City And Its Open Spaces

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Abstract: The city requires open spaces of sufficient breadth to maintain a balance between the regions. The city has a circulatory system that brings together the various regions and provides facilities to carry trade goods from farm to distribution centers in the city. Cities have many shortcomings in service to its population. Cities can be too dense, too many houses are less worthy, the unemployment center, and has its government. Taxes tend to be high while the service is inadequate. Even so, the cities will still be there. The task for planners at all levels, both government, and private sectors are seeking to be important elements in our social system is more comfortable to live in, especially when it is in the city found many open spaces that can neutralize the possibility of air pollution. Formation and good urban planning is the dream of society. With a good arrangement, the city will be more comfortable as a residence. Urban and open space are two things that can not be separated from one another. Although it has different functions and benefits, remains a single entity. It really should be understood by all urban communities.

Keywords: City, Open Spaces

1. INTRODUCTION

The city has a population concentration in the sense of a certain geographic area that feeds the city itself permanently from economic activity in certain regions. Cities can be a center of industry, commerce, education, government, or cover all these activities. The diversity of this opportunity will attract residents from rural areas to cities. Thus, it is seen that the city tends to be large when the economic base is broad. The small towns are usually the satellites that depend on big city to maintain its economic life. For example, the parent city has many functions, while the regions of residence in suburban provide housing for potential employment. The urban development poses a lot of changes in the surrounding environment. The buildings that occupy the land which was originally empty, hardening of the streets and smoke from factories, can change the microclimate of the city. Sometimes the changes are not expected to be dramatic. The future of mankind is not only in urban areas but also in dealing with the many problems posed by the urban areas, as well as order, security, culture and so on. It requires a readiness to live in urban areas by accepting all forms of potential impacts of the urban areas. The city is the center of the activities, trade, industry, government, politics, tourism, culture and all factors that support for the continuation of the activities such as, traffic, railways, bridges, poles and wires as lighting network or telecommunications, office buildings, and dwellings. It creates a rigid and hard to a city, which is a hallmark of a big city. In the construction of the cities, there is a long record of the failure to understand, appreciate and respond to the consequences of the destruction of nature with the qualities essential in urban open space. Nevertheless, overall open spaces plans of the city, as well as the open space of the elements of the city, had to be a harmonious whole. It is expected that the fundamental relationship between rural areas is generally green towards the city center, which is the end point of these things is the open space of the city, the urban forest or lungs of the city.

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To create or plan a city as described earlier, someone had to understand a little more basic premises and techniques or methods of planning and implementation. Development requires art. Art includes something the functionality and beauty of the existence of open space in urban areas. Art can also be interpreted as giving a feeling of fun and enjoyable to us through the senses of sight, hearing, touch, smell and taste. Human nature, character, and nature is the result of a reciprocal relationship between the state of the environment. Humans create new patterns of social life with humans; humans are also creating a pattern of physical nature. Both of these patterns in a cohesive environment. At the end of heredity and environmental conditions play a balanced role in the formation of the face and character of a city.

2. THEORIES

2.1 Establishment of the City

The simplest definition of urbanization is a partnership or a statement of neighboring tribes who had gathered to a center that is used as a place of meeting for worship purposes of protection and the like and therefore is a political institution or sovereignty formed by such societies. An urban area can also be defined as the union of cells residential neighborhoods, or places where people work together for the common good. Types of urban areas can be varied by the diversity of the various activities conducted there as production tools and an assortment of goods and services, or a combination of all of these activities [1][2]. The third definition states that urban areas are locations where there is a possibility of a diverse living environment and lifestyle is different. People live, work and enjoy life in social relations and cultural given by the proximity in urban areas. Urban areas can also be simple and complex. Urban areas can have a rural atmosphere or ambiance technical workshop. Urban areas can be small and easy to maintain, or very large and filled with economic problems and contradictions. Lewis Mumford wrote, "Although the township new permanent initiated since Neolithic times, but the habit to gather into caves for holding ceremonies magical together appear to have been started since the earlier period. The people living in caves and perforated stone walls have survived in areas that are highly dispersed to this day". Township is also a good place for the shrine to the creator, somewhere meetings to gather and a center for trading [3]. Urbanization arises due to the dense neighborhood by residents. The increasing number of functions, the growing settlement. Preservation of fertile land gradually became

neglected lot. The land is still used for agriculture, crammed with so many artificial fertilizers so that these lands are forced to farm, because the less agricultural land as a result of largely been earmarked for settlements. Attention protection of arable land is very slow, but now instead of attention to the preservation of worldwide has increased considerably. Compared with the township, a large settlement that then arises is due to the growth of food crops and livestock in the future more permanent than ever before. Production of wheat crop saved from year to year provides stability for providing security against famine. Urban areas are becoming more known than the type of food that can be preserved, wheat and rice in the region of Eastern Europe [4][5]. The ability to preserve food, allowing people to do other activities. With the development of economic diversification that is not overly dependent on the production of food, it is possible to draw people into the labor market and create jobs in a variety of forms. It leads to the growth of the rural village or a city, working according to the fundamentals of economics and politics are different than would be possible in the forms simpler. The cities newly formed still retain many social and physical characteristics of urban areas before. Even now, supplies of food from agricultural centers are located in the surrounding farmland. Urban centers like this have no reason to grow up beyond the size limit is determined by the basic needs [7][8]. Smailes described, a thriving city in the four thousand years before Christ in Africa and Southwest Asia are Egypt, Iraq, Masopotamia, and Pakistan. Starters and urban revolution occurred in the agricultural areas that have natural irrigation, which is in the valley of the Nile, in the Delta region of the Persian Gulf and the plains of the Indus River. In these areas, where the population requires agricultural grains (wheat), because of frequent flooding and because of the growing use of the plow, the production of food increased, so that agriculture can feed the population who are not farmers, in large numbers. Smailes also outlines specific natural conditions have a positive impact on the position or asana of a city at the beginning of its development, and the subsequent development of these positions grew wide. There is a classification of the position of the city, such as the position of the city caused by the flow of traffic that intersects, the valley, the river conditions intersect, by the confluence of sea and river (estuary). The morphology can be useful as a protective (e.g., river water / lake, or beach steep), and so forth. Apart from that, the state of morphology, such as traffic flow patterns, can clearly affect the situation (relationships with the wider region), so that a place could be a potential for centralization of the population. A city can be great and prosperous, due to the good situation, although there were shortcomings in certain respects.

2.2 Urban Types

Since the first time, every urban area in compliance with the specific purpose of the social and economic structure of the city [6]. The urban area has a specific function, singular and plural. Thus there are the types of urban as follows:

a. Crossroads. This form is the simplest, expanding or shrinking with the movement of traders from one place to another. Another place is the place to rest, eat and exchanged merchandise and ideas. The location can be on a transport terminal, such as a seaport or river.
b. Main Agricultural Region. This location is an area of service to rural activities. The materials will be the main agricultural needs can be obtained here. The crop is sent to a treatment site.
c. The City of Commerce. Business activities, exchanges, and merchandise transactions are done at this place. A wide variety of items is available to be selected by consumers.
d. The City of Industry. In this place, raw materials or semi-finished goods are processed into finished goods and shipped all over the world.
e. The City of Transportation. This kind of city is located in the center of the transport network, where the goods are brought from distant places to be distributed to the other corners.
f. State Recreation. Due to climatic or other special aspects, this kind of town attracts a large number of people for purposes not related to work or effort. For example, the gambling center, resort, sports center, or a beautiful scenic area.
g. Education City. An institution or group of major educational institutions in the city is the main function of this kind. For example, Claremont, California, Davis, New Jersey.
h. Mining Environment. The economic base is a mineral collection. Environmental diamond mining in South Africa is of this type, as well as cities in the area of coal mining.
i. Environmental Retired. Such places include cities; the main income comes from salaries and retirees. Areas in the path of the Sun in the United States is an example.
j. Government Center. Central government activities, where the main employer is the government.
k. City (Regional) combination. Some cities have all or in part, of the functions above. Therefore this kind of city is larger and more complex than in each of the above types of environments.

2.3 City Development Patterns

Because the topography is a uniform and homogeneous economy in a region, it will develop several patterns of development of the city such as the following:

a. The pattern of spread, because the topography is a uniform and homogeneous economy in a region, it will develop a pattern that spreads.
b. The pattern of parallel, parallel patterns of urban occur as a result of the development along the road, valley, river or beach.
c. The pattern clump, clump urban pattern is developing related to mining. If the topography is rather flat, but there are some real local relief, then there was a clump of cities. For example, strewn city, a group of cities that lie close together, and in this case there is not one important city from the other. Such scattering of the city can be considered a big city.

Since the development of the city, it can be said that the cities arise as a result of the development potential of the area (natural and human), and then the city can play a role in developing their respective areas [10]. Most cities arise because the area has a surplus of agricultural production, so that there specialization of livelihood for most of the population

does not need to work as a farmer, but it can do another skill. In further developments, the cities can grow as trade, industry, mining, and so on. Hippodamus, the first city planner, who was born in 480 BC. His planning theory is "a straight and wide road, grouping the house regularly, and special attention to the combination of parts of the city so that the city is a harmonious whole, with a market in the town center." According to Doxiadis in Ekistic, a larger town name is a metropolis, with a population of over two million people. Megapolis has a population of a hundred million or more. The Urban region has a population of more than seven hundred million inhabitants and is a town in the entire region [9]. Urbanized continent has a population of approximately five billion soul as well as the cities across the continent. Crown ecumenopolis population of roughly thirty billion people worldwide and is the city. In urban planning, according to Foly, there are two approaches:

1. Approach by unit. This makes an image of the pattern of the physical environment that is destined for society, and promote the development and conduct such arrangements, to ensure that the community will be able to evolve towards the pattern of the physical environment made for the future
2. Approach by harmony. It aims to review the plan of the city as a complex tangle of various parts that are functionally interdependent. Urban planning in this approach only tries to influence a variety of energy development that are applicable and does not seek to establish a specific city, which provides for the future.

At present, the latter approach is what can be done. According to Lean, an urban planning may not only aim to organize resources wisely course, because the urban planning considering the various actions and human behavior, so as to have a variety of purposes. According to Bruton, urban planning also known as urban and regional planning, or planning a space, which is a mixture of general planning and physical planning. General planning is a procedure in which a prearranged scheme, and is an activity that is done by people, various agencies, and so forth.

3. Result and Discussion

Viewed as a whole human life, human efforts in fulfilling their needs is a major factor in maintaining survival. Human needs are food, clothing, living space or housing, education, and health. Of these elements, space plays an important role. Space can not be separated from human life, either emotional psychology (perception), as well as dimensional. Humans are in space, move and to live, think and also create space to indicate the world. An artistic creation called the space architecture. It includes the interaction space of the space in the outer space, which require further restructuring.

3.1 Space

Space are very important for human life, all human life and activities related to aspects of space. The existence of a relationship between man and object, both visually and through auditory, or olfactory senses of taste, will always give the impression of space. The philosophers who try to interpret the space gives a different one of them, Immanuel Kant, argued that the space is not something that objective as a result of human feeling mind. Meanwhile, according to Plato, the room is a framework or container where certain objects and events are. It can be concluded that, space is a container that is not real, but it can be felt by humans. Space is not separated from human life, because human moves and being in it. Space will not mean anything if there is no man, therefore the starting point of the design should always be based human space. Human relationship with the environment of space can be divided into two, such as:

1. Dimensional relations, concerning the dimensions associated with the human body and its movement for human activities.

2. Psychology relationship, this relationship determines the measures need space for human activities. The relationship involves both human perception of space environment.

In the relationship between humans and space, Edward T. Hall wrote that one of our important feelings about the room is feeling territorial. This feeling will meet the basic needs of identity, comfort, and security to the human person. It is a large pedestal field influence on the formation of the outer space because these fields are closely related to the function of the space. The surface of the floor in the room can be divided into two, hard materials and soft materials. The effect of different materials used to distinguish the functions of different outer space. In addition to flooring material difference, the difference in height on a plane floor would form an impression and function of the new space without interfering with the visual dimension of relations these spaces. In the vast outdoor space, floor height differences on some fields can reduce the sense of film and create the impression of a more humane. Wall as a barrier outer space can be divided into three kinds:

a. Massive wall, the ground is sloping or vertical. The walls of the building in the form of brick, concrete and so on. The nature of the wall is very strong in the formation of space.
b. Transparent wall, this wall consists of a field that was transparent like a bamboo fence, metal, wood which is not tight, trees and shrubs are tenuous. The nature of the wall is less powerful in the formation of space.
c. False wall, a wall formed by a feeling of the observer after observing an object or situation.

The wall can be formed by the boundary lines, for example, the boundary line of the river, the sea, the horizon, and so on. The impression of space is also affected by the height eye sight is closely connected with the formation of a high wall outside the room. The impression of a strong outer space can be grouped into:

- The height of the wall that collapsed once.
- High-wall limited to the human eye.
- The height of the wall above the man's head.

Limitations of space is basically divided into:

a. High above the eye was as much protection.
b. High extent of the chest is to form a space that most felt.
c. Below the waist is regulating traffic or circulation pattern forming.
d. Knee is a directional pattern.
e. As high as the feet are as cover.

In the science of Landscape Architecture, essentially space occurs because the relationship between an object and a man who saw it (the sense of the eye). In architecture, the sense of space is connected also by smell, hearing and touch. A same space, sometimes the atmosphere is totally different, because the effect of rain, sun or wind. For example, a family who are traveling to the zoo. In a corner under the shade of leafy trees, they roll out the mat, sat casually, around the dish is served, as there was a room. However, what's next when it rains, they run, roll up the mat, looking for a steadfast, in this case, is there room happened? It is clear that the actual space does not exist, does not seem so alone, having to go through time, to give the impression of space where we can move on and enjoy. Understanding the science of space was critical in Landscape Architecture. Various spaces are as follows:

a. Static space. It is a space with fixed boundaries such as the fourth-floor walls and ceilings shape can be square, rectangular, circular, oval and so on.
b. Dynamic space. Space, in this case, is a form that is not fixed or not is obviously a restriction, but can only be felt, whether through a sense of smell, taste, and sight.

3.2 Open Space

In general, the sense of open space, including several classifications of utilization or use of land or land that is likely to have the same harmony. Special spaces that are like the landscape, whether it is natural or artificial. For example:

1. Natural landscapes, wilderness areas, rivers, bays, lakes, oceans, hills, mountains, canyons, reefs, deserts and so forth, as well as a blend thereof.
2. Made landscape, people, water reservoirs, base minerals, agriculture, parks, plazas, flower gardens, golf courses, cemeteries and so on.

This open space is basically a container that can accommodate the activities of certain activities of the residents of the neighborhood, either individually or in groups. The shape of the open space is highly dependent on the pattern and arrangement of the building mass. According to the nature of public space can be divided as follows:

1. Closed Public Space, which is a common room contained within a building,
2. Public Open Space, which is a common space outside of the building. Definition and limits of public open space patterns include:
   a. The basic shape of the open space outside the building.
   b. Which can be used by the public (everyone).
   c. Provide opportunities for various activities. For example, road, pedestrian, parks, plazas, cemeteries, around the airfield, a sports field.

In the environment, open space according to Ian C. Laurit, open spaces in the environment that is natural and human environment can be grouped as follows:

1. The open space as a source of production, among other things such as forestry, agriculture, mineral production, animal husbandry, aquatic, fisheries and so on.
2. The open space as protection against natural and human wealth. For example, a nature reserve in the form of forests, marine life/water, cultural and historic area.
3. Open space for health, well-being, and comfort among other things:
   a. To protect the quality of groundwater.
   b. Setting, the water drain, garbage and others.
   c. Repairing and maintaining air quality.
   d. Recreation, neighborhood parks, city parks and so on.

The open space regarding its activities, can be divided into two:

1. Active open space, is an open space that contains the elements of the activities in it. For example, play, sport, ritual, communicating, exploring, where this space can be a plaza, sports fields, playgrounds, greenery on the edge of the river as a place of recreation and so on.
2. Passive open space is an open space in which it does not contain human activities which include reforestation or garden as a source of aeration environment, greening as the distance to the railway line and others.

According to Rob Rmer, open space can be broadly divided into two types, such as:

1. Elongated. In the open space elongated, only have the limits on its side, such as road, river, and others.
2. Sticking. This open space has boundaries around it. For example, field roundabout and so forth.

There are two types of open space by its nature, such as:

1. The open space environment is open space contained in a public environment and nature, which is planning the preparation of open spaces and spaces of the closing will affect environmental compatibility.
2. The open space of the building is open space by building walls and floors of the building yard. This open space is public or private by the function of the building.

The function of open space as a place to play, exercise, relaxing place, a place to communicate socially, a transition, a place to wait, as a space open to get fresh air with the environment. It is as a means of liaison between somewhere with the others, as a barrier or distance among the mass of the building. By the Ecological function of open space is as follows:

1. Air Freshener. Plants found in open spaces take on the rest of the carbon dioxide (CO2), and dirt from the air, otherwise produce acidic substances (O2), which is indispensable for human breathing. Thus, the plant serves as the lungs of air purifier. Also, also, the plant has a great influence on the state of the environment, plants or plants can cause weaker local environment becomes cool and comfortable, although the weather in the air is very hot.
2. It absorbs rainwater. Land planted with herbs or plants is water storage (reservoir). Rainwater that falls torrential will be retained by each Courant plants, then into the soil pores. Water in the ground or stored in the roots of plants, for example during the dry season. It is also that allow the survival of crops in the dry season and the stable groundwater for other purposes for human beings.

3. Flood control. Soil erosion by flowing water can be avoided with the binding of the soil by the roots of plants.
4. Maintaining ecosystem set of plants or herbs contained in an open space is a sanctuary for animals that live around us, such as birds, soil microorganisms, and other animals.
5. Softening of the architecture. Plants can create living space for humans in the natural environment as well as possible, given the biological factors and physics. The presence of elements that are well planned and thorough will add to the beauty of the city.

3.3 Space and Time

Space has been there since the beginning, not made by man, but man can feel, and space that can be felt by everyone is different. A perceive the space, not necessarily to be perceived by others. According to Rudolf Arnheim, space can be imagined as a set, limited or unlimited, as the empty state already prepared and have the capacity to be filled goods. According to Immanual Kant, space is not an objective or real, but it is a subjective one as a result of human thoughts and feelings. According to Einstein's time is the fourth dimension of the earth, whereas according to Aristotle and The Pythagoreans, time is a realistic ongoing, independent of any other object and without direct relationships with other phenomena. Time objectively is something that does not have a separate state or an observer. According to Herman Minkowski, time shall be burned as shadows, only the union of the two that can show the state of both time and space. According to Van Doesburg, time is a dimension or magnitude than the amount of space and a space of time. So time and space dependent on each other. It does not exist without each other because of movement and exchange is always fixed. Space can not be separated by time. Space in the landscape design is the outcome of a three-dimensional, the way in which it gives the level of the value of the space itself. The overall space can be either or shared by elements of nature, the form of soil and plants. Space is limited not only by nature but is the result rather than a natural process or a room similar to restricted areas can also be created by humans from the natural elements. Landscape Design is an extension of site planning and cover or reaches the site planning, related to the choice of design elements. In short, design is a way of working that is very complex, with many alternatives. From the opinions that have been described previously, it can be concluded that space is a container that is not real but can be perceived by humans. The feeling is the perception of each through sight, smell, hearing, and interpretation. To specify the forms of his world, man creates a separate room, with basic functionality and beauty, which is called the Hall of Architecture. Architectural space concerns:

a. Inner Space is limited by the board, floors, walls, and ceiling or roof.
b. Outer space that occurs with the natural limits only on areas of the base and walls, while the roof can be said to be limited.

The outdoor space according to their physical impression, divided into:

1. Positive space, an open space that is processed by the laying period building or a particular object. Usually, there is contained the interests and will of man.
2. Negative space, open space spread out and not function clearly. It occurs spontaneously without specific activities.

Besides the positive space and negative space, also known as the:

a. The living space is the correct form in conjunction with the quality to have a composition with a well-planned structure. This space must be something to do with the character and the mass and function of such structures.
b. Dead space is the opposite of living space, a space formed by unplanned and can not be used, or also called the space formed by accident, the remaining space.

Structure and space should be planned and developed together as a blend implies solids and voids.

3.4 Classification and Function of the Open Space

Classification and function of open space are as follows:

1. Open space for production management of resources, such as:
   a. The land for forestry
   b. Land for agriculture,
      - Land with high fertility
      - Land for specialty crops
      - Flowering
   c. The land for mineral production
      - Mineral unused
      - Minerals for local consumption (sand, gravel)
   d. The land for livestock production (meat, milk, sheep's wool)
   e. Land for water supply
      - Regional groundwater reserves
      - Regional sunken water
      - Tread water reservoir or storage
      - Production of energy
   f. The area waters for commerce and recreation and fish production.

2. The room is open to the preservation of human and natural resources.
   a. Water, tidal areas and swamps to the habitat or the life of the types of fish and wildlife
   b. The trees and jungle as settlements beasts.
   c. Geological Characters
      - Coral Reefs
      - The area of land cliff
      - Earthquake zones
      - The beach and sandbar
   d. The place and the soles of cultural heritage and history
      - Pesantren
      - Regional settlements indigenous people
      - Walking trails, roads and so forth
      - The tomb or grave hallow

3. Open space for health
   a. The land for the protection of groundwater quality
   b. Open space for trash
   c. The open area to improve the quality of the springs
   d. Recreation areas
      - The gardens of the environment

- The gardens of the city

e. The area for recreational outings
   - Walking, cycling, horse riding, etc.
   - Driving through streets with a wonderful panorama
   - Flow and water basin

f. Regional landscape or visual effects lure
   - Hill-hills, mountains, valleys, lakes, beaches
   - The open space area Community or public collection in this case a square or a joint field
   - Panorama-panoramic views and so on

4. The room is open to the public security
   a. Reservoirs flood control, channel or canal, as puddles or stagnant water
   b. Regional security eroded soil
   c. Zone around the airfield
   d. Fire safety zone

5. The open space as a corridor
   a. High-voltage cable corridor
   b. Gas pipelines, oil corridor
   c. Roads, railways corridor

6. The open space for urban expansion reserve
   This space is reserved for various expansion needs (housing, public facilities, industrial complexes trade, depots rice food, oil, other fuels and so on.

7. Buffer zones or buffer area
   a. The open space border
   b. The open space as a separator or buffer of activities that are contrary

3.5 Standards Requirement

In general, a standard open space requirement for each city of a country are not always the same because it depends on the conditions and situations as well as the wisdom of government of the city or the country. The standard is an open space for play activities or exercise, while for recreation activities, and so on are not included. The standard residential neighborhood in the city issued by the Directorate General of Cipta Karya. The residential neighborhood is classified into three environments:

1. Playground (20-50 families, 100-200 inhabitants), wide open space for playgrounds is 200 square meters.
2. Kindergarten, (160-200 families, 800-1000 inhabitants), wide open space for playgrounds is 800 square meters.
3. Elementary School (600-1200 families, 3000-6000 inhabitants), wide open space for playgrounds including athletic field is 11,400 square meters.

According to J.O. Simond's book, are as follows;

1. Neighborhood (1,200 families, 3,600 inhabitants), every 1,000 residents, require a minimum of 3 acres for pages play in schools, recreational areas and a park, not including the parkway for vehicles.
2. Community (10,000 families, 36,000 inhabitants), every 1,000 residents, require a minimum of 5 acres of the school grounds, athletic fields, and the park, including a public outdoor space for the neighborhood, but not including roads highway and park Bay

The open spaces in a city is an open space or land that is set aside for purposes other social, public facilities and so on. The function according to its existence, such as open space by the road or the green line, the island's roads, parks intersection roads, sports grounds, watersheds, where the open spaces in the city..

4. Conclusion

City formed from the grouping people or people in an area due to the displacement of a place that is done to get protection. In the end, will form village-township which is based on the condition of the area where it is no longer possible to do farming because of limited land. Eventually, it will form a city with their supporting facilities and means of supporting the establishment of a city, such as roads, storage of money or goods, places selling food and drinks and so on. Open space by the time the city was formed. This occurs due to the formation of the spaces that are not planned for a building, such as fields for playing sports, for gathering and other activities that use materials or land which is not walled and roofed. The open space has many functions and benefits, meaning and kind. All were formed based on the functions and benefits as well as the previous types are not through a planning process. The open space in a city, it can be said as well as the city's lungs and heart. It is required by humans or urban communities and other living beings that exist around the human environment.

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