “light” (1980, p.31).

Norberg-Schulz (1980, pp.31-32) writes that the notion of light is culturally related. For instance, light for the ancient Greeks was associated with Apollo as a symbol as of
knowledge and of artistic and intellectual qualities. Whereas, in Christianity light is represented as the symbol of “conjunction with the concept of love.” God was considered *pater luminis*, and “Divine Light” a manifestation of the spirit.

Finally, the fifth mode of natural understanding Norberg-Schulz (1980, p.32) defines is the temporal rhythm of nature:

Light is not only the most general natural phenomenon, but also the less constant. Light conditions change from morning to evening, and during the night darkness fills the world, as light does during the day. Light, thus, is intimately connected with the *temporal rhythms* of nature which form a fifth dimension of understanding.

The rhythm of the day and the changing of the seasons are things that we experience every day; however, they are landscapes where the natural phenomena are particularly spectacular. Scully (1979, p.9) describes poetically how a Greek landscape changes its appearances during the seasons:

In summer the hills will be lighter in tone than the opaque blue sky, and they will seem to step forward, blooming white as silver gilt over their undertones of brown, green, and lavender. At summer midday they may dissolve in the blaze of the light itself, but at evening they will shift flat into the dark silhouettes of pure contour, tight-drawn as wire. In winter they will be shadowed in purple and rippled with cloud, and, above valleys green with the new wheat, they may be touched with snow.

In summary, the five basic modes are thing, order, character, light and time. Thing and order are considered as spatial, whereas character and light affect the atmosphere of a place. It is notable that thing and character are terrestrial dimensions, whereas order and light are determined by the sky. “Time, finally, is the dimension of constancy and change, and makes space and character parts of a living reality, which at any moment is given as a particular place, as a *genius loci* (Norberg-Schulz, 1980, p.32).”

**The Man-Made Place**

The man-made environment refers to all human settlements. The physical aspect of a settlement can be pictured through houses, governmental and religious buildings, streets and public squares. To establish a settlement is the action of dwelling. Heidegger (1971, p.145) suggests a concrete definition of dwelling by analyzing the terms:

*Bauen* originally means to dwell. Where the word *bauen* still speaks in its original sense it also says *how far* the nature of dwelling reaches. That is, *bauen, buan, bhu, beo* are our word *bin* in the versions: *ich bin*, I am, *du bist*, you are, the imperative form *bis*, be. What then does *ich bin* mean? The old word *bauen*, to which the *bin* belongs, answers: *ich bin, du bist* mean: I dwell, you dwell. The way in which you are and I am, the manner in which we humans are on the earth, is *Buan*, dwelling. To be a human being means to be on the earth as a mortal. It means to dwell.

The act of dwelling is related to the way we built our settlements. The settlements are made of buildings which
The Structure of Place

From the phenomena of place description, it can be concluded that the structure of a place can be analyzed by means of “space” and “character”. The word “space” denotes the three-dimensional organizational elements which make up a place, whereas “character” refers to the general “atmosphere” which is the most comprehensive property of any place (Norberg-Schulz, 1980, p.11).

The space we experience in our everyday life-word can be of different natures. For the purpose of my study, I consider only perceptual space and concrete space.

About perceptual space Relph (1976, p.10) writes: “Perceptual space is also the realm of direct emotional encounters with the spaces on the earth, sea, and sky or with built and created spaces.” Matoré (quoted in Relph, 1976, p.10) describes:

We do not grasp space only by our senses... we live in it, we project our personality into it, we are tied to it by emotional bonds; space is not just perceived ... it is lived.

According to Relph (1976, p.10) “Space is never empty but has content and substance that drive both from human intention and imagination and from the character of the space.” Man may experience a “substantive space” such as the sky, sea, landscape, streets and buildings in an infinite various ways depending on the rhythm of the day and the seasons.

Norberg-Schulz (1980, p.11) points out that space in
architecture is more than a three-dimensional geometry and a perceptual field. He says: “None of these however are satisfactory, being abstractions from the intuitive three-dimensional totality of everyday experience, which we may call “concrete space”.”

Lynch (1960, pp.47-83) approaches the structure of concrete space by proposing the concept of paths, edges, nodes, and landmarks that help people to orient themselves in cities. Paths have a directional quality, and they are also defined by the width of the streets. The space of a street is characterized by the different building types and their facades that make up the mass of the street. Edges constitute by definition a boundary, often they distinguish between two different kinds of areas. Since the edges are continuous and visible, they have the quality of lateral references. Districts are found in large city areas, when they are well-defined, people can recognize the internal structures and use them for external reference of the city. Nodes are strategic foci, typically located at junctions of paths; they provide a perceptual quality of the city. Finally, landmarks are distinguished from other buildings by their unique architecture and therefore serve as point references; they help people to orient themselves in the urban environment.

Another important characteristic of concrete space Norberg-Schulz (1980, p.12) says is:

The outside-inside relation which is a primary aspect of concrete space, implies that spaces possess a varying degree of extension and enclosure. Whereas landscapes are distinguished by a varied, but basically continuous extension, settlements are enclosed entities. ... In a wider context any enclosure becomes a center, which may function as a “focus” for its surroundings.

From the center, space radiates out in horizontal and vertical directions, hence, centralization and direction are other important properties of a concrete space as well as its enclosure. Any enclosure is defined by a boundary Heidegger writes (quoted in Norberg-Schulz, 1980, p.13):

A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that, from which something begins its presencing.

The boundaries for a building are the floor, the wall, and the ceiling. Similarly, the boundaries of a natural landscape consist of the ground, the horizon, and the sky. The degree of enclosure of the boundary is in relationship with its openings (Norberg-Schulz, 1980, p.13).

The character of a space embodies a general comprehensive atmosphere. Norberg-Schulz (1980, p.14) writes:

A phenomenology of character has to comprise a survey of manifest characters as well as an investigation of their concrete determinants.

Different places have different characteristics; for instance, a capitol can express power, whereas a church can express solemnity. Similarly, the natural landscape may be
characterized as fertile or barren. Norberg-Schulz (1980, p.14) explains:

In general we have to emphasize that all places have character, and that character is the basic mode in which the world is “given”. To some extent the character of a place is a function of time; it changes with the seasons, the course of the day and the weather, factors which above all determine different conditions of light.

Discussing the importance of character in buildings, he adds:

Character however, depends upon how things are made, and is therefore determined by the technical realization (“building”). Heidegger points out that the Greek word techne meant a creative “re-vealing” (Entbergen) of truth, and belonged to poiesis, that is, “making”29. A phenomenology of place therefore has to comprise the basic modes of construction and their relationship to formal articulation (1980, p.15).

The structure of man-made place can be seen in a series of levels, from the house to villages and towns. The main elements of a town are centers, paths, and districts. A square obviously functions as a center, a street as a path, and an urban district as a domain. The layout of these elements in city planning forms a complex network which is necessary for man’s orientation (Norberg-Schulz, p.59).

Similarly, the structure of “natural places” can be referred to a series of environmental levels ranging from a shaded area of a tree, a country, and right up to a continent. All these places are defined by concrete properties, which attribute to them a different landscape. The distinctive quality of any landscape is its topography and how it extends. For instance, the nature of surface of a valley, or an extended land, or a rolling countryside, or mountains, is read very differently from each other. In addition, the surface relief may be modified by the texture and the color of the ground layer, such as stone, sand, vegetation, and water.

Genius Loci

This is a Roman concept, (Norberg-Schulz, 1980, p.18):

According to ancient Roman belief very “independent” being has its genius, its guardian spirit. This spirit gives life to people and places, accompanies them from birth to death, and determines their character or essence.”

It has been the practice of ancient civilizations to live in good relationship with their natural environment. For instance, in ancient Egypt, people established their country along the Nile River, they cultivated the land in accordance with its floods, and they laid out the public buildings in relationship to the natural landscape in order to provide man with a sense of security that symbolized an eternal environmental order (Norberg-Schulz, 1980, p.18).

To understand the genius loci, we need to revisit the word dwelling, which means a total man-place relationship. To dwell refers to both being located in space and being
exposed to a certain environmental character. For man to belong truly to a place Norberg-Schulz (1980, p.19) writes:

The two psychological functions involved, may be called “orientation” and “identification”. To gain an existential foothold man has to be able to orientate himself; he has to know where he is. But he also has to identify himself with the environment, that is, he has to know how he is a certain place.

A system of orientation that has good spatial structures is essential for a city. The interrelationship among paths, edges, districts, nodes, and landmarks creates, as Lynch (1960, p.4) writes:

A good environmental image gives its possessor an important sense of emotional security. He can establish a harmonious relationship between himself and the outside world.

Norberg-Schulz (1980, p.21) suggests that in the context of the natural environment “identify” refers to becoming familiar with a specific environmental character. For instance, he says:

Nordic man has to be friend with fog, ice and cold winds; he has to enjoy the creaking sound of snow under the feet when he walks around, he has to experience the poetical value of being immersed in fog...

He continues his discussion, adding (1980, p.22): “Whereas identification is the basis for man’s sense of belonging, orientation is the function which enables him to be that homo viator, which is part of his nature.” And to dwell means to belong to a concrete place. Heidegger (1971, pp.146-147) uses the linguistic relationships to analyze the nature of dwelling:

The Old Saxon wuon, the Gothic wunian, like the old word bauen, mean to remain, to stay in a place. But the Gothic wunian says more distinctly how this remaining is experienced. Wunian means: to be at peace, to be brought to peace, to remain in peace. ... To dwell, to be set at peace, means to remain at peace within the free, the preserve, the free sphere that safeguards each thing in its nature.

Man is an integral part of the natural environment. To belong to a place means to have an existential foothold, in a concrete everyday sense.

The spirit of man-made place is related to how buildings are made together with their integration to the natural environment. Each man-made place has a particular combination of these two elements; their total integration constitutes the genius loci.

The spirit of natural places is the interaction between the natural factors of earth and the sky. In some region the sky may be dominant, others the earth contributes the primary presence. In general, there exist various degrees of interactions between these two elements in every landscape depending on the climatic conditions, the rhythm of the day, and the seasons.
2

THE ORIGINS AND
THE TRANSFORMATION OF THE CITY
The Origins

The emergence of the city did not grow out of the village, but it developed as an integral and self-contained settlement at a time when the society had gained enough knowledge to produce a surplus in agricultural production, Benevolo (1980, p.16) writes concerning the city:

It developed when certain categories of work were no longer carried out by the people who worked the land, but by others who were freed from the obligation and who were supported by the surplus produced by the cultivators. This phenomenon resulted in the birth of two distinct social classes—the ruling élite and the subordinates.

It was the ruling elite together with the priests, merchants, craftsmen and soldiers who lived in the more complex urban structure, the city. The existence of the city suggests a technical division between the social classes and the production. Contrary to the village, the city had specialized industries, skilled craftsmen, and the power to control the countryside. The more dynamic urban structure made it necessary for the invention of writing; it was the beginning of the first urban civilization that took birth in Mesopotamia some 5000 years ago.

Industrial City

Throughout history, specific circumstances have determined the characteristics of the city: military defense, scientific discoveries, successive administrations, and the progressive development of communications and means of transportation by land, water, rail, and air routes (Le Corbusier, 1973, p.47).

Certainly, the advent of the Industrial Revolution in the 19th century challenged the traditional city with new circumstances. It was the replacement of an economy that was mainly based on manual labor with one dominated by industrial production. More efficient machineries increased agricultural products and manufactured goods. This required the construction of more factories around the core of cities as well as a more efficient transportation system. With the surplus of production more people could enjoy a better life, and this created an afflux of population from the countryside to cities. These new social-economic conditions put severe constraint on the existing urban nuclei. For instance in France, the Baron Haussmann undertook the *Grands Travaux* to transform the medieval city of Paris, which was not suited for the modern mechanized traffic. To give mobility the priority over the traditional street traffic, the “percées” or tearing up of existing urban structures were made to create a new axis of circulation.

Since the 19th century, the planning of cities took a more rational approach in order to integrate mobility into the street network. The concept was borrowed from the industry where the Taylorism method was applied, that is, to break down the work into task-oriented jobs to optimize the production. Modern urbanism came up with the zoning method that rationally separates the urban fabric into monofunctional zones (Ascher, 2001, pp.21). The Athens charter gives a description of zoning, as Le Corbusier (1973, p.57) says:

Zoning is an operation carried out in the city map with the
object of assigning every function and every individual to its rightful place. It is based on necessary differentiations between the various human activities, each of which requires its own specific space: residential quarters, industrial or commercial centers, halls or grounds intended for leisure hours.

**The Modern City**

The concept of rationality is no longer limited to cities but has crossed the border beyond the city and extends into the suburbs. The production system is no longer at the outskirts of cities, but has moved to developing countries to take advantage of low-cost labor. Better knowledge in technology is continually promoting new products and more and more people can afford them. The mass production of cars, computers, and cellular phones have set a new landscape for the city dwellers. New means of production, speedy transportation, and telecommunication systems allow people or individuals to emancipate themselves from spatial and temporal constraints. As a consequence of this autonomy, we observe a delocalization of businesses and people from the city towards the suburbs. The distinction between the city and suburbs becomes blurred. The picture of the modern city has lost the quality of enclosure that was once enjoyed in the traditional walled city. Now the traffic system aerates the city with large avenues which are connected to highways that have techno poles, suburbs, and shopping centers. Cities have changed their scales and forms as well as their concentration of wealth and people. The competition of production between city and countryside has shifted among the suburbs.

With the expansion of the city and the dismembering of urban structures, social life took a toll; today people spend less time with family members, friends, and neighbors as the used do in the past. The traditional social life has been reshaped by the use of new ways of communicating, such as e-mail, Internet access and phones, which allow individuals to have a multilevel social network locally as well as globally. Individuals continually move between the real world and the virtual space (Ascher, 2001, pp.30-41).

There is no doubt that Internet access is a great invention and e-mail is a great communication tool for individuals to establish contact among people all over the world; however, this does not eliminate face-to-face contact with others. It can be observed that mixed-use developments, which offer business, culture and leisure activities, restaurants, and outdoor activities, remain very popular places.
3

THE PUBLIC SQUARE
What is a Public Square?

In general it is an empty space within an urban fabric. It is made up of a floor, surrounded by buildings, and has openings to access the square. The role of the public square, as Palladio (1997, p.193) writes, is as a place

... in which people can gather to carry out business which is essential and useful to their needs; and since they are used for various purposes, each must be given an appropriate and convenient site. As well as enabling people to gather to walk, converse, and carry out their business, such ample spaces left open throughout cities embellish them greatly when they are located at the end of a street in a beautiful and spacious place...

Public squares have not always existed; they became a part of city planning only around 500 B.C., in ancient Greece. They emerged at a specific time in history, as Zucker (1970, p.19) writes:

This may be explained sociologically: only within a civilization where the anonymous human being had become a “citizen,” where democracy had unfolded to some extent, could the gathering place become important enough to take on a specific shape.

The Greek name for a public square is *agora*, which was a public open space that served as a meeting place.

Public Squares in History

Similarly to cities, buildings, and streets, public squares are time and space related. They come into existence at a certain period. During their life span, they may undergo transformation or even disappear depending on social and economic circumstances. As an example *Place des Vosges* in Paris, originally designed as a royal square, later became a residential square. Other public squares, which have lost their functions as a gathering place, serve now as parking lots.

Public squares of the medieval towns vary depending on the town’s origin. In fact, the medieval towns had different types of towns; some were of Roman origin, others were developed around monasteries, and the newly planned towns. The public squares in Roman towns and in the newly planned cities had rectangular shaped squares, and they were of small sizes.

One of the most typical features of the medieval cities is the square in front of the church, called the parvis, as Zucker (1970, pp.69-70) writes:

...a feature which became of the greatest aesthetic importance for the town as a whole: the parallel existence of two separate squares. One of them was located before the church as a parvis or was otherwise adjacent to it, the other a certain distance away, as market square. From the latter only higher parts of the church structure with its towers and steeples would be visible.

The role of the parvis was a gathering place for the faithful before and after the mass. The character of space created an atmosphere of greatness. In contrast the medieval market squares were irregular and of little spatial interest. Zucker
(1970, p.70) writes:

Mostly such squares completely lacked any spatial unity or three-dimensional form. They made good this irregularity by the contrast between the modest dimensions of theburghers’ houses and the size of the cathedral or church: human scale against divine scale, a palpable symbol of themedieval set of values.

Public squares since the Renaissance are characterized bytheir geometric shapes. Towns of the Renaissance, unliketheir medieval counterparts, were developed on town plan-
ing. Zucker (1970, p.99) writes:

Theoretical thinking and aesthetic consideration begininfluencing the creation of individual parts and of the townas a whole.

The public square was designed to reflect regularity andorder. In France, it was the royal squares which were thejewel of urban planning. The squares were of regular shapeand surrounded by uniform buildings of the same architecturalstyle. In the center of the square was placed an equestrianstatue in honor of the ruling king. The character and space ofthese squares reflected the symbolic power. These squaresserved for tournaments, parades, and games to entertain thepeople (Pinon, 1999, p.86).

Towards the end of the 19th century the huge transforma-
tion of Paris under the direction of Baron Haussmann was toprovide a traffic network of boulevards and avenues forimproved traffic. At intersections of avenues and boulevardslarger places were required so that the automobile traffic couldeasily change directions. These new places introduced thecrossing square. In the center of these squares often a monu-
mental statue or a fountain were placed (Pinon, 1999, p.128).

Modern public squares that result from zoning are placesthat are open and crossed by traffic. Because modern planningproposes the separation between the pedestrian path and thestreet network public squares became of minor importance incity planning.

Why is the Public Square called a “Square”?

In The Ten Books on Architecture, (2,1), Vitruviusmenions that the ancient Greeks laid out their fora in the formof a quadrato. The reason he called it a square is related toancient Greek planning from the 5th century BC. WhenHippodamus, architect and town planner, redesigned the cityof Miletus by arranging the streets in a rectilinear pattern, inits center he allocated a few central rectangular blocks for theagora (Wycherley, 1962, p.33). Hippodamus was the firstplanner to design the agora that way. Aristotle (quoted inWebb (1990, p.29) credited him for that contribution “... aperfectly rectangular space measuring 400 by 540 feet, sur-
rounded by stoas (porticoed civic buildings) with a singlestreet entry...” Vitruvius refers to that perfectly rectangularshape as a quadrato for its right angles rather than the fourequal lengths of its sides. Over time the word “square” be-
came a generic term referring to such public squares, indepen-
dent of their geometric shape.
PART TWO

DESIGN OF A PUBLIC SQUARE
SITE ANALYSIS
History of Arlington County

Indian members of the Powhatan Confederacy were the first to populate the territory of Arlington. They lived on wild fowl, fish, game, nuts, and berries, which the forest around the Four Mile Run provided to them. In addition, they grow corn, beans, pumpkins, and squash for their food resources and tobacco for ceremonial purposes. It was at the beginning of the 17th century that the first explorers sailed up the Potomac River and less than eighty years later Arlington hat no more American Indian residents (Rose, Jr., 1976, pp.13-15).

A land grants system was in place in Arlington for almost two centuries because of navigable waters running far back into the land, which was an attractive feature for the plantations, as it was a convenient way to transport their products directly to the ocean-bound ships. It was only when there was no more land available along the waterways that settlement of the interior began and so did the construction of roads and towns. Since the natural environment was dominated by forested area, waterways provided an est-south orientation for the population.

The settlements in Arlington were mostly built of log houses well into the 1800s; a few houses were made of bricks, which came from the clay pits of Alexandria.

At that time, Arlington was a rural area, and most households were self-sufficient by growing their own flax for linen, by shearing their own sheep for wool, by spinning and weaving cloth. Fishing was once a source of income for Arlingtonians. Fishermen caught shad, sturgeon, and herring which were salted, packed in barrels, and sold on the market.

Rose, Jr. (1976, p.44) writes:
The first travelways in this area were those pounded out by big game: mammoths, buffalo, and the like. The Indians used these trails and developed others of their own. In general, these were on high ground so that the travelers—animal or human—could overlook the surrounding territory and watch for enemies.

When these well-established routes were used by the colonists they referred to them as a “wood’s path”. A public road system was gradually developed in the 18th century. The first bridges constructed to cross Four Mile Run were the bridge from South Glebe Road and the one on Lang Street (Rose, Jr., 1976, p.44).

Arlington County has a long history and has been part of many different jurisdictions. Until 1846 it was a part of the District of Columbia, when the portion of the diamond west of the Potomac was retroceded to the state of Virginia. Arlington became a part of the County of Alexandria in Virginia. Arlington was considered as the “country part” of the County of Alexandria because of its rural characteristics. Besides a couple of large plantations such as “Abindgon” and “Arlington”, only small farms were established in Arlington where people worked the land. One of the leading residents in Arlington was George Washington Parke Custis, the step-grandson who inherited from George Washington the tracts along Four Mile Run. Arlington House, which he built on the estate, was made from local timber and clay found on his domain. Custis promoted agricultural production by the use of fertilizer and sheep breeding.

Arlington had nearly no places for social gatherings, except the Arlington Spring near the shore of the Potomac. Its first opening to the public was for the Fourth of July celebration in 1824. For decades, Arlington Spring was a prominent place for social gatherings along the river, until it disappeared with the construction of the parkway network bordering the Key Bridge (Rose, Jr., 1976, p.69).

It was in 1920 that Arlington County became an independent magisterial district through an Act ratified by the General Assembly of Virginia.

**History of Shirlington**

Shirlington is located in the southern part of Arlington County. Four Mile Run provides a natural boundary on its north side and Shirley Memorial Highway delimits it on the east side. Shirlington is an urban village, and it got its name from the combination of the two words “Shirley” and “Arlington”.

Before the urban development of Shirlington in the 1940s that area was covered by forest, as the map of the Civil War shows, except for the location of a few forts. The development of Shirlington started when a portion of the Arlington Highway opened in 1944. The map of 1945 shows a street network; on the higher elevation of 31st Street is residential housing and on its lower part is a shopping center. Years later, a library and an elementary school Abingdon were added to the village. On the other side of Four Mile Run, the playground Jennie Dean Park came into existence. By 1961, the street layout of the village was completed, which connects the lower and upper parts of the area.

The shopping center of Shirlington was developed during
the area of mass production of automobiles. It was the first shopping center in Arlington County and opened its doors in 1944. It was praised for its shopping selection and was only a short distance from Washington D.C. However, with the outwardly creeping suburban sprawl and the building of more shopping centers, 30 years later the shopping center of Shirlington had became outdated. To remedy the aging of the shopping center, the County officials and the neighborhood association of Fairlington worked together on a plan to revitalize the shopping area. They came up with a redevelopment plan that consisted of a mixed-use development that included retails, restaurants, and offices to replace the existing shopping center.

Geology

The southern part of Arlington belongs to the Atlantic Coastal Plain, and its topography varies moderately over its area. The Costal Plain province is mostly flat and defined by terraces at different elevations. Over time the terraces have been dissected through erosions. The lower layers of the Coastal Plain consist of a complex sequence of sand, gravel, clay, and silt deposits formed during the Potomac Formation; they were deposited by the ancestral Potomac River in the Cretaceous Period.

The abbreviation Qt refers to stream terraces formed by Coastal Plain, whereas the term alluvium Qal denotes the existing floodplain. Qts stands for stream terrace deposits dating form the Holocene and Pleistocene geological times. These deposits are sand, silt, and clay deposited in lowland benches 10 to 25 feet above modern floodplain. The term Tt
refers to upland terrace deposits, Tt4 indicates terrace deposits form the late Pliocene Period. These deposits are silt and clay, pale-brown to medium yellow and reddish-orange.

In Arlington there is another layer called the artificial fill af. In fact, engineers use this method of cut and fill to prepare marshes or low-lying areas for construction. A consequence of this method is that it alters the surface geological layer. An example of this method is the construction of the Shirley Memorial Highway in Arlington County, which was build on an artificial fill.

**Urban Morphology**

Urban morphology is the study of the physical form of a city. The city can be observed as a landscape that is composed of two major elements, which are the infracture and the superstructure, writes Pinon, (1991, pp.23-24). The infracture consists of the site, street pattern, and plot pattern, whereas the superstructure is made up of buildings and the empty space between them. In general, the infratruce is designed to accommodate a settlement; however, there is a relative autonomy between them. For instance, existing buildings along a street can be replaced with newer ones without necessarily modifying the street pattern. Hence, the street pattern can be seen as the most enduring element of a settlement.

Any given site is defined by its topography, which is a determining factor in choosing a street pattern. For instance, for a relative flat topography a rectangular layout of streets may be appropriate, whereas for the
7. Extract of contour map of Arlington County, Virginia (source: Arlington County, GIS, 2006.)
8. Extract of street network layer of Arlington County, Virginia (source: Arlington County, GIS, 2006.)
10. Extract of building layer of Arlington County, Virginia (source: Arlington County, GIS, 2006.)
topography of an undulating slope a more organic one may be suited.

The contour map of the Four Mile Run valley at Shirlington has a gentle concave landform; the south rim elevation is 200 feet and the north one is 160 feet.

The layout of the street network is a simple one at Shirlington, and it has somewhat an organic shape related to the contour lines. The loose layout of the street network does not display any particular geometric shape; however there is a spatial relationship between South Arlington Mill Drive and Four Mile Run. South Arlington Mill Drive is wider in width than the other streets on the site, and it carries most of the traffic going to the village at Shirlington.

The map of the plot layout shows that on the northern side of Four Mile Run the plots are small and dense, which is characteristic of residential housing. This settlement was already established by 1931, as the map of Arlington shows. The only existing buildings on the southern part of Four Mile Run are those of the Arlington County Property yard. It was only in the 1940s that residential developments started on that side, which was the development of Fairlington. The residential housing is a series of houses that stand close together. The layout of more recent plots indicates the larger size of plots around 28th Street.

The map of the building layout shows that there are freestanding buildings as well as conjoined ones. Most of the residential houses are built closely together and form a unity. The low-rise commercial buildings along 28th Street are continuous. Whereas the large apartment complex, the office buildings, and the movie theater built after the 1980’s are freestanding buildings. Many of the more recent buildings are up to 10 stories high, whereas residential housing is in general only two to three stories high.

11. Extract of Arlington County map, 1931 (source: Arlington County, Virginia)
5

DESIGN PROCESS
Shirlington

Shirlington is located at the middle-mainstem of Four Mile Run, which separates it from its northern neighborhood, the Nauck. In the 1980s a footbridge was built over the run to unify the two separate landscapes. On each side of the run extends a continuous series of hills that gently slope up towards the horizon. The backdrop of hills against the sky creates a well-defined space, which gives the impression that the sky covers the landscape like a dome on which the sun inscribes the cardinal directions.

A remarkable natural phenomenon on the site is the sunrise and sunset. The rhythm of the day orchestrates the coloring of the horizon’s luminosity from dawn to dusk. The colors are spectacular depending on the climatic conditions. During the summer months the sun appears like a white light source against the blue sky; this creates a strong sense of luminosity.

The dominant color of the landscape is green. It is composed by various shades of green from the deciduous trees, shrubs, and grasses that grow in the floodplain, whereas in the winter time their colors are a brown-gray.

The character of the Four Mile Run valley still has the
essence of a wooded floodplain, even though its development has drastically changed the image of the natural landscape. Shirlington and its vicinity have only developed slowly into settlements over the last century. The first residential dwelling developed at Fairlington along the southern hill side. The low density of residential housing consists of brick houses along the street pattern. The uniform height of these houses creates a horizontal extension which integrates well with the eroded terraced landscape.

With the redevelopment of Shirlington in 1980s emerged mid-rise office buildings along South Quincy Street. Most of them are common modern office buildings, except for the one at the northeast corner of 28th Street. The facade of that building has an arcade with sharply detailed openings. The massing of the wall is stepped, and its roof has a recessed structure. Its architecture is a nice addition to the village. 28th Street has a strong linear quality, which is created by the median strip, the tree-lined sidewalks, and the continuous low-rise buildings on each side of the street. To allow easy access from the street to other parts of the village a pedestrian passage is integrated into each low-rise building. The openings of these pedestrian passages are at the street level. This provides an impression of depth and makes the space of the street look larger. The feathery foliage of the honeylocust trees covers the ground with a dappled shade, which creates the quality of an outdoor room.

Characteristics of 28th Street

The dominant feature of 28th Street is its brick floor. The sidewalks and the 100-foot middle section of the street are entirely covered with reddish-colored bricks, effectively defining that area as an outdoor room to which was added a fountain in the center.

Another noticeable color is the gray of the commercial facades, which matches with the gray color of the sidewalk curbs and the stone tiles around the fountain. The contrast between the grayish and reddish colors articulates the space nicely.

The light green canopy of the honeylocust trees provides shade during the summer months. In the fall, the foliage turns a yellow color.

The overheads of the retail stores have a bolder expression and stronger colors than the street itself.

The outdoor seating of the restaurants brings life to the street, and the large sidewalks certainly become a part of the social life.
Design Objectives

The aerial map of Shirlington and its vicinity shows that there is a concentration of buildings around 28th Street. On its northwest side is located a large parking lot, and to the southwest are mid-rise residential buildings. Opposite to the site is the Jennie Dean Park. The large parking lot, however, could serve the community better than as just an area to park cars. In fact, the parking lot could be transformed into a cultural center with a public square that serves multifunctional purposes: a place to celebrate the Fourth of July, a place for cultural outdoor representations, a place for spontaneous street performing, a place for social gathering, and a place for resting. The cultural center is composed of several individual buildings which form a unity. Each building has its own function, in which is integrated retail stores, residential housing, and offices.

Design Concept

The design concept is to create a meaningful public square. This means a square whose space is shaped by the surrounding buildings of the cultural center. Their architectural style gives the square a specific character, which changes its physical appearance depending on the light received during the course of the day and the seasons. Furthermore, the integration of the architectural buildings with the natural environment creates a sense of place.

The general theme of the square has a historical connotation which is to celebrate the nation’s birthday. The main elements for that day are the flag, which symbolizes the pledge of allegiance, the national anthem, which symbolizes unity, freedom, and peace, and the parade, which celebrates Independence Day. The role of the square, besides being designed to celebrate the historical event, is to complement the cultural center as an outdoor room where various cultural representations can take place, as well as a gathering place for the community.

The starting point for the historical theme for the square is represented by the thirteen flags that remember the original states that signed the Declaration of Independence in 1776. The placement of the flagpoles is equally spaced along the periphery of a circle, which is located in the center of the rectangular square. The circle symbolizes the union of the states. The flags are mounted on the flagpoles only for special events such as the birthday of the nation and the birthday of the flag. On the Fourth of July celebration the mounting of the flags on the flagpoles and the singing of the National Anthem are parts of the ceremony which create the emotional part of the day. Then the ceremony continues with the parade, which comes along 28th Street and then enters the square, marches around it, and leaves it on its south side to follow the parade route.

Drawings

From the site analysis we know that the sun’s path is a very noticeable element of the natural landscape. There is a strong luminosity during the summer months. The site does not have any spectacular views or any interesting focal points. It is the cultural center that will be the focal point for the village and its vicinity. The character of the square has an enclosed quality which provides intimacy and protection for the people.

A schematic drawing of the cultural center and the square

The schematic drawing shows that the cultural center and the square occupy the place of the existing parking area northwest of 28th Street. The layout of the cultural center has its street lined up with 28th Street. The prolongation of 28th Street has an oblique layout to indicate a physical change from its commercial counterpart.

A cultural center does not mean that it has to be separated from other social-economic functions. Therefore residential housing and offices are integrated into the cultural center, as are its ground-level retail stores and restaurants. Each building of the center has its own specific cultural function which is also translated through its architecture, but the buildings all together form an architectural unity around
22. Schematic drawing of the cultural center and the public square. Pencil on vellum, 42 x 54”.

The buildings of the cultural center are the following:

1. Movie theater
2. Fitness center
3. Theater
4. Library
5. Office building
23. First drawing of the cultural center and the public square

This drawing starts to explore the shape of the public square to accommodate the Forth of July celebration. The elliptical shape seems to be appropriate for the parade’s movement around the square. As a scenario, the parade route starts from the village at Shirlington, then comes along 28th Street, turns right into the square, marches around it and leaves the square on its south side.

The proposed oval shape of the square is also carried out for the placement of the flagpoles instead of the circular shape. Pedestrian access to the square is enabled by means of three paths that lead to the village.

The large sidewalks along 28th street could accommodate the stands of the farmers’ market on Saturday morning.

23. First drawing of the cultural center and the public square. Pencil on watercolor paper, 22½ x 30".
24. Second drawing of the cultural center and the public square

This drawing keeps the oval shape of the square but increases and elaborates on the space between the square and the edge of the buildings. To connect the oval shape of the square to the edge of the buildings a line radiates from each flagpole towards the sidewalk. A tower was added to the cultural center that serves as focal point for the place. Its oblique alignment with the street directs the movement of the view towards the square. The pedestrian paths are reorganized among the building of the square to integrate them better within the existing urban fabric. The function and location of certain buildings of the center were reassigned as the following:

1- Fitness center
2- Art center
3- Library
4- Theater
5- Movie theater
6- Office building
25. Section north-south of the second drawing

The section shows that the buildings have been articulated, and the ground floor of the buildings and the tower are pierced by arcades in order to provide shelter from rain and wind. The tower was placed on the site where the views are the best towards the square and the street. The section drawing shows an enlarged plan view of a metal quarter dollar embedded into a granite slate, which is inlaid into the brick sidewalk. There are 50 quarter dollars, each of which indicates the year and the name of a particular state when it joined the union. They are placed in chronological order; the starting point of the quarter dollar series is located at the corner of the intersection between 28th Street and South Randolph Street. In this way, people can see it easily from all directions.

25. Section north-south of the second drawing. Pencil on watercolor paper, 16½ x 23½”.
Final design of the cultural center and the square

The final design is the result of various design attempts at how to define the space and the character for the square. The site analysis indicates that the sun path is very visible on the site. To incorporate this natural element into the design, I just needed to rotate the main axe of the ellipse by 3 degrees northwest in order to aligned it with the north-south direction. Then, this became the reference point for the entire construction of the cultural center and its square.

An impressive element of the square is the 200-foot flagpoles, which exceed by far the buildings’ height on the cultural center. On the Fourth of July flags could be flown lower into the square so they become a part of the celebration; otherwise, they fly up high. With the rhythm of the day the cast of the flagpoles is projected against the wall of the buildings and the square’s floor, moving west to east. This shade movement provides a sense of time.

The space of the square is visually divided into two parts: the inner space of the ellipse is contained by the flagpoles and the other space by the edge of the buildings. Each building has an arcade on the ground level, except for the library which has monumental stairs. The facades of the buildings are straight and interrupted by balconies. The proportion of the square in relationship to the vertical elements, which are the flagpoles and the buildings’ height, creates a strong feeling of verticality, which contrasts with the natural landscape of horizontal expansion.

The relationship between the inside and outside of the square is relatively closed except on its south side, where it opens up to 28th Street. The enclosure of the three sides of the square it is not complete, but it is interrupted with pedestrian paths. This makes the outside of the village feel present in the square and provides a sense of emotional security. The enclosure of the square is sufficient to experience the square as an outdoor room.

Below the cultural center is located an underground garage, which has a functional purpose of parking cars, but it should also provide people with the north-south orientation. The pillars of the buildings could be made distinctly to indicate which one they are supporting. In this way people already have a sense of orientation of what to expect on the ground floor. The underground garage wall could be covered with white tiles and picture images to brighten up the atmosphere of the underground.
26. Final design of the cultural center and the public square. Pencil on watercolor paper, 22½ x 30".
27. Final site plan. Pencil on watercolor paper, 42 x 62".
28. **Section looking west.** Pencil and collage on watercolor paper, 22½ x 30".
29. **Section looking north.** Pencil and collage on watercolor paper, 22½ x 27”. On the Fourth of July the flags are lowered into the square so that they are a part of the celebration.
30. Plan and section of the pool. Pencil on watercolor paper, 10 x 15½”.
The pool located at the center of the ellipse is one foot deep. A relief map that shows the thirteen original states is placed in the pool in such a way that the relief slightly emerges from the water. For each state, a water jet is geographically located at its state capital, except for Pennsylvania. The direction of the water jet’s movement converges on Philadelphia. The pool edge serves as a sitting area.

31. Flagpole section. Pencil on watercolor paper, 4 x 16”.
The flagpoles are made of stainless steel and have at their base a sitting area. The flagpoles are 200 feet tall with large-sized flags.
32. Flagpole base section. Pencil on watercolor paper, 6½ x 10”.

33. Flagpole plan. Pencil on watercolor paper, 6½ x 6½”. There are thirteen equally spaced flagpole bases around the pool, one for each original state. Each flagpole base is partitioned into six parts. Each of the six parts identifies some facts about a state: the state name, the state capital, the state nickname, the state motto, the state song, and the state flower.
## State Characteristics

<table>
<thead>
<tr>
<th>State</th>
<th>State Capital</th>
<th>State Nickname</th>
<th>State Motto</th>
<th>State Song</th>
<th>State Flower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>Hartford</td>
<td>Constitution State</td>
<td>“Qui transtulit sustinet” (He who transplanted still sustains)</td>
<td>Yankee Doodle</td>
<td>Mountain laurel</td>
</tr>
<tr>
<td>Delaware</td>
<td>Dover</td>
<td>First State</td>
<td>“Liberty and Independence”</td>
<td>Our Delaware</td>
<td>Peach blossom</td>
</tr>
<tr>
<td>Georgia</td>
<td>Atlanta</td>
<td>Empire State of the South</td>
<td>“Wisdom, Justice, and Moderation”</td>
<td>Georgia on My Mind</td>
<td>Cherokee rose</td>
</tr>
<tr>
<td>Maryland</td>
<td>Annapolis</td>
<td>Old Line State</td>
<td>“Fatti Maschii, Parole Femine” (Manly Deeds, Womanly Words)</td>
<td>Maryland, My Maryland</td>
<td>Black-eyed susan</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Boston</td>
<td>Bay State</td>
<td>“Ense petit placidam sub libertate quietem” (By the sword we seek peace, but peace only under liberty)</td>
<td>Hail to Massachusetts</td>
<td>Trailing-arbutus</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Concord</td>
<td>Granite State</td>
<td>“Live Free or Die”</td>
<td>Old New Hampshire</td>
<td>Purple lilac</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Trenton</td>
<td>Garden State</td>
<td>“Liberty and Prosperity”</td>
<td>I’m from New Jersey</td>
<td>Violet</td>
</tr>
<tr>
<td>New York</td>
<td>Albany</td>
<td>The Empire State</td>
<td>“Excelsior” (Ever Upward)</td>
<td>I love New York</td>
<td>Rose</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Raleigh</td>
<td>Tar Heel State</td>
<td>“Esse Quam Videri” (To be rather than to seem)</td>
<td>The Old North State</td>
<td>American dogwood</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Harrisburg</td>
<td>Keystone State</td>
<td>“Virtue, Liberty, and Independence”</td>
<td>Pennsylvania</td>
<td>Mountain laurel</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Providence</td>
<td>The Ocean State</td>
<td>Hope</td>
<td>Rhode Island, It’s for me</td>
<td>Violet</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Columbia</td>
<td>Palmetto State</td>
<td>“Dum Spiro Spero” (While I breathe, I hope)</td>
<td>Carolina</td>
<td>Yellow jessamine</td>
</tr>
<tr>
<td>Virginia</td>
<td>Richmond</td>
<td>Old Dominion State</td>
<td>“Sic Semper Tyrannis” (Thus always to Tyrants)</td>
<td>Carry me back to Old Virginia</td>
<td>American dogwood</td>
</tr>
</tbody>
</table>
34. **Thread model view.** The purpose of this model is to show the surface level of the square’s floor. The inner nails represent the border of the inner ellipse of the square. The large portion of the ellipse slightly slopes down towards the double nail rows that indicate a drain area. Similarly, the smaller part of the outer ellipse slopes down in the opposite direction, representing the sidewalk. This method visually shows how the water is collected on a rainy day.

35. **Decorative drain plan.** Pencil on watercolor paper, 5½ x 8½". The rain is a natural feature, and as such is part of the square’s experience. To provide adequate drainage is essential for a built environment. On a rainy day, the water flows over the square’s brick floor towards the drain. The drain cover is made artistically from cast iron. It lets the rain water pass through its openings into the drain, which is connected to the storm sewer system. The decorative motif of the drain cover is more elaborated on the square side than the one on the street side. The decorative drain cover not only embellishes the square but also collects the rain in an aesthetically pleasing way.
36. Sidewalk pattern details. Pencil and collage on watercolor paper, 11 x 18”.
The sidewalks of 28th Street in the part of the cultural center have similar bricks than those used on 28th Street. However, the stone pattern of the right hand side sidewalk is more detailed than the one on the left hand side. Its middle section has a row of imbedded quarter dollars, and on its left side is located the drain, the cast iron cover of which has a simple decorative motif.
37. **Planting plan for the square.** Pencil on watercolor paper, 14½ x 30”.

It consists of various sizes of plant containers. They are placed according to the plants’ growing needs along the sidewalk and the monumental stairs either in groups or singly. The plant selection for the containers is made from the state flower of the thirteen original states. These plants vary in sizes, from a few inches to several feet tall. The color palette of the plants is white, yellow, pink, orange, blue, and green.
38. Monumental stairs.
The monumental stairs are designed for the library, the most important building of the cultural center. It is located at the north side of the oval and acts as a backdrop for the square. The stairs are composed by a series of steps followed by a platform. The first platform is large enough to house the reviewing stand for the Fourth of July parade. The top platform of the stairs serves as the entrance to the library, but also constitutes a junction how people can circulate on the first floor. It connects with the bridge on the right hand side and with the public balcony on the left hand side. The public balcony on the first floor which goes along the theater and the movie theater can be seen in picture 39. As stairs, they promote the vertical movement from the square to the first floor.

The tower at the south edge of the square constitutes a junction, from which people can move in different directions. One option is to walk along the 28th Street without entering the square. Other options are to enter the square, to exit the square between the tower and the movie theater, or to enter the tower.
40. **View looking down to the square.**

This picture shows the total space of the square. It is confined by the building walls and flows out of the square through the pedestrian paths and 28th Street. The openings between buildings connect the square visually and physically to the village. This provides people with a sense of orientation and emotional security.
41. Views looking towards the square. These scenes of the square are visible when walking along the pedestrian paths coming from the village.
42. Views looking outside the square. These views are visible when leaving the square via the pedestrian paths leading towards the village.
43. **Shade study of the square for the month of July.** These pictures show the shadow cast by both the buildings and the flagpoles on the square at hourly intervals from 9.A.M. to 3.P.M. During the course of the day the square interchanges the shaded areas with the sunny ones. During the summer months the shaded areas provide comfort for people, whereas in winter time the sunny area feels pleasant to enjoy outside.
44. Site model
The site model displays the entire cultural center, and how it integrates into the existing urban fabric. On its south side the stepped facades of the buildings help to integrate it with the height of the residential buildings. The difference in height between the low-rise commercial buildings of 28th Street and the cultural center is intended to act as a visual contrast between these two elements. The bridge that connects the cultural center with the Jennie Dean Park unifies two important human activities, which are culture and sport, and it reinforces the pedestrian network between the village and the northern neighborhoods.
45. Viewing the cultural center from a distance. The flagpoles and the flags together with the tower constitute a point of reference for the surrounding areas.
6

CONCLUSION
Discussion

The cultural center designed at Shirlington is an extension of the commercial street, 28th Street. It aims to become a place where the community of Shirlington and its vicinity, as well as others, can enjoy collective events. It is a place where people can freely express themselves in an environment that has been conceived for them. The architectural setting of the cultural center plays an essential role in shaping the atmosphere of the square and in setting the stage for public events to take place.

The main feature that differentiates the public square of the past and that of today is its location. Due to telecommunication tools, such as the cellular phone and the laptop, people can communicate with each other without being physically present. It frees us of place constraints, but at the same time it has weakened our social fabric. As great as the digital tools may be, they do not provide face-to-face interaction, and direct contact is still the most valuable means of communication.

Another aspect of human life is that we need to feel we belong to and identify ourselves with our environment. With the fragmentation of the urban structure, the traditional town and the square have lost their functions as meaningful places. However, this does not mean that the public square is no longer needed; rather, it needs to be relocated in the center of today’s activities, where it can play again its role as a social and cultural place.

Modern man understands that besides technology he needs something more to make life meaningful, and reaches...
out to art. Architecture is an art form, particularly the building of museums; Rykwert (2002, p.236) says, “The museum has now become the only universally recognized institutional building, and it has therefore assumed an unprecedented importance as a type in modern cities. ... a new kind of museum/art gallery is developing as a landmark and a city magnet.” He cites the example of the Bilbao Guggenheim museum in Spain, a show piece of architecture that attracts people from all over the world to view not only its collections and exhibitions, but also the prestigious architectural building itself.

Another cultural center well known for its architecture is the Center Pompidou in northern Paris. The Center was built in 1977 on an existing urban fabric that had been demolished; this construction is the result of a reclaimed space. The architectural expression of the Center is a signature of our time, which sharply contrasts with the historical buildings on that site. The Center also attracts people to its exhibitions and cultural activities, as well as the experience that the building and the public square provide. Tourists from the four corners of the earth come to visit this cultural center, some of whom are artists who come especially to exhibit their skills in the square.

This is the kind of ambiance that the cultural center at Shirlington could also have in its own right. The strength of the cultural center as a meaningful place depends mainly on how it is built and how well it combines with the local natural forces. If these two elements work together to form a unity, then people can experience a “strong feeling of location”.

In order to conceive a meaning place, we should listen to what nature tells us about a place and listen to what humankind’s psychology tells us about our deepest feelings concerning our dwelling place.

The act of listening is poetically expressed by the Ecoute sculpture made by Henri de Miller in 1986.
Bibliography


