

THE LANDSCAPE OF A PUBLIC REALM IN THE FUTURE CITY

M. Lasocki

PhD. Eng. Arch., Faculty of Geography and Regional Studies, University of Warsaw,
Faculty of Architecture, Warsaw University of Technology,
ul. Karowa 20, 00-324 Warszawa, Poland, maciej.lasocki@uw.edu.pl

The abstract: Kevin Lynch in his book „The Image of the City” has described a city landscape that consists of a few elements: paths, nodes, edges, landmarks and districts. For sure, a human being is able to perceive only a small part of a city space and all elements that belong there. A public realm of a city is the place where most of these elements are located. Therefore architects and urban planners are deeply concerned about a design of the public realm in cities. The Author considers possible changes that may occur in the landscape of the future city. Cultural, technological, economic and social phenomena in a contemporary city will change the meaning and importance of different parts of the public realm in the future city. Some of landscape elements will disappear, some will lose its importance. Other will appear as more eminent and well exposed in public realm.

Keywords: landscape, urban design, public realm.

1. The physical form of the city.

Any city is a masterpiece of a human civilization. As a masterpiece it has got its physical form – like a sculpture. But unlike any sculpture its form is complicated beyond possible descriptions. One of the first attempts to describe a city form – a landscape in a coherent and concise manner has been made by Kevin Lynch in his famous book „The Image of the City” (Lynch 1966). He has described the city landscape that consists only of a few elements: paths, nodes, edges, districts and landmarks. Followers have added new elements to that puzzle later on. Polish architect and urban planner Kazimierz Wejchert has extended the classification in his own way: streets, junction points, border stripes, localities, landmarks divided into three elements (dominants of the spatial structure, distinguishing marks and natural landscape features) and finally his own elements that crystallize the spatial structure (Wejchert 1984).

For sure, a human being is able to perceive only a small part of a city space and all elements that belong there. These elements constitute in humans mind an image of a city that represents the whole city. A public realm of a city is the place where most of these elements are located. Cultural, technological, economic and social phenomena and processes that are observed in a contemporary metropolis will change the meaning and importance of different parts of the public realm in the future city. Accordingly, perception of functional areas, spatial compositions and architectural elements may change dramatically. Some of landscape elements will disappear, some will lose its importance.

Other will appear as more eminent and well exposed in public realm. Surely, there will occur a set of new elements of the landscape, unknown yet. What is going to happen in metropolitan cities will soon diffuse to other cities and towns. That is why a metropolis is a city, in which the public realm should be studied and analyzed carefully (Lasocki 2009). Already Lynch has noticed that his description of the city's landscape is inadequate to big cities. The idea of elements that crystallize spatial structure has not been successfully introduced in large-scale developments. The Author of this article suggest that “the urban texture” or “the urban style” may set up a new category that describes a character of a city in a larger scale. The other new element of the city landscape that was yet not imaginable for predecessors, may arise out of a virtual image of the city that comes from new mobile and internet technologies. As it is described beneath, the Author is convinced that some of these elements are in danger and need to be protected and others themselves are the danger for the landscape and need to be restrained.

2. Paths, streets.

The most common element of the urban landscape is the street. However streets change their shape and look over centuries but it is hard to imagine a city without a street. It is a highly functional element as it serves for transportation and contains all the movement that takes place in a city. Therefore, the street is also the most remarkable space within any city. It is no coincidence that the map of a city is always represented by the street layout. Citizens move along the net of streets and thus they learn the city structure in relation to streets they use most often. Visiting an urban space is always a kind of experience. The sum of such experiences draws a “mental map” in the memory of each individual. The pattern of streets plays the basic role in construction of such a map. It is as important for its communication significance as for its reference role. Any citizen places in his mind all important objects along recognized and memorized streets. If one realizes that the street pattern is a key to shape an urban landscape, one should not deny that it is necessary for streets to be easily remembered. There are also other linear elements of the communication system that play similar part here as streets do, which could be generally named “paths”. These are: walkways, motorways, railroads etc. along which people tend to move around the city. These paths may but do not have to lead through streets. Therefore the street and the path is not exactly the same element of the city structure. In traditional urban planning the street is understood as an urban interior – a corridor between urban walls set up mostly by rows of buildings. In this form the street has survived in European culture unchanged till the 20th century. It is quite obvious that, if people's paths lead through urban streets, the

city structure seems to them understandable. Modernism creators tried to separate streets and buildings. Effects of those ideas prove the rule mentioned here above. Inhabitants of the city space shaped by modernism tend to lose their orientation in the space. Paths deprived of urban walls are less recognizable, look more alike each to the other. However modernism in urban planning seems to be a matter of the past, though threats for the traditional street space remain topical. The reason of that comes from rapid development of modern and efficient means of the public transport. The subway system has got the strongest impact so far. With a dense network of underground railways the city becomes a collection of places connected by the transport system. Underground paths, invisible in the city space, substitute streets in their basic function. Even if the city space around subway stations constitutes of streets and squares, though these streets do not compose a network in the scale of the whole city. Subway do not interfere with management of the surface but some new ideas in public transport do. There are various types of vehicles designed that will use an overhead traction and railroads, which need only some cantilevers along the path to support the whole structure. Such kinds of facilities, independent from on-ground arrangement will change the way the city is perceived. Vehicles will pass across blocks and quarters regardless of the street pattern. Also aerial transportation means may become a reality in the future further reducing role of ground paths. In such conditions people more often will observe a general skyline of a surrounding rather than a detail of urban interiors. If there is still a place for the traditional street in the future city we would find it in pedestrian areas. It seems that an open air public realm will always be a good alternative for glass-roofed shopping malls. Nevertheless the street is the first of public realm elements that will be most threatened in the future city.

3. Nodes, junction points.

Just opposite to linear paths, nodes are places within limited area around special spots in the city. Nodes may have a different character. They will occur in spots where urban activity is accumulated. This kind of space becomes a source and goal of movement within a city. Commercial, entertainment, and business centers shall be included here. However most of nodes will be represented by junction points situated on paths with a simple crossing as the most common example. A junction point is formed wherever city traffic becomes intense. Usually it is placed around crossings with heavy traffic of the public transport. Even more significant it becomes nearby railway or subway stations. At the junction point people either observe a city landscape while they move in a hurry or while they are stopped waiting for a transfer. Both situations are a very good chance to experience a landscape of the public realm. During movement all

views become more dynamic and people are naturally concentrated on what happens around their trajectory. During longer stops people have a lot of time to admire views and take a closer look at usually omitted details. That is why junction points draw a remarkable spots on “mental maps” of citizens. Nowadays the best place to contain a junction point is a city square. In the traditional urban structures a square is the other, besides the street, kind of urban interior. As such, it is clearly limited with urban walls. Rarely it is completely closed, though all existing openings should not break awaited compactness. Junction point framed by an enclosure of a square is somehow kept under control. The whole its dynamism fits into a well defined urban space. It is easily associated with architecture and functions of buildings situated around the square. In a consequence it is easily located within the whole pattern of streets and thus easily remembered. Unfortunately in modern cities more often junction points occur outside urban streets and squares – in open spaces where heavy traffic is not such a nuisance. The open space is a good viewing point to observe a skyline of surrounding built-up areas. However an open space filled up with a transportation infrastructure is not the most beautiful part of the public realm. Intensity that these places are perceived with, causes a threat that the city landscape will be dominated by negative phenomena. While streets are threatened by different processes, junction points are themselves a threat for the public realm of the future city. While streets need help to survive, junction points have to be restrained. That is why contemporary urban planning should focus on these areas to prevent their degradation. There is also another change observed in contemporary cities that may intensify in the future. Nodes of concentration are transferred from the urban space of streets and squares into enclosed environment of shopping malls, business centers and recreation parks. Also public transport with its modern inter-modal solutions more often hides its terminals underground. Therefore, public realm of the future city may become rather a matter of architectural and not urban design.

4. Districts, localities.

Differentiation of urban areas is a natural process. There are different conditions of development in each part of a city, different needs of inhabitants and many kinds of land use that should not coexist in one neighborhood. As a consequence, in functional structure of the city one can observe separation and concentration of land uses in particular functional centers. With different land uses comes a variety of physical forms of the environment. For any visitor this form is visible and readable – one can recognize the purpose of the arrangement of the area, its basic functions and the role in the spatial structure. The sum of these observations creates another element of a city landscape perceived by our

citizen. These are districts (but not administrative ones) more suitably called: “localities”. In the most general definition, a locality is an area of the city clearly distinct from other surrounding areas. It is perceived as a two dimensional area with its surface and edges, however its uniqueness may be represented by three dimensional features. Most common localities consist of groups of buildings, settlements or real estates with the same basic function. Among them shall be included living, industrial, recreational or business areas. Sometimes a locality is formed with its unique function despite its small part in the whole functional profile of the area. For example, a diplomatic district may be delimited, if a few embassies are localized in a close neighborhood. Occasionally, localities exist only in the memory or consciousness of the local society. A factor of historic or traditional character may add values to the landscape of an area that are invisible in the space. The other kind of the locality may occur when an ethnic minority or a social group starts to manifest its presence in one fragment of the city space. Finally, even a multi functional and multicultural areas may be recognized as a separate and coherent locality, if its architectural heritage and style show symptoms of unity. Colors, materials, proportions of buildings, amount of greenery, width of streets etc. always produces a unique set of attributes that describes some particular locality. In the future city the role of a locality in the public realm may decrease. The process of on-going differentiation will soon lead to the process of homogenization of the city space. It will be stimulated by globalization (international architecture, multicultural societies) and sustainable development activities (multipurpose land use, ecological demands, renewable energy infrastructure). Especially in big cities and metropolitan areas small localities and big districts will more often look much alike. Borders between them will become blur or completely disappear. It is a highly unfortunate process as it threatens the identity of particular places within the public realm. Even the most sustainable city becomes monotonous and boring when it is homogeneous. Therefore, a care about the local identity and heritage is one of important points in shaping the city landscape.

5. Edges, border stripes, belts.

Localities are paired with edges as there always has to be a transition between areas of a different character. Edges are necessary as they constitute the structure of localities. Sometimes edges are sharp and vivid but sometimes they are blurred and the transition between areas is calm and gradual. It is still well or even better perceived because a strong contrast in the city is hardly ever welcomed by the public. Thus an “edge area” has not always got the negative connotation. It is quite common situation that a regular street becomes an edge of two localities, being at the same time a path itself. Edge-type areas exist also

by themselves as completely independent features. Open spaces, lakes, rivers, parks, railroads, motorways – all these places may play a role of a border stripe. A border stripe divides the urban space into pieces and usually has got a linear form in plan. The common factors of all types of border stripes are that they cross paths or fragment streets and open views on the surroundings. A path that leads through a bridge brings always a good chance to admire skylines of the river banks. Within border stripes the observer has got better conditions to learn the city structure. In cases where border stripes surround particular area they form a belt as yet another kind of an edge area in the city. Green belts and ring roads in various cities constitute the most common examples. They work well as for the transportation and ecology as for clarity of the spatial structure. Edges are inevitable in a diversified city space. If they are kept under control, the landscape of the city is enriched. However edges often show the other side of the coin – the negative one. Edges and border stripes are a huge threat for the image of the city. Usually due to their peripheral character they are left abandoned. Authorities tend to invest in central points of the public realm and also edge areas are less interesting for private investors. In the future city new developments and transportation infrastructure may arise new deprived areas. New transport corridors (underground or skyway) will empty main on-ground connections with surrounding spaces. With no major traffic they will become even less attractive to bother with. The other phenomenon that rapidly develops in some modern cities are gated communities. There is a serious danger that edges of localities will be soon transformed into real physical borders – especially in the case of areas dominated by housing estates. Is it possible that the time of well fortified medieval towns will be back?

6. Landmarks – remarkable details, peculiarities, distinguishing marks, natural landscape features.

There are features in any city that play important role in shaping the public realm despite their modest dimensions. These are details of a city space that are for some reasons remarkable for city's dwellers and visitors. They have two basic functions – informative and decorative. Monuments, architectural details, sculptures, fountains and other elements of a street space furniture become signs necessary to find the way across the city. On the other hand these elements may bring joy, amusement, excitement or a moment of a reflection. Sometimes they are not really visible nor remarkable but still very important for a local society. It applies to cultural or religious symbols that exist in “mental maps” of citizens. The future city in some predictions will be a multicultural “melting pot”. For this reason it is highly probable that many social groups and ethnic minorities will try to manifest their presence with their own cultural, architectural or

religious symbols. Multiplicity of these symbols may lead to chaos. At the same time they will be less noticeable and less meaningful for most of citizens. The other danger for individual character of distinguishing marks comes from commercial advertising. So called billboards may show up everywhere if uncontrolled. Advertisements become more aggressive trying to compete one with the other. That leads to a visual chaos and makes all local peculiarities less remarkable. Billboards are usually exposed in thousands of identical copies all around a country in many different cities. Therefore a uniqueness of places may be strongly limited. There is yet another category of landmarks constituted by landscape features that are shaped or come from the nature. Mostly, these elements will occur in cities that have a characteristic geographic location. Especially a city that is located in a valley, has got a privilege to expose surrounding hills in many viewing point around the urban space. Also lakes and rivers introduce the nature into the city. A skyline of a city, mirrored by a water surface is able to draw a picturesque and memorable views. More common natural areas like green spaces also belong to this category. Sometimes they are pieces of natural landscape enclosed with urban areas due to development of a city. More often they are artificially reintroduced into the public realm. Elements of the natural landscape are threatened also to some extent. However mountains and rivers will always be a specific feature of some of cities, though less spectacular natural elements like parks may disappear from the public realm in the future city. It would be possible if gated communities, business and shopping centers “swallow” public green areas for the exclusive use of their clients. Examples of such processes are already observed in some cities.

7. Landmarks – dominants of the spatial structure.

Some of landmarks has got the special ability to influence a city structure. They are not only characteristic and remarkable but also they dominate over surroundings. The most common example of a dominant is a tower or a skyscraper – just a very high building structure. However there are other examples of spatial dominants that have not got this attribute. These are buildings very important for local society (seats of authorities, religious centers, mausoleums) or buildings of significant shape, dimensions, color or style, which remain in a strong contrast to surroundings. The factor that lets to recognize whether a given structure does function as a dominant, is the fact of its clear presence in the urban space of the city. A lot of viewing points should expose the structure in many urban interiors. It may happen by an accident with a high-rise buildings, though it is usually achieved by a purpose. The real part of a dominants of the spatial structure is to influence and change the spatial composition of the city. Wherever such an important object occurs it is exposed

by viewing axes of streets and open spaces. Other new streets and buildings have to adjust to these axes. This way a single structure may influence development of a city. Usually dominants become also orientation points for travelers who do not know a city very well. Also “mental maps” of city's dwellers are drawn in relation to such important objects. Additionally high-rise buildings mark areas that may function as nodes in the city landscape. One can easily recognize a location of a center of the city while observing a skyline from a distant viewing point. Probably dominants will become the most spectacular elements of the future city landscape. The race for the highest structure goes on. It has started with a Babel tower thousands years ago and not far from there nowadays the Burj Dubai tower is almost completed. Dominants in a spatial composition are necessary and sometimes whole groups of them may form a harmonious visual effects. American cities are well known for their downtown high-rise areas. The problem begins when they start to appear in a city space without a deep consideration and spatial analyses. Sometimes it happens spontaneously without any control. In these cases dominants may be really destructive. They attract attention to places that are not so important for the life of the city. Visitors to the city loose their orientation in the space. As a consequence the spatial structure of the city becomes blurred. Urban planners and authorities of cities should have a deep concern about new high-rise developments. Some of European cities cope with this problem very well and surely the future will bring no change. But others will be threatened heavily with invasion of supernumerary dominants.

8. Elements that crystallize the spatial structure (ECSS), urban texture, urban style.

Wejchert (1984) describes an element that crystallizes the spatial structure as a set of components that defines the way that the city is being developed in its general spatial composition. Such elements may be created spontaneously through ages of constant development or on purpose to predict and regulate that development. In most cases of historic cities ECSS is a quite simple set of simple components. These components usually belong to one or a few of categories of city landscape elements. In small towns it is a market square or main street and a dominant of the city hall. In larger cities the ECSS may consist of a few paths, nodes and dominants. Occasionally some other elements may occur important. In a case of new settlements the ECSS may be constructed with a deep analysis of diagnosed future development. However is is quite difficult to introduce such an idea in real life and check its results. So far, some attempts have been undertaken with an “airplane” of Brasilia as the most prominent example. Cases of big cities prove that the idea of the ECSS does not work well

with the large scale of the development. The spatial composition achieved in this way is completely unreadable for the city's dwellers. It can only be admired on satellite pictures like the Nazca Desert drawings. Though the idea is great while smaller settlements are designed. The clear set of landscape elements make the city structure clear and understandable for everyone. In the opinion of the Author the element of urban texture (or urban style) should be recognized as an important part of the landscape of bigger cities. It is yet hard to define these terms. The intuition lets people to recognize cities with one look at a random picture. Especially, if a city with a "style" is concerned. An urban style would be similar to architectural styles, however it would be specific to a particular city (or group of similar cities) and not to a historical epoch. The urban style can be detected while examining the urban texture – structure and dimensions of buildings and open spaces. It is quite astonishing how characteristic that factor may be in some of the world cities. Besides that one, there are many factors of the public realm of a city that are remarkable enough to be associated with only one city in the world. Building materials, local plants, street furniture, architectural ornaments and even the color of the sky may be unique. If the overall character of a city is going to be protected in the future, the traditional urban texture should be controlled. New developments should follow recognized patterns. Otherwise these new developments may destruct a heritage that has been built for centuries.

9. Virtual landscapes.

A virtual landscape of a city is yet a matter of a futurology. However urban planners should not be afraid of prognoses. The prognosis is that the real landscape may be exchanged for a virtual one. In the most extreme association – for a "Matrix"-style second world of virtual illusions. However more realistic predictions already have strong bases in the real life. The process that has already started has two dimensions. First of all, there is a tendency to build virtual spaces in the internet that shall reproduce or replace real spaces that exist in the city. Internet shopping and banking already keeps clients at home deserting to some extent real streets of cities. It is not necessary to travel abroad to visit every corner of major cities. Interactive services provide panoramic views of streets and squares that have been scanned by cameras. The power of the internet may cause a situation where the least significant street of a small town, exposed on the net, will be recognized by millions of internet users worldwide. All other elements featured above will have no longer any meaning for the perception of the particular town's landscape.

Secondly, there are technical possibilities for a virtual space to become a real part of a city space experienced by visitors to the public realm. There is a huge

amount of information about any city gathered by different technical facilities like GPS tools, mobile infrastructure or satellite cameras. It is easy to spot a single car, bus or a train anywhere in the city and follow its movements. It is possible to collect the information about all major events in the city. Now it is only a problem to transfer this information to citizens on streets. Huge LED-based screens that can convert whole buildings into gigantic TV sets, are able to display an information that was hidden so far. For now, there are some experiments that reveal a wide area to explore in the future. The most useful experiments are introduced in the private and public transportation technologies. If the traffic in a city is monitored, it can be controlled and modified. Travelers may have a good information about connections and save time during their journeys. One day the information displayed may become interactive and people will have a chance to “touch” the soul of a living city. There are some experiments to display the motion of people and the city traffic on buildings' facades. In a distant future the virtual information may constitute an artificial cover for buildings. Let us imagine an apartment building that waves to us with virtual benches of displayed trees. That may change the way that a city will be experienced by its future dwellers.

Bibliography:

Lasocki, M. (2009) Spatial order – the goal of spatial management, in: M. Czerny & J. Tapia Quevedo (Eds) *Regionalidad y localidad*, Toluca: Universidad Autónoma del Estado de México.

Lynch, K. (1966) *The Image of the City*, Cambridge: Massachusetts Institute of Technology Press.

Wejchert, K. (1984) *Elementy kompozycji urbanistycznej*, Warsaw: Arkady.