

# Using of natural environment elements in formation of attractiveness of small town space

## Abstract

The article discusses the role of natural space elements in formation of attractiveness of the urban environment of small towns. Meaningful use of natural elements is necessary for development of a strategy of formation of the urban space attractiveness and can become an important source of it. Natural surrounding also impacts the urban development structure itself, characteristics of architectural objects and spacial visual communication of a small town and its suburbs. Using available natural characteristics, as well as purposeful introduction of elements of wildlife and inanimate nature into the urban space has an essential impact on the increase of the number of visitors and tourists in the town and dissemination of information about it.

Keywords: urban space, natural environment, small town, architectural attractiveness.

Nature is an inseparable part of the urban environment. Natural elements, as well as other spacial objects, are full-fledged components of the process of formation of the architectural space and require a special attention. As the practice shows, the natural surrounding of architectural objects can either make them stand out by emphasizing their spacial characteristics or, vice versa, make them practically invisible and difficult for visual identification. Unfortunately, the peculiarities of natural environment are usually disregarded in the process of formation of the urban space, what frequently results in certain disadvantages, especially compositional and visual ones. Therefore, taking natural elements into account in the process of development of the concept of city attractiveness formation is essential and important.

Certainly, the first thing that comes to mind when we talk about natural elements in the city is their influence on the sanitary condition, ecology of a city, physical parameters that usually have essential impact on the quality of life. Natural characteristics and elements are integral components of introduction of principles of sustainable development and smart architecture in the process of elaboration of the urban development plan. However, in the nearest future these issues and principles will turn into main and essential requirements to the architectural environment and designing of objects. They are quite well represented in the modern professional literature [1] and do not fall within the scope of the present research. In this work, we would like to devote a special attention to spacial and visual characteristics, as well as conceptual aspects of natural elements in the small town space.

The role of natural elements in the small town space is analyzed herein by the example of small towns of Lviv region (Ukraine). This territory was chosen for several reasons. First of all, it contains a large number of small towns (with up to 50 thousand dwellers according to the state construction standards) [2]. This fact makes the issue of formation of the urban space attractiveness especially important, since all small towns are rather similar and there is a real threat of complete loss of their visual originality and distinctiveness. Secondly, the territory of Lviv region is rather diversified in terms of landscape and natural zones. There is a flat terrain and forest area on the north (Polissia). The Carpathian Mountains are located on the south. For this reason, the landscape is very interesting and varied that allows to analyze various options of compositional arrangement of the architectural space and using of different species of plants in the urban environment in the territory of one region [3]. Thirdly, this territory is also very interesting from the architectural and historical point of view. It is located in the border zone of East-European and West-European traditions of urban development arrangement of the city environment [4]. Panoramas of small towns include a large number of sacral objects be-

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longing to different confessions. Church buildings have their specific peculiarities and by visual interaction among themselves create specific town silhouettes. Besides, small towns of this region still bear visible traces of architecture of the Soviet period. Organization of their architectural environment is impacted by the specific attitude of the state leaders of that time to the nature in general and to the separate natural elements and methods of introduction of natural resources into the urbanized space. Later on, in the period of the independent Ukrainian state, the problem of landscaping of territories of small towns was undertaken primarily by local enthusiasts due to the lack of funds and low interest of government agencies in professional organization of landscape zones in small towns. Unfortunately, most of these enthusiasts were not represented by professionals in the sphere of landscaping, architecture, landscape design, town planning and relied on their own visions of aesthetics of the environment, primarily solving local problems without taking care of the general visual image of a city. This situation lasted for quite a long time, and still exists in a number of small towns. Therefore, the current condition of urban landscaping and natural landscape objects in the town territory is mostly a result of spontaneous initiatives of town dwellers and local authorities. This situation led to appearance of several interesting aspects of usage of landscaping in the urban space. We can argue about negative or positive influence of such activity, however one can confidently say that it created a special character of the small town space that probably has a potential for additional direction of formation of visual attractiveness of the small town architectural space. Here we have to mention that these characteristics, present practically in all towns, can become a basis for the regional attractiveness. Then we will be able to say that small towns in a certain region have a specific attribute that allows visual identification of this region. For example, towns of Lviv region often have old cemeteries located in their central historical parts. They are mostly planted by trees, open for public access and serve as a peculiar kind of public gardens. Also, Eastern Christian churches located in these towns are always planted round by trees and encircled by a green area. Due to this fact, their architectural image is not always visually accessible and is weakly exposed in the urban space. The same can be said about monuments that are often hard to identify visually, especially in summer, because they are hidden behind high green plantings.

A small town is a special type of settlement. On the one hand, it has characteristics of a city, and on the other hand – characteristics of the village. A city is an anthropogenic space that, at first glance, has little in common with the nature and generally subordinates the natural surrounding to the needs of comfort living of people. On the contrary, villages are very dependent on the natural environment and landscape. Nature plays a leading role in these settlements and is critically important for their economic growth. In the context of this objective, the architecture plays a sort of secondary supportive role and frequently has a practical character. The role of the natural component in the architectural environment, as well as attitude of dwellers to natural elements, fundamen-

tally differs in cities and in villages. A small town is a sort of a bridge that combines these two opposite approaches to understanding of the nature. On the one hand, it has administrative and architectural characteristics of an urban settlement, what is especially noticeable in the building system of central parts of settlements. On the other hand, the majority of buildings in a small town is represented by private houses with household plots. It is important that these plots are rather big and are often used not for decoration, but rather with a practical purpose. In particular, the locals of small towns in Lviv region often keep cattle, sheep and goats, poultry. This makes the town space, especially its suburbs, visually similar to the image of village settlements. In this situation it is rather difficult to choose the correct concept of landscaping of the small town space. For example, the practicability of the tradition to arrange large parks and plant many trees on the central squares of small towns, which became widespread in the Soviet times, now raises many doubts, because the majority of locals live in garden zones and have their own gardens. On the contrary, sometimes they would like to “go to town”, to the urbanized space. Only a small number of people in small towns live in apartment houses, and their need in contacts with nature can be satisfied by arranging parks on much smaller territories (il.1, 2).

Architecture and architectural environment of settlements, including small towns, can be attractive in certain circumstances – i.e. to be able to attract attention by their spacial and visual characteristics or conceptual meaning. A source of such attention, or an attractant, can be represented not only by beautiful and pleasant atmosphere, but sometimes also by certain emotionally negative characteristics. Attractiveness of the urban space is especially important for a small town. This is explained both by status reasons and partially by economic considerations. Small towns often play a role of local cultural and administrative centers in the village surroundings. Therefore, the distinction of their architectural space from village settlements, their “urban” visual image should be maximally emphasized. Also, the majority of small towns of Lviv region usually have specific historical monuments of architecture and places related to some historical events. However, due to economic and historical circumstances architectural buildings are mostly poorly maintained, and the history of a small town is usually little known not only



Il. 1 Rudky. Trees on the central squares of small towns. Source: author's own materials



Il. 2 Rudky. Garden zones. Source: author's own materials

for town visitors, but even for its locals. In its turn, this impedes self-identification of townspeople, as well as preservation and development of special features of a town. The same economic circumstances make the issue of attractiveness of the urban space particularly topical for small towns. As opposed to big cities that have many sources of income, where the architecture plays an important role for their economic situation, but not a decisive one, exposition of the architectural environment of small towns often turns into the main source of their income. Namely the architectural environment is the first thing that travelers and tourists see, and namely contemplation of the architectural environment allows them to receive basic information about unknown settlements. Therefore, the problem of preservation of authenticity of historical small towns – objects of recreation and tourism, is considered in many scientific researches, including in Poland (Anna Pavliak, Slavomir Kamosinski) [5, 6] and Ukraine (Mykola Bezv, Bohdan Posatskyy) [7, 8]. Traditionally it is believed that the the historical heritage of a town, including its architectural heritage (i.e. objects that correspond to the notion of “high” culture based on their place in the hierarchy of public significance [9]), forms a foundation for formation of tourist attractiveness of a town. According to Slavomir Kamosinski, historical product of a place that presents a documentary evidence of its civilizational and cultural legacy is subject to commercialization and serves as a promotion for a certain place [6]. However, for historical reasons not every small town has architectural monuments of a corresponding level; and often many towns of some region have similar architectural objects. For example, small towns of Lviv region are mostly characterized by churches, cathedrals, residential stone houses of the 19th century located in central parts of towns. Therefore, it is difficult to shape the attractiveness of a certain town based only on these historical architectural buildings. Apart from that, concentration only on historical monuments and events throws into question the possibility of creation of an original image for relatively new towns that originated in the middle of the 20<sup>th</sup> century as workers settlements or for those historical towns that were destroyed in the war time and rebuild again. In these and similar cases, the attractiveness of space should be purposely created from scratch or by

using available non-standard objects that are disregarded from the point of view of classical tourist attractiveness and sometimes are even considered as an essential defect. In conditions of absence of usual traditional attractants, we need to apply the principle of “flexibility in selection of attractants”. The essence of this principle is to avoid a prejudiced attitude to various nonstandard options in selection of potential attractants among objects of the urban environment being guided by the presumption of innocence, and admit objects with spontaneous or negative attractiveness for consideration and analysis.

In both cases mentioned above, natural elements and green planting can foster formation of urban space attractiveness, and sometimes even act as self-sufficient, prioritized, visual and conceptual basis for formation of this attractiveness. For example, the town of Pidkamin takes its name from the stone rock (“kamin” in Ukrainian) located on the hill near the town. Pidkamin Festival is also organized here. So, the rock became the main visual characteristic of the town. However, apart from this rock, there is an old monastery, ancient cemetery and several chapels in Pidkamin that could become interesting attractants in other circumstances. Yet, historical objects are not a rarity for towns of Lviv region, while such rock is located only in Pidkamin. It is logical that this rock became the main visual attractant, and later on – a conceptual spacial attractant.

Let's make a conventional classification of various forms of presence of a natural component that directly or indirectly impacts the process of formation of the architectural space attractiveness of practically all settlements, including small towns.

The first form of presence is the natural landscape where the town is located. The





Il. 3 Olesko panorama is well-seen from the road. Source: author's own materials  
 Il. 4 Zhvyrka by Zakhidnyi Buh River. Source: author's own materials

character of the surrounding landscape impacts location of a town in the region and its general visual image. The character of landscape is very difficult to change, and it influences the qualities that are important in the context of architecture. Particularly, location of a town in the region impacts the level of its transit potential. If a transit road passes through a town, travelers can observe its architectural objects on their way, so visual characteristics play a crucial role in the process of formation of the town attractiveness. If there is no transit path, a town should have not only such conceptual and visual attractants that can make travelers pull off the main road and intentionally go to a certain town, but also a well-organized promotion campaign. The landscape also impacts the visual accessibility of settlements located near main roads, way of formation of their urban panoramas, possibility to see the town and its attractive objects from a distance. The town of Olesko is one of the most telling examples here. Due to the plain landscape, hills where the monastery and the castle are built create a specific atmosphere, and since the town is located near the state-level highway, this panorama is well-seen from the road and plays a role of a visual landmark for travelers (il. 3).

The second form of presence of a natural component in the urban space is represented by separate objects of inanimate nature. These can be elements of relief (hills), rocks, rivers, water reservoirs. It is clear that such objects have an impact on the urban development structure itself, on its silhouette (especially rocks and hills often act as equal visual dominants together with towers of cathedrals, city halls, domes of churches). In a number of cases, they are connected with legends and stories, attract certain social activities to themselves. Small towns have much better conditions for exposition of such natural objects in the urban environment and for their preservation, since there are less sources of their contamination. In small towns, rivers and lakes take up larger territory as compared to the town buildings and are rather noticeable in the urban environment. Even small-sized separate dominants – elements of relief – are much better noticeable between low-level mansion buildings, then between high-rise buildings in a large city. Also elements of inanimate nature in a small town are often related to separate reserved ecological systems that present a significant interest for biolo-

gists and can serve as a good training area for holding thematic workshops and excursions. In other words, apart from a pure visual role (mountain, rock), they often have a conceptual attractiveness. In this context, a town of Rohatyn is a good case in point. Historically and culturally the town belongs to Lviv region, however it is situated outside its administrative boundaries. There is a hill in Rohatyn called "Chortova Hora" (The Devil's Mountain). It has an original ecosystem with preserved unique steppe plants (conceptual attractiveness) and is rather clearly noticeable in the town's silhouette (visual attractiveness). Rivers and water reservoirs can also serve as attractive elements of inanimate nature. In this context, the most illustrative examples in Lviv region are represented by towns Sokal and Zhvyrka separated by Western Bug River (Zakhidnyi Buh) (il.4). Because of the plain landscape, the river is very wide and becomes an important spacial element of the surrounding composition. The large stretch of the water reservoir on Western Bug actively shapes the visual image of Dobrotvir Village. Apart from servicing of Dobrotvir Hydroelectric Power Station that presents an economic foundation and spacial and visual dominant of the town, the water reservoir also serves as a training area for professional kayakers.

The third form of presence of a natural component – green plantings directly within the town – is the most widespread, the most flexible, unstable, vulnerable and changeable component. Traditionally they have significant importance in the Ukrainian cities. Partially it is connected with climatic conditions and land fertility and partially – with the ecologic principle of formation of the living environment that is traditional for the local vernacular architecture [4]. Green plantings are very important for small towns and serve as visual "connec-



Il. 5. Dobrotvir. Fruit trees in urban space. Source: author's own materials  
 Il. 6. Stara Sil. Green plantings serve as visual "connective tissue" for architectural objects. Source: author's own materials

tive tissue" for architectural objects (il. 6). This is conditioned by the above-mentioned presence of large garden territories, as well as public green areas. Landscaping elements can become an attractive peculiarity for a small town. This is particularly true for towns, where trees of one species are traditionally planted. Considering the fact that the locals themselves take essential part in landscaping of the urban space, these species may be particularly represented by fruit trees. For example, this is true for the town of Dobrotvir mentioned above. It makes the urban space particularly attractive in the summer period (il. 5). Certainly, the idea is not new. The same role is played by sakura avenues that are fashionable nowadays. However, fruit trees are mostly typical of our region and their use in the urban space is not very widespread, so this option may serve as a good basis for formation of the town attractiveness.

The fourth form of presence of a natural component – presence of useful natural resources (coal, oil, gas, mineral waters and therapeutic muds, salt, etc). These natural elements are not visualized in the town's silhouette directly, but have a strong indirect impact both on its spacial and visual characteristics and conceptual attractiveness of the urban environment. Researches devoted to the urban nature and landscaping do not usually view local mineral resources as natural elements able to influence the architectural space. However, in many cases they are the main factor shaping the attractiveness of a town. Useful resources especially impact the attractiveness of small towns due to their small size and narrow

range of local attractants. Small size of towns with curative resources facilitates organization of clam recreation as opposed to noisy large cities. As compared with small size of towns with mineral resources in their territories, the technical equipment for development of these resources looks rather massive and, respectively, turns into an important spacial element of the architectural environment and sometimes even into the main and unparalleled dominant. For example, Lviv region has such famous resort towns as Truskavets, Morshyn, Liubin Velykyi, Nemyriv, and namely this natural peculiarity make them attractive for visitors and famous not only in Halychyna, but also at the state level and in neighboring countries. The whole urban space in Morshyn is tailored for the needs of holidaymakers. The mineral water pump room is its main and the most known building that also serves as a visual identifier of the town for its presentation in mass media. The central space of the resort is located around the pump room, and the majority of town buildings is represented by recreation centers and sanatoriums (il.7). The adjacent territory is encircled by park zones created for convenience of holidaymakers. The situation in Truskavets is a bit diffe-

Il. 7. Morshyn. Pump room. Source: author's own materials  
 Il. 8. Stebnyk. Derricks for coal mining. Source: author's own materials





rent. Due to the high popularity of the resort in the 19<sup>th</sup> – 21<sup>st</sup> centuries, many new recreation centers, sanatoriums, hotels have been built and are still being built in the town. This turned the resort into a peculiar gallery of architecture of hotel and recreation objects. This situation is unique for a small town, especially in Ukraine. Also, as opposed to similar European resorts, historical authentic architecture in the town has not been preserved in full. There are also some small towns in Lviv region that originated as workers settlements near mines or electrical stations, for example, Hirnyk, Sosnivka, above-mentioned Dobrotvir, Stebnyk. In Stebnyk, derricks for coal mining have created a unique peculiar town's silhouette that is maybe totally unaesthetic in the classical sense, but undoubtedly attractive and recognizable. Without them, the town would become visually unnoticeable (il.8). In our times, mineral resources in Lviv region are not so actively used and developed as before. However, traces of these past activities can present an excellent base of attractive objects for lovers of the history of technology. We can try to turn old mines into a good place for active recreation and training facilities for pupils or simply people interested in technologies.

### Conclusions

For small towns, the problem of attractiveness of their architectural space is one of the high-priority issues that require permanent attention. Apart from formation of the attractiveness of a separate town, we can also support the general attractiveness of the architectural space of the region by developing characteristics that are present in the majority regional towns. Natural surrounding, starting from the geographical location of a town and ending with its landscaping, is a crucial component of the urban environment. Together with the architecture, natural elements create a town's silhouette and complete the urban architectural space. Impact of natural elements on the attractiveness of the architectural environment of small towns is exercised not only through their visual qualities, but also through their conceptual characteristics.

Natural resources that are present in the territory of a small town (healing waters, mineral resources) not only foster the

development of the local economy and industry, but also play an important role in shaping of the urban space and town's panorama, thus facilitating formation of the conceptual and visual attractiveness of the architectural space. Natural elements, in all forms of presence of the natural component in a small town, have a decisive, although not always noticeable, impact on selection of the concept of formation of attractiveness of a certain urban space. Understanding of influence of this resource on visual and conceptual characteristics of the architectural environment will maximally facilitate its use in the process of project urban development activities.

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