LANDSCAPE ARCHITECTURE

INTERACTION AREAS OF THE CULTURAL AND HISTORICAL TERRITORIES AND THE SOVIET PERIOD RESIDENTIAL AREAS

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ABSTRACT

Based on the carefully studied historical material, a research was carried out on the interaction zone between the cultural and historical territories and the Soviet period residential territories in the urban environment. The visual structure analysis of the landscape in the urban environment was analyzed, choosing the Old Town area of the city of Jelgava, Jelgava St Anne's Evangelical Lutheran Church, and the soviet period residential territories located between these objects. In this defined area the elements of the visual structure of landscape were analyzed, including both the compositional and aesthetical aspects, and the evaluation of sights in the urban environment context. Consequently, the aim of this research is to obtain new findings from the analyses preformed in the research and the groups of respondents.

Key words: visual landscape structure, cultural and historical territories, residential areas

INTRODUCTION

Jelgava is the only Latvian city, which had been destroyed during the world wars, losing a great part of its cultural and historical housing. Jelgava used to be the pearl of Latvian urban construction of the early 20th century . But from July 27 to 31 of 1944 the beautiful city of the baroque, classicism and renaissance era masterpieces, and all of its architectonic, cultural and national values were destroyed - bombarded and burnt down. 93 % of the city territory was turned into ruins. During the Soviet occupation from the 1944–1945 the General Plan of the Jelgava city housing was developed by a group of professionals with V. Laka in the lead. It was decided that a brand new city will be constructed instead of reconstructing the old one. The new city was supposed to have wide streets and squares, new residential housing quarters which would vaguely remind of the earlier Jelgava. The old housing was supposed to be subordinate to the new constructions; also the unaffected buildings were pulled down. The area which is presently known as the Old Town is only a small part of the city outskirts with a historical wooden architecture which has surprisingly survived, see Figure 1 (Jelgava city hall project, 2011; Soldatovs, 1949; Suhecka, 1990; Riekstiņš, 1991).

Presently the city of Jelgava is not one of the most attractive places with its half-collapsed houses and neglected courtyards, but at the same time this area is the only witness of the former luxury of $M\overline{1}tava$ – some of the buildings have remained from the 18th and 19th century. The present cultural and historical

heritage comprises urban construction, architecture, art and historical monuments, thus composing the historical environment of Jelgava. In the process of city development it is crucial to maintain the cultural and historical heritage because it composes an essential and diverse spatial image. These fragments of historically spatial architectonic environment are unique elements of the whole city planning system. One of the base units of the urban structure is its residential areas; therefore, a great attention is paid to the development and housing improvement in these territories in the urban development strategic and operative planning documents. The residential area is a populated environment of an appropriate size which has its own maintenance, identity, character that follows its type of housing, physical borders and the sense of community between the landscape and the residents (Treija et al., 2003). Along with rapidly developing processes of industrialization in the period of the '60 - '80s in Riga and in other cities of Latvia, a chain of new industrially-made type residential and industrial building complexes were built, which attracted to Latvia a large number of workers from other republics of the USSR. This impressive constructing process in the post-war Soviet period disrupted the historical planning principles and the urban scale. Rapidly deteriorating, this apartment market caused social, economic and technical problems, as well as issues that concern their maintenance (Asaris et al., 1996; Briņķis et al., 2001)

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Figure 1. In the crossing of Dobeles, Vecpilsētas and Jāņa Asara Streets remains the oldest part of the Jelgava housing that has not been destroyed during the World War II (Source: construction made by the author, 2013)

MATERIALS AND METHODS

The research of the interaction area between the cultural and historic territory and the territory built during the Soviet period in the city of Jelgava was carried out from October 2012 till December 2012. In order to reach the set goal, the following scientific research literature was studied publications, documents and electronic resource analyses. By involving a group of students (K. Aizups, K. Cirse, D. Lapsa, A. Mengots, S. Pastare, S. Sarkanbārde, A. Katlapa, J. Gertmane, the Latvian T. Patrina from University of Agriculture. Faculty of Rural Engineering, Landscape architecture and planning specialists), a study of the present situation was carried out, and a visual structure analysis was performed. In order to qualitatively study the present situation, the group of students interviewed 52 respondents. 32 of whom lived in the analyzed territory, whereas,20 respondents worked (pastor, civil servant. businessmen, store employees, printing workers, secretaries, teachers, shop assistant-consultant), spent their whole day in the Old Town territory of Jelgava. The group of respondents comprised 54 % male, and 46 % male respondents aged 20-70 years.

In order to raise the quality of the research, several experts were chosen and interviewed according to the specifics of the research. The group of experts consists of 12 professionals respondents: historian A. Tomašūns, engineer A. Dambergs, land surveyor M. Mengots, landscape architect of the Jelgava City Council Administration Building Authority A. Lomakins, professors-architects A. Ziemeļniece, I. Lāčauniece, V. Liepa, assistant architect L. Daga, designer J. Borgs, chief geodesist of the Jelgava City Council Administration Building Authority Jelgava V. Veinbergs, Local Government Investment Division Project Manager S. Zīverte and head of the History and Education Division I. Deksne.

In order to establish and define the results, a monographic (descriptive) method was applied, which was based on the scientific data and established facts obtained from the analyzed territory. All the developed schemes of analysis were obtained in the process of research (authors: group of students: K. Aizups, K. Cirse, D. Lapsa, A. Mengots, S. Pastare, S. Sarkanbārde), applying digital topography. The photographs used in the research were created by authors during a period from 2006 until January 2013. The historical maps and historical photographs were taken from the archive of the Scientific Library of Jelgava and the State Inspection for Heritage Protection of Latvia.

RESULTS AND DISCUSSION

Transformation of the analysed territory over the centuries

In the second half of the 19th century the activities of economic life began to increase, which caused an economic growth that created an impulse for the housing development. New modern plants were constructed. Kramer's Grebner's, Westerman's – Dering's and Gauderer's plants could be successfully running even nowadays, because a part of these buildings are still existing. In several places of the city streets, instead of wooden houses, first multi-storey residential houses were built according to the individual projects, which established that the top storeys of these buildings would rise above the traditional panorama of the Jelgava city church



Figure 2. Residential building on Dobele Street, the '30s of the 20th century (Source: http://www.zudusilatvija.lv/objects/object/10275/, National Library of Latvia, Latvian Studies, from project collection "Gone Latvia")



Figure 3. Jelgava. Courtyard of the residential house with a balcony and a woodpile (Source: http://www.zudusilatvija.lv /objects/object/10652/, National Library of Latvia, Latvian Studies, from project collection "Gone Latvia")

towers. At the end of the century the construction spread outside the borders of the historical city

(Dābols, 2003). Another three new facade image collections were published before 1824. These examples of copper carving techniques offered a great variety, and their authors were the great architects Luigi Rusca, Vasily Stasov and William Geste; however, the new system lead to a housing creativity stagnation and the loss of individuality. The permit for every new building or rebuilding could only be obtained if the facade was adapted to one of the examples in the book (Lancmanis, 2010). Until the end of July of 1944, Jelgava could undoubtedly be characterized as a monument of the wooden architecture complexes. Only few drawn city overviews, drawings of housing fragments, illustrated publications, pictures of maps, and several photographs of old city housing, which were taken shortly before the fire demolition in Jelgava, are left today; see Figures 2 and 3. Whereas, the multi-storey residential housing of the analyzed territory, which is located along the Liela Street, was created during the Soviet period, see Figure 4. This housing is visually unattractive and heavy in comparison to the nearby Old Town buildings. They are located in between cultural and historical heritage housing territories and St Anne's Evangelic Lutheran Church. Part of these multistorey residential houses was built very close to St Anne's Evangelical Lutheran Church and it completely transforms the characteristics of the housing. The transformations of the visual space of the landscape are reflected in Figures 5 and 6. The church history explorer Ernst Herman Bush considered the approximate construction time of St Anne's Church to be around the period of Duchess Anne's spiritual patronage around the end of the 16th century, respectively, after the death of Duke Gotthard Kettler. Although the Latvian Lutheran congregation in Jelgava was established and had existed a lot earlier, the name of the Patron saint given to the church is an obvious glorification of the Benefactress- Duchess Anne, which allows dating the approximate time of its construction. It can be assumed that until her death in 1602, St Anne's Church was almost constructed, but only from timber. It lacked the throne, which was finally built in between 1619 and 1621, but since 1638 the newly built stone church was ordained on July 26 in 1640 (Spārītis, 2011). The construction of the 5 km long Duke Jacob's canal along the St Anne's Church was begun from the 17th to 18th century, and it connected the rivers Svēte and Driksa. The canal was flowing through the centre of the city. It served as the drainage for gutter water and as a water supply for the whole city, but unfortunately was not successful. The canal ramified into three arches, thus, being the most characteristic construction of the city of Jelgava, which crossed the whole city in a straight line from the river Driksa until Dambja street (Jelgava, Duke Jacob's Canal ...; Lancmanis, 2010), see Figures 7 and 8.

The Plan illustrates the city street network quarters surrounded by the Jelgava fortification bands, Jacob's Canal, newly built baroccal planning of the Jelgava city (Lancmanis, 2010.) The historical view and the present condition of the Duke Jacob's Canal are illustrated in the Figures 9 and 10.



Figure 4. Multi-storey residential housing along Liela Street (Source: photo by the author, 2006)



Figure 5. St Anne's Church surrounding area in the end of the 1920 (Source: Dāboliņš, 2006)



Figure 6. View at the analysed territory from Kr. Barona Street (Source: photo from N. Reča's private archives)



Figure 7. Plan of the Jelgava city with the Duke Jacob's Canal, 1763 (Source: LU AB: http://www 3.acadlib.lv/broce/ 4. vol. part 2, figure 255)



Figure 8. Duke Jacob's Canal that joined the rivers Svēte and Driksa (Source: http://www.zudusi latvija.lv/objects/object/10303/, National Library of Latvia, Latvian Studies, from project collection "Gone Latvia")



Figure 9. Duke Jacob's Canal (Source: http://www.zudusilatvija.lv/objects/object/13637/, National Library of Latvia, Latvian Studies, from project collection "Gone Latvia", Original keeper: R. Zalcmanis)



Figure 10. Kr. Barona Street nowadays (Source: photo by the authors, 2012)



Figure 11. Multi-storey residential housing and St Anne's Church in the middle of 20th century (Source: photo from A. Tomašūn's private archives)



Figure 12. Multi-storey residential housing and St Anne's Church today (Source: photo by the authors, 2013)



Figure 13. Transport and pedestrian traffic conflict zones. Functional territory zoning (Source: construction photo by the students group, 2012), I – degraded urban environments landscape space, industrial or abandoned territories; II – unexploited territories without landscape; III – ladscaped territories with positive landscape values

Visual structure analysis of the territory analyzed in the research

Performing the visual structure analysis in the process of research, it was established that in Jelgava only a small part of the unique historical housing been left, which should be allocated the most attention and resources in order to perform conservation of these historical buildings. The dominant structures of the territory are the twostorey building, which offer pleasant sights and comfortable atmosphere in the modern urbanised urban environment. The Soviet period five-storey residential areas overshadow the most significant dominance - St Anne's Church. Moving along the Liela Street in the direction to the point R, the fivestorey buildings obstruct the view onto the Jelgava Old Town territory. The main part of this multistorey residential housing is located along the sides of Liela street. The visually unattractive landscape is reflected in the historical information of the middle of the 20th century in Figure 11, and the present situation in the analysed territories is reflected in Figure 12. The overemphasized scale of the multi-storey residential housing is too hulking for the analysed territory because it obstructs important views.

The research established that the present functional zoning of the area is chaotic, and the examples can be observed in Figure 13. The main part of the analyzed territory is occupied by the residential, functionally unexploited, and commercial zones. Today the present cultural and historic heritage takes up around 1/4 of the analyzed territory. In the process of research it was established that there are multiple conflicting cases involving pedestrian and traffic flow in the Old Town territory of the Jelgava city, which is also reflected in the survey data, see Figure 14, and 20 % of residents wish to diminish transport flow and 60 % want to construct recreational areas suitable also for people with special needs. 11 % of residents wish that in the process of development, new children playgrounds would be constructed, 26 % want new walking areas, 19 % want new restaurants, bars and 15 % expressed a desire to have new cinema in the area. Whereas, 8 % of residents want new multi-storey car parks constructed in the new the Old Town in order to easily access all the entertainment facilities in the Old Town's territory, whereas none of the



Figure 14. Survey data from 32 respondents. I – 37 % of the respondents use private cars; II – 44 % travel on foot; III – 4 % use public transportation; IV – 15 % use other vehicles (Source: authors construction, 2013)



I – 55 % functions should be renovated only partially; II – 35 % of the working group would prefer the total renovation; III – 5 % do not find the renovation necessary; IV – 5 % do not express any concern on this topic

(Source: authors construction, 2013)

residents who work in this area consider this construction necessary. The data collected from the survey on the respondents who work in this area differ from those of the other respondents: 10 % of respondents want new greenery, 5 % want better open views at the St Anne's Church. 5 % want more car parks, 8 % for new children playground, 10 % want new recreational areas, 9 % want water elements, 9 % – new tourism objects, 8 % – more litter bins, 11 % want qualitative pavements for pedestrian pathways and road surface, 6 % want cobbled streets and 10 % want improved lighting. The research established that no one would prefer to leave the territory in its present condition.

Opinions from the other group are shown in Figure 15. According to the findings 88 % of respondents are not satisfied with the quality of the pedestrian pathways and roads, and the other 12 % of respondents find that the quality of road surface is decent. 55 % of people want the territory to have several changes – the historical buildings should be, renovated. 96 % of the respondents affirmed that they would exploit these territories after their renovation, reorganization and landscaping but 4 % would not change their opinion of these territories and would not use them even after their

reconstruction. 60 % of residents who work in this area would gladly spend their spare time in the Old Town territory, whereas 40 % would prefer other places. 27 % of respondents would prefer to transform the location of industrial areas, moving them to other parts of the city territory.

To summarize, the surveyed group of residents have distinguished the following urban environment issues in the Old Town territory of the Jelgava city: 13 % mention the car parking problems, 13 % disorganized pedestrian flow (especially early in the morning. near public institutions such as kindergartens, see Figure 16), 25 % consider the analysed territory to be neglected and unattractive. 19 % emphasize that there are no resting areas and 13 % find the lighting in the territory to be very poor. The research established that 15 % of residents find this territory to be unsafe and 60 % of the respondents who work in the area find it unsafe to be in this territory in the night hours. The amount of data proves that 90 % of respondents who work in this area feel safe in this area during the daytime. 57 % would rely on the proper work

of municipality and professionals. In addition, 43 % of the residents wish that the territories were qualitatively developed and reorganized. 88 % of inhabitants would prefer the Old Town territory to be transformed into a pedestrian area, which would attract more tourists in the future and would provide more recreational possibilities for every visitor and resident. The research established that also the experts unanimously consider that it is necessary to move all the industrial areas outside the city borders or at least outside the Old Town territory, and to transform Vecpilsetas street with the square near Dobeles street into walking area, prohibiting the traffic along the narrow streets, except the servicing transport. To achieve the set goal, an accounting of the most valuable, aesthetically qualitative elements in the analyzed territory was carried out, and the opening views of the vertical dominances were analyzed, which is reflected in Figure 17.



Figure 16. On the right side of kindergarten (Source: photo by the authors, 2013)



Figure 17. Analysis of vertical dominances in the analysed territory (Source: construction photo by the students group, 2012), I – negative views of the vertical dominances; II – positive views of the vertical dominances; III – view of the chimney; IV – view of St Anne's Church from the Dobele street;
V – view of St Anne's Church in the direction to point A; VI – view of the St. Anne's Church in the direction from point R to point A

The results obtained in the research are also confirmed by the group of experts and their opinions as regards the present condition of the territories. 33 % of experts find that the main problem lies in the poor condition of the historical objects. They explain it with the location of this territory as opposed to other cultural and historical objects of the city. They consider it necessary that these objects are united into a one "historical path", and 45 % of them suggest improving the facades of the five-storey residential buildings along the Liela Street. Whereas, 22 % of experts shared their opinion that it is necessary to transform this housing with different construction solutions that agree with the style of the analysed territories.

The process of research analysis established wide, unattractive sights of the multi-storey residential housing and their courtyards. The conflicting aspect

was established in the direction heading from the point R to St Anne's Church, where the view is fully obstructed by soviet period housing. The research established that 32 % of respondents, who work in this area, consider the most valuable landscape element to be St Anne's Church, 12 % he massive tree that grows in the territory -Canadian aspen, 23 % - the Old Town territory itself, 20 % - the paved streets, 5 % - house chimneys, and 8 % of respondents have no opinion as regards this issue. Whereas, 50 % of experts consider St Anne's Church tower to have the main vertical dominance. Experts suggested that in the future perspective, the main point of attention might be another building, which would be constructed in a historical style with the facades similar to the style of Old Town. 29 % of experts agree with the statement that the green territories should be

constructed mostly in the courtyards and squares, in order to reveal the fronts of the historical building as much as possible. 50 % of experts consider that it is necessary to construct new buildings with historical elements, and 17 % of them wish to

CONCLUSIONS

The findings obtained during the research process are essential for the further development of the cultural and historic objects and Soviet period residential courtyards. By performing the historical research and photo fixation in the Old Town territory of the city of Jelgava, multiple unresolved and neglected issues were established. Consequently, the amount of the material obtained, considerably reflects the present condition of these territories. Qualitative and objective information was obtained from the data collected from respondents, as regards the issues that the residents would prefer to change, and their desire to participate in any activities that would help improve

integrate both the historical, and modern elements in the Old Town territory, while 16% of them emphasize that it is necessary to completely renovate the historical identity for the analyzed territory.

the poor conditions of the analysed territories. The residents of the territory are unanimously ready to collaborate with the members of municipality and other specialists in order to find gradual improving solutions for the neglected territories. A great contribution for the research was given by the expert opinions that have accentuated even more the existing variety of problems of the urban construction that affects the improvement and maintenance of the cultural and historic objects, as well as the improvement of the planning structure, supplementing the existing housing with new historical buildings, organizing and improving the landscape of the courtyards and resting areas.

REFERENCES

Āboliņš, A., Tapiņa, I. (2001) Latvijas pilsētu vēsturiskie centri. Rīga: Valsts Kultūras pieminekļu aizsardzības inspekcija, 87 lpp.

Asaris, G., Marana, A. (1996) Riga, Latvia: Demography and Housing. Royal Swedish Academy of Sciences, 2(25), pp. 97–102.

Briņķis, J., Buka, O. (2001) Teritoriālā plānošana un pilsētbūvniecība. Rīga, Rīgas Tehniskās universitāte, 219 lpp.

Būmane, L., Butāne, O. (2008) Jelgavas Vecpilsētas iela atdzimst [online] [accessed on 12.04.2008.]. Available: http://webcache.googleusercontent.com/search?q=cache:4bg3zQdZp6oJ:www.jelgavniekiem.lv/% 3Fact%3D4%26art%3D9943+Jelgava+atdzimst&cd=11&hl=lv&ct=clnk&gl=lv

Dābols, A. (2003) Jelgavas būvvēstures eksplikācijas. Ģ.Eliasa Jelgavas vēstures un mākslas muzejs. Raksti I, 8-14. lpp.

Dābols, A. (2006) Lielā iela, "Pie baltās zostiņas", "Pie zelta zirga" – ceļojums pagātnē, retrospekcija nāktonei. Ģ.Eliasa Jelgavas vēstures un mākslas muzejs. Raksti II, 20–27. lpp.

Jelgava. Hercoga Jēkaba kanāls Kanāla ielā [online] [accessed on 10.01.2013.]. Available: http://www.zudusi latvija.lv/objects/object/10303/

Jelgavas pilsētas domes projekts (2011). Jelgavas vecpilsētas bruģakmeņa stāsts [audiovizuāls materiāls]: The Tale of a Paving Stone from the Old Town of Jelgava / scenārijs un režija Aiga Dzendoletto; tehniskā montāža un režija Guntis Šūpulnieks; tulkojums Kārlis Streips; balss Zigurds Ķeizars; operatori Ojārs Zariņš, Uģis Jakubāns, Mikus Andersons; producents AGD grupa; vāka dizains - Santa Teimonen.

Lancmanis, I. (2010) Klasicisms Jelgavas arhitektūrā. Senā Jelgava. Rīga: Neputns, 216-234. lpp.

Leiburga, A., Laukšteina, D. (2003) Koka namu ceļš no skaistuma līdz postam. Zemgales Ziņas, Nr. 2989, 3. novembris

Riekstiņš, K. (1991) Atjaunotu vecpilsētu - rīt uz brokastu laiku? Jelgavas Ziņotājs, 5. aprīlis

Soldatovs, N. (1949) Atjaunosim mīļo Jelgavu. Zemgales Komunists, Nr. 77, 14. maijs

Spārītis, O. (2012) Versija par Jelgavas Sv. Trīsvienības baznīcu. Jelgava: Jelgavas pilsētas pašvaldība, 139-143. lpp.

Suhecka, M. (1990) Vecpilsētai - vienotu koncepciju. Jelgavas Ziņotājs, 22. decembris

Treija, S., Bratuškins, U. (2003) Development Problems of Large Scale Housing Estates in Riga. Scientific Journal of Riga Technical University, 2(4), pp 77–83.