

CONTEXTUAL SEARCHES OF THE ARCHITECTURAL SPACE AND GREEN STRUCTURE OF BAUSKA OLD TOWN

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Abstract. The cultural heritage is a potential resource for ensuring quality of human life and sustainable development. The urban environment, in which we live, is not frozen, it is constantly developing. Each time it leaves footprints in the space that can enrich or downgrade its architecturally compositional expression. The environment is constantly changing due to human ambitions, errors and actions. For the preservation of cultural space and development, interdisciplinary cooperation and understanding is required. Identity maintenance of the urban space of Bauska is mainly associated with identification, restoration and preservation of cultural and historical sites as well as care and protection of the landscape space specific to this site. Under the impact of the green cover of the river bank it is visually hard to see the place of rapids. This also applies to the balanced green area in the town's historical centre.

Keywords: urban structure, urban landscape, roof landscape, green plantation wedges, green structure, interdisciplinary dialogue.

Introduction

The cultural heritage is particularly recognized by a community during a crisis period. In a situation where all back up points are lost, heritage gives meaning to the human life and spiritual fulfilment, demonstrating the genuine true value of continuity. The conditions of an economic crisis in the heritage preservation are a period of evaluating opportunities, allowing problems to be perceived as a challenge (Discussions 2009). The cultural environment is protected and developed as the third dimension of the environment along with the physical and natural ones.

The cultural environment is defined as a “geografically restricted area reflecting important features of society development and its aim is to protect the cultural heritage” (CHIP 2009). Spatial planning is one of the major instruments to provide protection. Issues of protection of the cultural heritage are solved in regional plans that are updated every four years. Research was carried out to analyse the town's cultural heritage, define most valuable buildings and cultural landscapes and include solutions for protection in the town's planning (Jakobsone, Strautmanis 2009).

The aim of the research is to write a valid conclusion based on the research material that may provide preservation of the urban environment of Bauska and suggestions for its development based on the analysis of the urban planning and the current situation in the context of the green plantation zones. *The research assignment* is to determine the current state of Bauska Old Town and identify issues that affect development of visual quality of the urban landscape. *The method* includes analysis of the green plantation structure, compilation of historical data and the study on the materials of the current urban environment.

Materials and methods

According to the Venice Charter (ICOMOS 1964), the values of cultural heritage in Bauska Old Town are “the objects imbued with a message from the past, the historical monuments of generations of people which have remained to the present day as living witnesses of their age-old traditions”. One of the most essential preconditions for preservation of Bauska Old Town, according to this Convention, is that “people are becoming more and more conscious of the unity

of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized". The awareness of people is one of the most relevant factors in preservation of the old town (ICOMOS 1964).

Bauska Old Town has been extended in about 200 m wide and about a kilometre long narrow strip along the left bank of the Mēmele River, the spatial shape which is vividly marked by a structure of three parallel street buildings. Each of them creates its own architectural spatial expression. None of the streets of the Old Town is made up of regular historical tree plantation lines. Quite the contrary, the end of the 19th century street side of the building facades is accented by architectural elements and not hiding them behind the tree lines (Fig. 1). Comparing the current situation to the historical materials, there is a very dense "green finger" network in the Old Town (Fig. 2). Closest to the river's bank, Rīgas street with single-storey and two-storey buildings is situated. The north side of the street's buildings has the most expressive green courtyard space as it is supplemented by the fragility of the river bank and the riverbed. The river bluff with gardens is particularly well seen in the silhouette of the Old Town. The dolomite rocks revealing in the Mēmele and the Mūsa precipices are used as a building material only in the foundations of the castle, the church and a number of buildings and it is not visible in the decoration of building's facade. Basically, up to the end of the 19th century there dominate wooden pillar or transverse edge constructions.

In order to highlight priority of the cultural landscape, a three-stage value scale is used: high value (dark red in the map), medium value (pink in the map) and low value (red in the map) priority. Criteria should not

be used mechanically, i.e. if the cultural environment confirms many criteria, it should not be evaluated automatically as a high priority, but if some of the criteria – as a low priority. Each individual's cultural environment has to be evaluated in comparison and setting priorities. Each specific landscape should be compared to similar cultural landscapes and the solutions should be included in city planning (Jakobsone, Strautmanis 2009). Criteria of setting priorities of the cultural landscape are as follows: priorities are set according to scientific criteria, most representative or most rare features are searched for in the region under the study. Evaluation of the specific cultural landscape approved or not, is based on the criteria: uniqueness, local meaning, characteristics, peculiarity, and level of protection, status of functionality, authentic and historical identity, powerfulness, story, diversity, homogeneity, and harmonization with the natural environment (Fig. 3) (Jakobsone, Strautmanis 2009).



Fig. 1. Perimetral buildings in the Town Hall Square of Bauska along Riga street no trees ('20s of the 20th century). Source: a photo of Local History Museum of Bauska.



Fig. 2. The southern part of the Town Hall Square is hid by linden tree plantations. Source: author's photo, 2012.



Fig. 3. Plūdoņa street near the Town Hall Square has retained its architectural and historic building structure, with no specific tree plantations. Source: author's photo, 2012.

Results and discussion

In the post-war years in the 60's–80's of the 20th century, streets of Bauska Old Town have lost several construction volumes as a result disrupting the continuous perception and harmony. The breaking of the building line that sometimes makes up even 3–4 buildings, provided an opportunity for an appearance of a zone with extensive tree and shrub cover which crown has immensely widened over decades and it does not only hides the adjacent historical building but also disrupts the architectural uniformity of the street building.

Density of the green structure veining and building areas in the historical building zone are increasing year by year, giving evidence that the cultural and historical heritage is slowly lost. Due to the formation of the breaking of the street building, the harmony and scale of the historical structure is lost (Fig. 5). Experience shows that, if instead of the dismantled building, there are carefully groomed lawn and flower plantations, it means that within a few years the owner of the land will be ready to start reconstruction of the historical construction volume (Fig. 4).

After the size of tree branches and the trunk, where their age is detectable, as well as the approximate time period in which the historical building disappeared. Oak, maple, chestnut, linden trees planted within 5.0 m from the outer wall of the building is far too small.

Having evaluated the information presented above, the study of the green structure of the Old Town includes three main aspects of the research:

- impact of the tree crown and root system on the construction of buildings;
- density of the green cover and suppression of the visual perception of the historical building in the main view lines;
- impact of the green structure on the historical scale of the urban environment and roof landscape changes.

Most commonly, trees are spaced on the street building line and the crown is so huge that it covers a half or third of the building's roof. The green chlorophyll in the leaves tends to settle down with the rainfall on the building structures, moisturizing and damaging them. However, according to the dendrological characteristics the size of their root system is analogous to the size of the crown. The existing vegetative system of trees develops radial and extends under foundations of buildings, cracking and damaging constructions.

For decades, the local government has stressed that trees and plantation zones are quite an important thing in the urban environment but it has overlooked the fact that it is not permissible to extend their spacing in the building area.

One of the most striking examples of research- is the corner of Plūdoņa and Kalēju streets, there is created a square with linden line plantations. Historically, the S. Trinity Church that was located where was burned down in 1773. If related to the scale, such large square area in the structure of the Old Town is strange and it is easily noticeable when compared with the scale of the historical building adjacent to it. The same is true of the adjacent Saules and Kalēju street intersection where in the 80's of the 20th century there was built a kindergarten.

The south side of the building of Rīga street meets with gardens and courtyards of the residential houses of Plūdoņa street which are separated by a pronounced zone of household buildings. The continuous building of Plūdoņa street is not so dense as in Riga street and thus the green plantations or the green wedges are



Fig. 4. Thanks to the initiatives of main architect of the town (Architect A. Paklons), in the lost historic construction sites a lawn is being cultivated, so maintaining view lines to the roof landscape and the building structure of the Old Town. Source: author's photo, 2012.



Fig. 5. Instead of the lost wooden buildings in Riga street, there are breaking in huge tree branches hiding buildings of the historical urban environment which disrupts its scale. Source: author's photo, 2012.

spaced more densely. In contrast, Kalēju street, which is ending the area of the old town, is densely covered with trees and shrubs. The south side slope of Kalēju street is steep and as a result of the surface water runoff it has contributed to the disappearance of the old wooden building. The street forms a peculiar green ring with a relief (about 80 m wide) which overlooks the river line views, and the building structure of the Old Town and its scale are seen. Behind the green ring of the south side relief of Kalēju street, there start the high-rise residential houses and public buildings of the 60's–80's of the 20th century that parallel to the area of the Old Town form the urban construction space of another scale and proportions.

Adjacent to the southern building zone of Riga street, there is spaced the Old Market Square or the Town Hall Square. Thanks to the wide restoration work in the last five years, the Bauska Old Town centre with restoration of the Town Hall Square and Town Hall has regained its historic scale and face. Unfortunately, between Riga and Plūdoņa streets, one side of the square is loaded by VIA Baltic Transit traffic where intensity of the heavy transport flow does not allow to perceive and enjoy the historical romantic perimetral building character of Kalna street in the western part of the Town Hall Square.

In the 60's of the 20th century, along Kalna, Rigas, Pasta and Plūdoņa streets there were planted regular linden tree plantations which not only reduced the size of the old Town Hall Square but also hid and spatially divided the perimetral buildings of the historical square, thus creating a new scale of street networks.

Starting restoration of the Town Hall Square in 2009, the trees inadequate to this historical urban space were sawn off. Sawing off the trees around the square caused a very sharp public debate in the community as a half century with the green plantations in the centre of the town had created the habit and myth of truthfulness of their location. One of the trees, growing in north-eastern part of the square, is retained as its crown's expressiveness well accents the intersection place of Pasta and Rigas streets. At the same time there is also highlighted the historic traders' road for taking goods from the river bank to the market place. It is the Mēmele rapids place where peasant boats were anchored and the goods were taken to the square. For brightening of the historical testimony, in the coverage of the restored square there is a zone of cobbled wedge-type red clinker bricks in the direction of the river bank. At the foot of the Town Hall historically there was also a well, the location of it is now symbolically marked with artificial light built which is covered by a blow-resistant glass.

In the southern and eastern parts of the Town Hall Square along Pasta and Plūdoņa streets, the remaining lines of linden trees have still survived as they partially hide the low-value unrepaired two-storey building at the back of the Town Hall. Unfortunately, the mentioned linden tree line absorbs expressiveness of the historical wooden building of Plūdoņa street as well.

Therefore, with restoration of the Town Hall, the town has regained one more spire in its silhouette. 200 m away, the bell tower of the Church of Holly Spirit has lost its historical spire's elegance. The simplified quadrilateral pyramid with a tile cover of the tower's roof is partially hidden by immense tree crowns of the church garden which hide the roof landscape of the adjacent block of houses. It is possible to model tree crowns of the church by cutting their branches. In the historical panorama of the Old Town, there is also seen the third dominant – the spire of Mara Church that was lost with burning down Mara Church. The silhouette of the Old Town is seen best of all from the right bank of the Mēmele in Kalna street. Approximately 200 m away from the river, the silhouette of the town is visible only as a small fragment as the view lines are hidden by huge tree groups on both sides of the side street. The silhouette of the entire town with its roofs is exposed only by moving closer to the river, there the height of the view point is lost due to the rise of the ancient river valley.

For Bauska Old Town as a significant cultural and historical value there should be mentioned its roof landscape which is well visible from the highest places of the relief. In order to be visually perceptible the main viewpoints must be carefully examined and the place of viewing platforms should be decided.

This is attributable to the view lines in the block of houses between Kalna, Kalēju, Baznīcas and Riga streets where the most expressive slopes of roofs are concentrated. Also, in these view points, it is thought of sawing off giant trees.

The quality of the landscape is characterized by the shapes of roofs and compliance of the used covers with the building's architectural style, duration of construction, color, placement of chimneys and technical equipment. The owners of buildings desire to get more attic space of historic buildings, they often choose solutions that create an uncharacteristic landscape to the historical building zone. Most often it refers to the construction of new roof patios, terraces or bays.

Visually the aesthetic information volume is dependent on the ability to perceive and feel more or less the architectural shapes and exclusivity of the environment created by them (Strautmanis 1990). The cultural and historical environment of Bauska's shape – spatial

structure, silhouettes and panoramic views, sight lines, historic division of urban area, street network, plots of land, parcelation, historical buildings, their scale and characteristic proportions, watercourses, archeological culture layer, building traditions, color, texture, arrangement of public spaces: landscape architecture and monumental art (Figs. 6, 7). These values constitute the unique historical urban space and no element must be changed in order to preserve intact the overall townscape context (Jakobsone 2008).

The historical towns of Latvia have been built by developing the local landscape peculiarities and in them we always feel the created mood, organically fusing and considering all the components of the spatial expression (Jakobsone 2011) which increases visually enhanced emotions of the common urban construction space. The intimacy of the ancient parts of historical towns largely depends on a correct choice of the street space scale (Figs. 8, 9).

Local governments need more information about positive solutions and heritage's role in the economic recovery.



Fig. 6. The roof landscape of the Old Town. *Source:* author's photo, 2012.



Fig. 7. The huge trees of the garden of the Church of Holy Spirit hide the elegance of the church in the landscape. *Source:* author's photo, 2012.



Fig. 8. The historical buildings and character of nature near the bank of the Mēmele. *Source:* 2012, author's photo.



Fig. 9. The historical buildings in Upes street. *Source:* author's photo, 2012.

Conclusions

The value of the historical centre of Bauska lies in its landscape, where testimonials have survived from the human intentions to change nature, as well as from different ages describing sites of the cultural heritage. The wooden architecture of towns is a unique phenomenon of material culture. The old houses have withstood fires, natural disasters, wars, technically erroneous repair works and badly planned rebuilding. Many houses have perished, thus diminishing the architectural quality of provincial towns.

The disappearance of building shape density of the green cover and suppression of the visual perception of the historical building in the main view lines and shape impact of the green structure on the historical scale of the urban environment and roof landscape bring changes (Figs. 10, 11).

Development of the historical centre of Bauska does not satisfy the needs of next generation, sustainable planning principles have to be considered. The aims of sustainable environment are as follows: preserva-



Fig. 10. The spaced historical building and green structure in Kaleju street. Source: author's photo, 2012.



Fig. 11. The building scale in Riga street no trees. Source: author's photo, 2012.

tion of cultural heritage, rational use of buildings, improvement of public space, promotion of cultural interactions and integration of society, improvement of living space and conditions. There are three dimensions of sustainable environment – economic, social and environmental ones – and there should be kept balance between them (Trušīņš 2000). At the same time a balance between environment and cultural heritage preservation and economic development of the territory is needed. Although the cultural environment and cultural landscape are perceived as an important value in planning preservation activities, requirements of the modern society determine necessity of functional elaborations of historical buildings and town environment in general.

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