

Genesis of the Cultural Historical Landscape Space of Zemgale

Aija Ziemeļniece*

*Latvia University of Agriculture, Faculty of Architecture and Construction
Akademijas st. 19, Jelgava LV 3001. E-mail aija@k-projekts.lv*

(Received in January, 2016; Accepted in April, 2016; Available Online from 10th of May, 2016)

Abstract

The development of the cultural landscape and urban construction space, which belongs to the basin of Lielupe of the region of Zemgale, has been influenced over the centuries by political and economic aspects that during the last 200 years have greatly changed forest areas, the structure, scale and functional value of agricultural lands and cultural historical building structure.

Agricultural management intensity in the 19th century and in the first part of the 20th century radically differed from the load intensity developed from the 70s of the 20th century reached with the rapid wave of rural collectivization, industrialization and modernization. It is related not only to the changes of the landscape space scale, but also to the agrochemical, drainage and wind load or soil erosion level increase. With the development of the rural economical turnover, the intensity increases the same way in the formation of urban production areas, in the development of streets network and new residential blocks. In turn, this brings up new requirements for the attraction of social comfort and ecological level in the urban environment. As one of these criteria are development possibilities for the city's green areas – wood parks, squares and gardens.

Key words: *Urban landscape space, cultural historical landscape, synthesis, aesthetic quality, cultural heritage, transformation process.*

Introduction

The influence of destructive effects of the both world wars and the time of post-socialism in the middle of the 20th century on the region of Zemgale was the hardest, changing the building structure of city historic centers. Jelgava is either one of them. The radiance and the economic growth the city reached in the 30s of the 20th century, in rapid tempo had developed the dense annular building around historical Market Square un Jēkaba channel. Church steeples in the urban silhouette, chiseled cobble-stone streets, stone tenement houses, the dense line of shop windows in the streets, barges at the Market Square, yachts at the palace – everything pointed out the undeniable economic growth of the capital of the former Duchy of Courland. In turn, the July of 1944 and Russian air aviation had wiped off the city during the day.

The time of post-socialism and its “understanding” of the city's economic development brought the monstrous structure of new city environment and arrangement of functional areas. In particular it is related to the new industrial areas formation in the historic city center. For example, dairy produce factory and multi-stored buildings of the engineering plant next to the church and historical wooden building, the demolition of cemeteries and building of new street through it, etc.(Grosmane,2010, Tomasuns,2015)

The aim of the study is to evaluate the existing urban building and its connection with the existing forest areas, transforming them to wood parks serving both as recreation spaces, and building areas of wood park type.

The assignments of the study are linked with transformation processes of 70s – 80s of the 20th century, bringing in rapid changes of suburb areas. The study focuses on the existing garden areas, as well as urban building structure influenced by the intensity of anthropogenic load.

Over the past decade the town-planning trends form new direction that connects both the recovery of historical building, and deliberative conservation of certain existing green areas. On moving the development conception further and looking closely separately the southwest and southeast parts of the city, it is evident that existing suburban forest areas retain a great potential for green recreation or rest zone creation.

The urban building load of the river basin of the left bank of Lielupe is much more typical than the right bank. This applies not only to the building density, but also to the functional intensity formed by the road structure and natural substrate specificities. The city part in this area is characterized by river floodplains (Ziemeļniece, 2012) (Fig. 1 and 2).



Fig.1. Perspective building areas of wood park (scheme by author)



Fig.2. Existing allotment territories (scheme by author)

The basin of the left bank of Lielupe around Jelgava is formed by several rivers – Tērvete, the stream of Bramberģe, Svēte, Platone and Vircava. These rivers together with the nearby forest plots form the blue-green ring about 2–3 km wide (Fig. 3.).

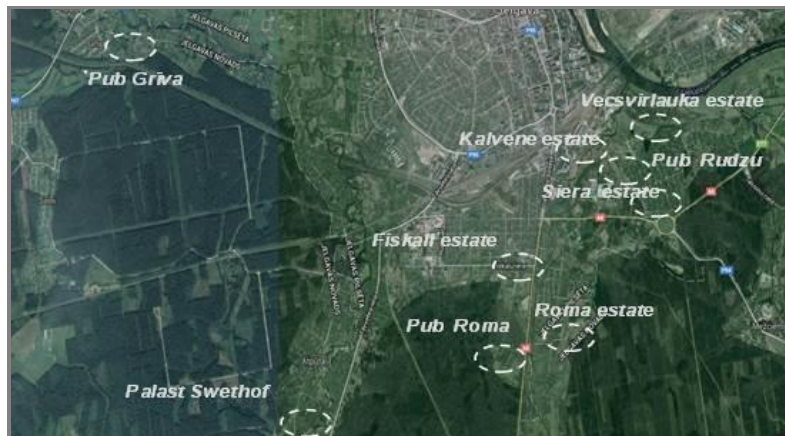


Fig.3. Radial location of manors and pubs around the city (the beginning of the 20th century) (scheme by author)

Materials and methods

The prognosis has an important role in the regional spatial, balanced and sustainable urban development planning processes, determining by scientific and analytical methods the ways of achievement of different scale regional population and its optimization in a certain time period.

In planning the achievement of the expected project objectives, existed already structural spatial development specificity, the time and the tempo of the environment cannot be ignored. In projecting the structural design development processes of the architecturally spatial planning of the urban and rural settlements – integration, differentiation, transformation, reconstruction, and recovery – balanced and sustainable cyclic or threshold shaped development of these processes should be ensured.

In the projects of urban development plans, mainly for the nearest foreseeable period, constructive of simplified forecasting is used, based on structural modeling of statistical data and mathematical calculations (population, dynamics, density, demographics, the capacity of building and transport, the analysis of environmental ecological indicators, etc.) (Fig. 4 and 5.).



Fig.4. The existing network of main transit roads (scheme by author)



Fig.5. The development vision of the Dambja Street (scheme by author)

The negative stagnating demography of the population of Latvia is rather undesirable factor in regionally spatial and social-economic development. (Brinkis, Buka, 2006).

The prognostic has an important role in the regional spatial, balanced and sustainable urban development planning processes, determining with scientific and analytical methods the ways of achievement of different scale regional population and its optimization in a certain time period.

In planning the achievement of the expected project objectives, existed already structural spatial development specificity, the time and the tempo of the environment cannot be ignored. In projecting the structural design development processes of the architecturally spatial planning of the urban and rural settlements – integration, differentiation, transformation, reconstruction, and recovery – balanced and sustainable cyclic or threshold shaped development of these processes should be ensured.

In the projects of urban development plans, mainly for the nearest foreseeable period, constructive of simplified forecasting is used, based on structural modeling of statistical data and mathematical calculations (population, dynamics, density, demographics, the capacity of building and transport, the analysis of environmental ecological indicators, etc.) (Fig. 6 and 7.).



Fig.6. Forests areas along the road of Bauska (photo by author)



Fig.7. The structure of the garden area in the urban space of Jelgava (photo by author)

The negative stagnating demography of the population of Latvia is rather undesirable factor in regionally spatial and social-economic development (Brinkis, Buka, 2008).

The application of graphic-analytical methods in the regional, district, county, town and city planning process is one of the fundamental mechanisms of action in prognosis. Graphic-analytical methods in planning are a specific display type of structural spatial environmental development process (Fig. 8–11).



Fig. 8. Street building character in the allotment area
(photo by author)



Fig. 9. The allotment area at the pub Griva
(photo by author)



Fig. 10. The allotment area at the Burinu road
(photo by author)



Fig. 11. The allotment area at the Tervete road
(photo by author)

Systematic analysis in territorially spatial forecasting is a set of tools, which is used in the solution of urban planning development problems. These methods are based on a systematic approach to the exploration the alternatives of solutions. Four phases of research are distinguished in the systematical analysis process:

- The determination of problem, objectives and criteria;
- The partition of the researched systems, its structural analysis;
- The formation of the statistical mathematical and graphical model of system;
- The analysis of the solution options and the consequences of its development.

The observance of systematic analysis principles in urbanistics makes it possible to observe the problems of regional development as a single entity, to reconcile the objectives of sub-systems with the objective of the system. The fourth, the resultant variant of the analysis is assumed as the most optimal because of the spatial direction of urbanization in the study Rīga – Olaine – Jelgava, which is suited to modern social economic and ecological environmental development trends. Railways, highways, engineering and the capacity of areas are a secure basis for the development of these directions (Brinkis, Buka, 2008).

Preventive forecasts must be taken in the following specific related to the regional development of urbanistics processes:

- When making responsible choice between a number of solutions of the project;
- When wrong solution may have negative consequences in perspective;

- When it is quite difficult or even impossible to adjust the consequences of the existing solution in further development stages.

Results and discussion

Forests in Jelgava cover 1264 ha, which is 21 % of the total territory of the city. Since urban forests are included in the first group or the protected forests, the economic activity there is not allowed, except for thinning.

The demand of population for such resorts in the city outskirts of the city is great and the demand for living space comfort grows up. The municipality of Jelgava, for cultivating urban forests and wood parks, for ensuring the availability for the city population, has intended in 2010 already:

- To make urban forest management to realize the population's social, economic, ecological, cultural and spiritual requirements;
- To promote such forest usages that leaves minimal impact on them;
- To form the division of forest in areas in order to preserve natural biotopes and create new habitats for native species;
- To make the appropriate improvement of recreation areas of intensively exploited forest plots (wood park) in order to reduce anthropogenic load on the natural base, create new wood parks, as well as linking them to a bike lanes that connect the multi-stored residential complexes with public recreation recreational zones (Municipality of Jelgava, 1999).

The number of population of Jelgava reached 71 thousand in 1998. There were several large industrial plants in the city – sugar-refinery, linen factory, agricultural machinery factory, dairy produce factory, metalworking factory, brick factories, etc. It created the demands for formation of holiday houses or summer garden area in suburban areas. The wave of development of garden cooperatives began in 60s – 70s of the 20th century. More sandy suburban lands, inapplicable for agricultural production, were allocated for its dislocation. As well as economically more disadvantageous suburban land plots, where the development of urban building infrastructure is difficult, were allocated for gardens.

This mentioned above green wood plot, enclosing urban construction space of Jelgava, in its southwestern and southeastern part is clearly recognizable as a green ring linearly radiantly divided by transport network, building and river beds with floodplain meadows. Consequently it has developed a number of functionally different wedge-shaped areas:

- 1) Forest gap corridors, consisting of the transport network, which seamlessly splits the green areas structure;
- 2) Forest corridors, where garden areas and their infrastructure (streets, utilities, building intensity) are situated);
- 3) Forest corridors created by the river beds and floodplain meadows, which gives the highest environmental quality assessment.

Each of mentioned corridors has its own functional importance, which is formed in context both the historical, political and economic situation. Transport transit roads in this forest area are formed of both railways from 70s of the 19th century and historical land roads, which today have gained the nature of national importance.

The forest area in the southern part of the city is crossed by three railway trunks – to Meitene, Liepaja and Tukums, which were built at the time of the Russian province. The tsarist railroad had been already historically built through the cheapest land units – forests. Clearing areas had a high value for being recovered from the forests, cultivated and sown.

The existing transport network or historical land roads in the southern part of Jelgava create 4 main traffic directions:

- The road of Bauska that leads to the former Anna's gate;
- The road of Eleja that connects to the former Anna's gate;
- The road of Svēte and its connection to the former Little gate;
- The road of Liepāja and its connection to the former gate of Dobeļe.

Each of the historical land roads was connected with the old planning structure of the city that had been changed in the post-war years. This refers to the re-planning of street network and changes of the building red lines (Ziemeļniece, 2014).

The next in the study it is the forest breakthrough corridor formed by the garden and the mansion building areas that divide southern city forest zone into 4 places:

- Garden area in the estuary of Tērvete into Svēte;
- Gardens at the estuary of the stream of Bramberģe into Tērvetē;
- Gardens along the river of Svēte concurrently the road of Tērvete;
- Garden formation along the left bank of the river of Vircava;
- Private houses along the Roma Street.

Looking at each of the mentioned garden areas separately, they constitute a different landscape space. The gardens situated along the stream of Bramberģes and the river of Tervete (19.5 sq. km) spikelly divide the forest area into two parts. The northern part is connected to the urban construction space, which can be formed as a suburban wood park area with multi-stored residential and public nature building. The extension of the Dambja Street there would be as the unifying transport transit line. Prospective area of wood park would be conveniently connected to the network of bicycle paths. In turn, a small forest plot in the southern part serves as a part of wood park and is used for people living in the garden area.

Next spiked nature garden areas are situated between the left bank of the river of Tērvete and forests. The river of Tērvete is formed as the tributary of the left bank of Svēte. 600 m up along Svēte in its left bank the garden area continues, which are situated in a narrow line between the river and the railway.

Linearly stretched allotment areas formed in the eastern part of the mentioned above forest area – in both banks of the river of Svēte. They separated 3 km long forest plot between the river of Svete and the highway of Eleja. This forest area is easily connectable to the urban infrastructure as Mežaparks.

By continuing the radial line to the west-east direction, a forest plot between the highway of Eleja and the river of Vircava creates the picturesque walking areas, where allotment garden area stretches along the left bank of the river 1.5 km long.

The fold of wood park in the southern part of the city forms radial urban green space, which centrically connected with it, creates the new city green corridor networks.

On continuing the started research, it should be underlined that the southwestern and the southeastern areas of the city include a number of cultural and historical spaces located in the mentioned area of wood park. This applies to a number of the old feudal or the duke's manors, the building ensembles of which had disappeared, but the place names or individual buildings continue to exist:

- Former Vecsvirlauka manor territory with a grain barn,
- Former Siera manor area and former Rudzu krogs (Rudzu pub) – in the left bank of the river of Vircava,
- Kalvene manor – the left bank of the river of Platone;
- Romas manor and its old pub near the highway of Eleja,
- The place of Fiskaļu manor near Viskaļu Street;
- Svēte palace ensemble at the right bank of the river of Svēte;
- Grīvas krogs (Grivas pub) near the old ferry of the river of Svēte.

The biggest urbanization load to the forests area mentioned in the study was made by transport corridors:

- The highway of Eleja that forms about 1 km wide transport corridor through the forest area;
- The highway of Tērvete with about 1 km wide transit corridor;
- The highway of Liepāja with 100- 800 m wide transit area;
- The highway of Bauska, which corridor is the narrowest – 60–80 m.

Conclusion

In the current conditions of unstable economic and social processes, suburban garden areas turn into permanent residential areas, and they lose the importance of seasonality. These areas relatively quickly acquire a nature of a mansion infrastructure, bringing in a new stylistics and scale. This process is promoted by the sharp rise in the costs of the real estate in the city central part. Thereby, the market value of the garden areas, transforming them into a "green" mansion zones situated close to perspective wood park, increases. In turn, this contributes the local municipality to deal with utilities orderliness. The "green" wave, which is now popular in the city development in Europe and is called the "urban gardening", is easily solved in the region of Zemgale. It is based on the preserved forest plots around cities (Dobele, Auce, Bene, Tukums, Olaine).

In the context of wood park territory with the recovered cultural heritage values, a bright characterization of regional identity forms out.

List of literature

1. Briņķis J., Buka O. *Reģionālā attīstība un prognostika pilsētplānošanas kontekstā*. RTU, Rīga, 2008., p.154–158.
2. Briņķis J., Buka O. *Pilsētu un lauku apdzīvoto vietu kompleksu arhitektoniski telpiskā plānošana*. RTU, Rīga, 2006, p. 215.
3. Grosmane E. *Senā Jelgava*. Neputns, Rīga, 2010, p.38.
4. *Jelgavas teritorijas plānojums 1999–2010*. Jelgavas pilsētas dome., 1999., p. 128.
5. Tomašūns A. *Mana Jelgava*. Jelgavas pilsētas dome, 2015, p.65.
6. Ziemeļniece A. Context seeking of cultural heritage and green structure in urban environment. *Landscape Architecture and Art*, Vol. 1., 2012, p. 67–74.
7. Ziemeļniece A. Transformation of the landscape space in the post war years. Jelgava example. *Landscape Architecture and Art*, Vol. 4., 2014, p. 67–75.

Генез культурно – исторического ландшафта в Земгалии

(Получено в январе 2016 г.; отдано в печать в апреле 2016 г.; доступ в интернете с 10 мая 2016 г.)

Резюме

В процессе планирования градостроительства важную роль играет прогнозирование, которое, при помощи научно-аналитических методов, указывает на масштаб развития региональной населенности. Ландшафтное пространство, примыкающее к бассейну Лиелупе, которое за последние 200 лет изменили политические и экономические аспекты, уменьшили территорию лесов, структуру сельскохозяйственной земли и функциональное назначение культурно-исторической застройки. Интенсивность сельской хозяйственности в 19 веке и в первой половине 20 века резко отличается от той интенсивности, которая формировалась в 70–х годах 20 века, которая несла волну коллективизации, индустриализации и модернизации. Это связано не только с изменением ландшафтного масштаба, но и с нагрузкой ветра или с эрозией почвы, агрохимией и мелиорацией. С экономическим развитием городов развиваются также и индустриальные территории города, улучшается структура улиц и жилая застройка. Вместе с этим появляются новые потребности в социальном комфорте и экологии города. Одним из критериев являются зеленые территории, лесные парки, скверы и сады. Разрушительные последствия мировых войн и пост-социализма сильно повлияли на регион Земгале. Это

изменило структуру застройки городских исторических центров. Одним из них является г. Елгава. Экономические достижения, которых город достиг в 30–е годы 20 века, быстрым темпом развивали плотную застройку кольцевого характера вокруг торговой площади и канала Екаба.

Цель исследования – оценить существующую застройку города и ее связь с лесными территориями, трансформируя их в лесные парки, которые служили бы для рекреации или как застройки лесных парков.

Задачи исследования связаны с процессами трансформации, происходящими в 70–80 годы 20 века, которые внесли интенсивные изменения ландшафта загородных территорий. В исследовании акцентированы территории садов и структура градостроительства, на которую влияет интенсивность антропогенной нагрузки.

Заключение. При сегодняшних обстоятельствах, касающихся экономических и социальных процессов, территории садов превращаются в жилые территории и теряют характер сезонности. Эти территории вносят архитектурный стиль и масштаб. Резкое повышение цен в центре города способствует на этот процесс. В связи с трансформацией садовых территорий в зеленые зоны индивидуальных застроек повышается ценность этих территорий. И это приводит к необходимости решать задачу в плане развития инженерных коммуникаций. Зеленая инициатива, которая популярна в городах Европы, называемая городским озеленением, в регионе Земгале легко воплощается. И это основано на сохраненных зеленых территориях города.