

Context seeking of cultural heritage and green structure in urban environment

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Abstract. Architecture creates the artistic image of the built-up area and it has a profound effect on human perception. People get the first emotional impression of the city when approaching it and seeing its skyline that is the most characteristic and easily perceivable spatial form and that can be taken in when the artificially created spatial form is projected on the natural scenery or the sky [1]. The evolution of the society and economic changes create dynamics in the spatial development of the city. Each stage of urban development has characteristic structures of spatial volume forming the overall urban composition of the city. Whenever the city develops, its silhouette takes shape and this process is generated by several generations [1].

Keywords: history of architecture, cultural heritage, townscape, visual space, qualities of spatial environment.

Introduction

The city environment is transforming and changing with the times. It has been in the recent and more distant past, but there are positions that remain unchanged. One of them is the interaction between society and architecture. If the society aspires to a high-quality urban environment, architecture satisfies this demand. Not infrequently in the societies that are still in the stage of stagnation, just the opposite can be observed. Architecture and, consequently, the development of urban space go hand in hand with the requirements of man as an individual towards his space of life [2].

Urban building is a continuous process. Plans and conceptions are changed, but united development idea and its co-ordination with the processes taking place around is essential [3]. Variability through stability is a principle that has to be strengthened in development of historical centre of towns. It is necessary to have balance between existent environmental and historical heritage development and economical development of territory [3].

Research methodology

The value of Jelgava historical heritage is determined by:

- 1) recognition of Jelgava as the capital of old Kurland dukedom with its castle;
- 2) pictorial banks of the Lielupe and the Driksa with the meadows;
- 3) steeples of churches bringing accents in the town silhouette from separate sight points;
- 4) preserved historical building territories in separate parts of the town.

The investigation has the aim connected with a detailed study of the historical heritage of the town building, estimating the of pre-war and present building structure and green planting zones of the town.

The principal tasks of the research reflect:

- 1) the influence of modern economic policy on the preservation possibilities of the industrial heritage;
- 2) search of the architectonical synthesis of the form development of the new urban space;
- 3) the synthesis of type buildings elements of the 50-ties of the 20th century in modern tendencies;
- 4) careful estimation of existing historical heritage in the perspective development context of the town.

The heritage of the historical urban space includes both the urban building and the local architectural, archeological, historical, sacral, applied arts and nature objects.

During the war years Jelgava has lost huge building territories, preserving only some building zones or buildings, each of them having a huge value. Jelgava historical centre as the protection monuments of urban building includes the territories of the old building blocks which fragmentary are found in separate parts of the town.

The research method includes comparison of the historical building and green planting structure of the town space with the town space developed in the years after the war. The research examines the compositional solution of each street in detail. One of the research objects is approximately a 6 ha territory along Pasta street. It is characteristic with both the existing green park zone (Raina park, Alunāna park, Stacijs park) and the building intensity from Raina street to Jana street characteristic with intensive new building during the last 10 years.



Fig. 1. Since the 90-ty years of the 19th century Zemgale avenue to Valnu street in Jelgava has been formed as the boulevard type with dwelling houses and tree plantings [Source: from A.Tomašūna private archive]



Fig. 2. Jelgava. Akademijas street. The Saint Trinity church and saint Simana and Annas church. (19th century 90-ty) [Source: from A.Tomašūna private archive]



Fig. 3. Jelgava. The new Swedbank and Saint Jura church (2012) [Source: photo by the author]



Fig. 4. Jelgava. Old Katolu street zone with dwelling house and S. Jana church (2012) [Source: photo by the author]



Fig. 5. Jelgava. The new street in cemetery territory S. Jana church (2012) [Source: photo by the author]



Fig. 6. Jelgava. Old Katolu street zone by S. Jana church (2012) [Source: photo by the author]



Fig. 7. Jelgava. The reconstruction of composition axe in cemetery [Source: photo by the author]

Results

Pasta street is formed as a one-way transport street and the principal sight lines are in the left side of the street. As regards the architectonical quality of the building, the reconstructed Swedbank building (2010).

In the crossing of Raina-Pasta streets appears well, this building has got its model by the synthesis of the historical type cinema building of the 50-ties of the 20th century with modern tendencies using successfully glass planes both in the facades and in separate roof constructions.

Two economically political power periods are seen well in the outer image of the reconstructed building. Each of them is characteristic symbolically as regards its form and the building material heavy concrete planes and light glass forms. Preserved national romanticism decors in the facades create the forms of harmonies successfully. Behind the Bank building-Saint Jura church the expressiveness of which is increased by lime-tree row plantings along Raina street. The street crossing at the Bank building is heightened up by nice green plantings. The huge parking between the bank building and the trade market-hall deranges the homogeneous scale of the block building. It is significant to regain the perimetrically completed building of Raina and Katolu streets which was lost during the war years.

The trade market-hall at the crossing of Pasta and S. Edzus streets was built (2006) in the place of old warehouses the expressions of historical elements of which-the composition of the rhythm of brick arches reflects along S. Edzus street. Particularly expressive the play of arch forms is at night lighting. In this building zone there are necessary new tree row plantings in S. Edzus street to create some connection with the Raina park.

Behind the block building-Katolu street has preserved its historical form. During the post-war years its southern direction has lost both its form and building – approximately 200 m. Only one historical five storey dwelling house behind the dwelling houses of the 70-ties of the 20th century has remained. Also sight lines to Saint Jura church are seen from this place. It is the only sight point to the church.

At present the church is located behind a one-storey monotonous long trade zone the end of which is the small Jana street. As a clumsy accent at the end of the trade building in the 2-storeid flower shop (2010) with red brick pilasters built in a semicircle form which in his heaviness competes with the elegance of the belfry of the next church. It may be referred both to the choice of the form and the material. In summer the crowns of

the trees at the church cover the sight lines, and it is difficult to perceive the church.

The Alunans park opposite the church is the historical cemetery territory done away in the 50-ties of the 20th century by building a new autotransit highway to Lithuania. In order to preserve the old unity of the historical space the longitudinal axis of the church is marked with the path bed and it is planned to finish it with a sculptural work serving as a memory mark of the historical place. In the eastern zone of the church or altar place a fragment of the old Katolu street has remained with lime tree plantings creating the connection of the green space with Stacijas park.

The old town dam was located historically parallel to the longitudinal axis (about 150 m to the north) of the church (till the beginning of the 19th century) which was filled up and changed to Valnu street with the 5-storied dwelling house building. The continuation of the historical street in the direction of Saint Nikolaja church is interrupted by the 5-storied dwelling building of the 70-ties of the 20th century. The perspective development conception of the town has elaborated a proposal to dismantle the first storey volume of the dwelling building opposite the old Valnu street bed and create it as pedestrian zone even to Pasta street, thus opening the sight points to the historical dwelling houses on Valnu street and the Saint Jana church.

In the southern part of the church cemetery territory was located, but it was destroyed in the post-war years, by dismantling the granite monuments and building a new building on the foundation. The territory was razed to the ground and Stacijas park was laid out. Only after the rebirth of our free country in 1990 Lacplešis monument made by sculptor K.Jansons was regained, the monument was dedicated to the people killed in the war during bermondiade.

In this place the town has historically preserved the green plantation zones only changing their functional meaning and structure.

Stacijas park, Alunana park and lime tree planting rows of Katolu street create the solution of united green plantings. The compositional completeness of the green space in to be searched by the creation of new plantings in the inter-block territory of the existing dwelling houses (Akademijas – Jana – Pasta – S.Edzus streets). Bringing in green “wedges” would decrease the scale and the impersonality of the inner courtyard of the dwelling building. At present the inner-courtyard zone is transformed into an autotransport parking and the conception location of public roads.

The new green territory of the block is formed to connect it with the green planting space of Raina

street enriched with the Saint Jura church garden basing walking paths. The garden is dissociate with a splendid metal fence. The pictures queers of the church garden is continued by the parade front square which is connected in the composition longitudinal axis with the plantations of Forest faculty garden. Opposite the Saint Jura church garden – the green territory of Saint Simana and Anna church. Like the Saint Jana church, the silhouette of this church is see only from the inner courtyard of the 5-storied dwelling building in a narrow sight line.

The green wedges or fingers between the historical heritage and the new territories of the post-war building are line scars searching a compositional united and harmonic balanced town space deprived by war years from Jelgava.

Since the 90-ty years of the 19th century Zemgale avenue to Valnu street has been formed as the so-called building space of boulevard type with dwelling houses and tree plantings. The bed of the new street built as on extension of Akademijas street after dismantling the town wall, created scale and character of the town space. The historical building along Akademijas street was nearer the driving part of the street and there were no tree row plantings. During the war period the historical building disappeared and the new building did not preserve the line of building, but created indention from the street. Because of it the street has got the lime planting on the both sides of it. Only along the altar end of saint Simana and Annas church which are located close to the street the border line of old building may be seen. As the new post-war building retreated, the street has got its green decoration, but lost its historical heritage.

Broad street building works have began along the Driksa left bank in 2011. The Driksa bank (parallel to Akademijas street) has been the walk promenade with lime tree lane along a dense zone of bank building, where the synagogue and rich dwelling houses belonging to German nobility and well-situated clerks of town authorities were located. The location of buildings opposite the castle played not only a symbolic but also direct influence of the town power. Historically the castle park territory was to the canal of Pasta island along the side of which the road to the town from Riga was located. Therefore the prestige dwelling building mentioned above was located opposite the castle park plantings. The inner courtyard zone of the building was at the German church – Saint Trinity church.

During the war years when the street building burnt down, board square part of the Forest faculty has been formed having a sport zone which disarrange the structural character of the old building. It refers to the exaggerated long (106 m) technical faculty building too, as well as to the hostel building.



Fig. 8. Jelgava. The reconstruction boulevard promenade and new bridge by Driksa (2012) [Source: photo by the author]

Particularly well it may be seen in the sight point coming from the Riga side where the brittleness of the town silhouette is depressed by the scale and proportion of the building structure. This year the new tree plantings of the reconstructed Cakste boulevard will gain the foliage of their crowns only after 30 years.

At present not only the street reconstruction project, but also the building of a new pedestrian bridge is realized. The bridge connects the town space with the green landscape space of the Pasta island and the new plantations with Cakste boulevard. The bridge is the continuation of the pedestrian zones of Driksa street (sorb lane plantations) to the Lielupe left bank. The walk and trade zone mentioned (250 m) in the span from Katolu to Akademijas street is to create a new architectonically expressive image of the town space. It is also referred to taking off the transport load in this space. But in part of pedestrian street

From Akademijas street to Cakstes boulevard (150 m) or the connection at the bridge, reconstruction of the inner courtyard zone of hostels is to be realized. There a small square is necessary which would be compositionally as a green point at which the axis of urban space – the axis of the Driksas street pedestrian zone to which the side axis of Saint Trinity church would be connected.

It is possible to mark the building of the Saint Trinity church last in the period of war with a clipped hedge like along the building perimeter, also marking the liner of the church benches. It is one of green proposals of the solutions considered in the competition of state significance. Attachment of municipal finances for the construction of the church has already began by creating the memory mark with the fountain in the altar part. After the reconstruction of Cakste boulevard the part this entertainment zone will be one of the bank recreation space.

The part of the boulevard promenade will continue also down the existing Driksa bridge creating under the bridge the pedestrian zone with



Fig. 9. Jelgava. Old boulevard promenade by Driksa (20–ty 20th century) [Source: from A.Tomašūna private archive]



Fig. 10. Jelgava. The S.Trinity church
[Source: photo by the author]

separate stairs. The bank slope will be made with a concrete support wall with railing.

The basis of the architectonical constructive solution of the pedestrian bridge is the system of hanging shrouds at two support pilaster. It makes the bridges look visually light and attractive.

At the opposite side of the bridge Pasta island is projected as the green recreative zone for public activities and peaceful walks. It is planned to create the sculpture garden, locations for children plays and activities by additionally propping the bank line of the island. At the bridge in the island a coffee house with small boat station and roof terrace above it where the sight lines to the river and the boulevard promenade will be seen.

In the perspective transport flow during the mass activities is to be taken into consideration. One of the solution proposals is to make the green roof cover the parking to be designed at the descent to Pasta island. Such solution visually would not disturb the unsettled character of the green structure of landscape pictorial space of river.

Pasta island is narrowly stretched land stripe between the beds of the Lielupe and Driksa which is flooded partly in spring. In its farther point-southern part the project plans to built a pontoon bridge which would comfortably help the pedestrian transit from the station and new bus terminal to Jelgava castle.

While finishing the research of the landscape space of the urban space an important role is played by Lielupe right bank which creates visually united compositional structure with the Pasta island. It is necessary to mention new Lielupe bank promenade with beach very popular for the inhabitants of town in summer.

Beside the new beach zone there is former territory of the sugar factor. The problems to preserve the historical heritage have become particularly urgent in the last years. An example is the dismantling of sugar factory buildings where the economic policy of European Society is particularly merciless in the completion conditions. But no goodness is obtained without losses the compensation finances for the dismantling of sugar factory building are used for the arrangement of landscape space of Lielupe and Driksa river.

After dismantling the historical sugar factory buildings (1927) the possibility is lost to preserve the old building as an industrial park at Lielupe meadows. The meadows have no characteristic tree and brush growth, and in distant

sight lines the silhouette of town may be seen. Particularly it is significant in sight points from railway. The location of the sugar factory formed historically in geographically favourable place as sugar beets from fertile Zemgale fields were carried with barges along river to the factory.

In the silhouette of the right bank may be seen the second industrial historical heritage – the dwelling houses of workers of railway station. They are one-storey barrack-type wooden buildings with small gardens and dividing tree planting row. There are also buildings for the repair zone of old steam locomotives. The building took place during the period of first Latvian free country when one of Ulmanis slogans was to cover Latvia with the railway network.

Lielupe right bank in this territory according to town territorial planning preserves the meaning of the green recreation space with the walk promenade. In the bank building it is planned to locate the building amount having the public character which opposite the Pasta island would create new silhouette.

Discussion

While summarizing up the research the green structure in Jelgava historical centre it may be concluded:

- 1) during the post-war years the historical building of town was not restored but new compositional structure-squares, parks changed location of streets and width of street beds was increased;
- 2) new space conception has been developed for the town space creating broad street plantings even with double tree rows;

- 3) the change of historical building structure by creating in the location of burned out houses tree groups or separate trees with brush groups;
- 4) large role for town green decoration was played by founding the new Forest faculty which planted new trees particularly during spring joint work;
- 5) with the creation of green planting zone a symbolic opposition to the political power was created not to let inferior building in significant places of the town structure.

Conclusions

During the post-war years the parks, squares and tree rows or separate groups were formed as landscape plantings. But the historical town plantings till the 40-ties of the 20th century were clipped regularly and their branches were formed in definite form and proportion, trees taking into consideration the architectonical expressiveness of existing building besides.

Tree plantings in urban space were to increase the expressiveness of building but not to cover up architecture and silhouette of buildings. Particularly

it may be referred to castle building at present the eastern façade of which is covered up with chestnut trees along Lielupe left bank. Tradition of university graduates to plant trees in castle park is not good idea. The location of trees cover up castle. Therefore it is necessary to choose the planting places as well as height of tree crowns at buildings, directions of dominating winds, the dendrological features of trees. It is significant to urban space which has dense underground communication network.

References

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Kopsavilkums. Pilsētībūvniecība ir nepārtraukts process, kurā plāni un koncepcijas tiek mainītas, bet būtiska ir vienota attīstības ideja un tās saskaņotība ar apkārt notiekošajiem procesiem. Mainīgums caur noturību ir princips, kas jānostiprina pilsētu vēsturisko centru attīstībā. Jelgavas pilsētvides kultūrvēsturiskais mantojums ietver gan pilsētībūvniecisko, gan lokālo arhitektūras, arheoloģijas, vēstures, industriālos, sakrālos, lietišķās mākslas un dabas objektus.

Jelgava kara gados ir pazaudējusi milzīgas apbūves teritorijas, saglabājot tikai atsevišķas apbūves zonas vai ēkas, kur katrai no tām ir liela vērtība. Jelgavas vēsturiskais centrs kā pilsētībūvniecības aizsardzības piemineklis ietver vairāku veco apbūves kvartālu teritorijas, kas fragmentāri ir nolasāmas atsevišķās pilsētas daļās.

Pētījuma metodika ietver pilsēttelpas vēsturiskās apbūves un zaļo stādījumu struktūras salīdzinājumu ar pēckara gados izveidoto pilsētvidi. Pētījums aplūko detāli katras ielas kompozicionālo risinājumu.

Stacijas parks, Alunāna parks un Katoļu ielas liepu stādījumu rindas veido ainaviski vienojošu zaļo stādījumu risinājumu. Zaļās telpas kompozicionālā pabeigtība ir meklējama, risinot jaunu stādījumu izveidi līdzās esošā daudzstāvu dzīvojamā iekškvartāla teritorijā (Akadēmijas – Jāņa – Pasta – S.Edžus iela). Zaļo „ķīļu” ienešana mazinātu dzīvojamās apbūves iekšpagalma mērogu un bezpersoniskumu. Patlaban iekškvartāla zona ir pārvērsta par autotransporta stāvvietu un braucamo ceļu koncentrēšanās vietu.

Zaļie ķīļi jeb pirksti, kas caurvij vēsturisko mantojumu un pēckara gadu apbūves jaunās teritorijas – ir kā rētaudi, kas meklē kompozicionāli vienotu un harmoniski sabalansētu pilsēttelpu, ko Jelgavai ir atņēmuši kara gadi. Pēckara gados ierīkotie parki, skvēri un koku rindas vai atsevišķas grupas tika veidotas kā ainavu stādījumi. Savukārt, vēsturiskie pilsētas stādījumi līdz 20. gs. 40. gadiem tika regulāri cirpti un to zarotne tika veidota noteiktā formā un proporcijā, tā ievērtējot blakus esošās apbūves arhitektoniskās formveides valodas izteiksmīgumu.