

The landscape quality of the residential area courtyards in Latvia

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Abstract: Nowadays the quality of landscape in the large-scale residential area courtyards is an important aspect that determines the further development of these territories.

Rationally exploited and planned courtyard territory raises the level of quality of these areas. The research reflects the analysis of the large-scale residential area courtyards in the cities of Latvia built in the second half of the 20th century. The data obtained, based on the criteria used in the research, reflects comprehensive characteristics of the current condition of the landscape quality in Daugavpils, Jekabpils, Jelgava, Riga and Ventspils. The established aspects in the analysed territories vary; in many cases they cannot provide the residents with optimal residential area conditions that would correspond to the 21st century planning principles. To provide aesthetically qualitative landscape in the large-scale residential area, it is necessary to consider the functionality of the greenery masses, construction of courtyard resting and playground areas, as well as provide comfortable traffic in the Soviet period large-scale residential areas. The analysed topics presented results that, what considered and applied in the renovation and improvement of any other Soviet period large-scale residential area courtyard in Latvia.

Key words: landscape quality, residential area courtyards

Introduction

The idea of neighborhoods, in the ground of which lies the idea of large-scale residential areas, was first announced in 1929 by a sociologist and planner Clarence Perry. Clarence Perry devoted his ideas and actions to immigrant and their children integration processes. His actions were supported and promoted by Clarence Stain, Henry Wright, and Thomas Adams who propagated the neighborhoods as the ground for urban development. These ideas and practice were soon borrowed by the progressive urban planners in the USA, Canada, and Europe (Mathiew 1997, Leščinska 2010). Peter Hall and Ulrich Pfeifer (2000) in their book „Urban Future 21” present the „ideal” description of the local neighborhood complex: the local neighborhoods have to be friendly and attractive to their inhabitants – with clean air, trees and green areas, sufficient amount of sunlight, gardens, public outdoor territory, low noise and pollution level. The authors emphasize that these requirements have to be rational instead of overwhelming – at the utopian level (Leščinska 2010).

The idea that the physical environment affects the appearance of communities in the neighborhoods and the idea of perception of the space is supported also by the supporters of the New Urbanism ideas – it is a movement created by architects, planners, and developers in the 80’s in the USA. The research reveals that the architecture, the design, the common space of the neighborhood, and its functionality facilitate or, on the contrary, slow down the development of mutual connections. For example, there have been conducted several studies revealing that for a certain group of individuals a common space (for one group of neighbors it is a courtyard) is the most important everyday meeting and communication place (Fleming et al. 1985, Ušča

2010). Even the quality of this common area affects the mutual social connection – for example, in territories with more greenery and trees, the social activities of residents can be observed more often than in those territories with less amount of greenery (Coley et al. 1997, Sullivan 2004). Thus, to study the social spaces from the perspective of inhabitant requirements, it is important to consider the inhabitants themselves and their surrounding environment that affects the development of the mutual interconnection and their attitudes (Ušča 2010). In the beginning of the 80's and 90's in the research of social connections the most attention was paid to the socio-economic characteristics.

In Latvia the most significant researches on the territory planning and urban construction have been made by such architects Janis Brinkis, Olgerts Buka,

Janis Krastins, and Ivars Strautmanis. Professor Ivars Strautmanis in his book

„Dialogue with the room” encourages evaluating of the importance the organization and aesthetics of the surrounding spatial environment (Karpova 2008). Prof. Zaiga Krisjane, scientist Andris Bauls, and geologist Guna Mezciema have studied the urban environment in Riga (Jankava 2010). Comprehensive studies on the environmental development of housing construction, quantitative and qualitative housing developments in Riga have been conducted by prof. Sandra Treija. The evaluations of the surrounding environment are considered also when studying the living conditions of inhabitants. In such researches the emphasis is placed on the housing quality, negative environmental factors and the evaluation of safety level (Bauls et al., 2003). For example, the Commission of Strategic Analysis has developed the Quality of Life Index for Latvia. Prof. Talis Tisenkopfs has studied what is understood a good life in Latvia (Tisenkopfs 2006, Jankava 2010). Several analysis of the spatial composition was carried out in certain Latvian cities. One of such researches is „The Development of the Spatial Composition in Riga” by an architect

Andris Roze (Dimze 2010). According to the author, „a good image of the city can be achieved only, if the city means something to its inhabitants, and if in the urban environment there are elements that cause positive or negative feelings and associations to its inhabitant, because they are a significant part of him as an individual and as a member of society.” The prof. of architecture Janis Rubins, on the other hand, in his work „The Residential Fund of Riga from the 20's Century typological perspective” has analysed the close connection between the development of the city and its residential fund, and the social and historical situation in the country (Rubīns 2004). Since Latvia has joined the European Union, it is necessary to recognize the level of quality in the architecture and residential areas of Latvia on the European level. One of the leading architectural organizations is The Architects Council of Europe. A 21st important message sent by the organization to the 21st century is „The Architecture and the Quality of Life”, a document that denotes the main guidelines for achieving the effective sustainable development of the residential environment (Newman, Thornley 1996, Karpova 2008).

The author performed a study on the condition of greenery planning in the Soviet period large-scale residential area courtyards in the Baltic States. Consequently, the researches performed in Latvia on the landscape quality in the large-scale residential area courtyards built in the second half of the 20th century are poorly studied. The goal of this research is to study landscape quality of the Soviet period large-scale residential area courtyards in the cities of Latvia.

Materials and methods

The research on the quality in the Soviet period large-scale residential area courtyards has been carried out in 2009 and 2010. To establish the quality of the large-scale residential area courtyards, a comparative analysis method was applied. The comparative analysis method is based on the observation of the present Soviet period large-scale residential areas in Latvia, according to the criteria set by the author, which are as follows: functional planning, infrastructure planning, society impact, environmental pollution, green zones, courtyard insolation, climate conditions, draughts, inhabitant safety, housing condition. The analysis was applied in order to establish the current landscape quality of the courtyards in the cities of Latvia. To evaluate the present situation, the author of the present paper has explored five Latvian cities – Daugavpils, Jekabpils, Jelgava, Riga, and Ventspils. 10 randomly selected Soviet period large-scale residential area courtyards in every city were analysed. Consequently, the total amount of courtyards analysed in the research comprises 50 courtyards. To

obtain precise data, the defined criteria in every city were evaluated according to the established values: good, almost good, average, and bad. As a result, the research established a comprehensive description of the landscape of the Soviet period large-scale residential area courtyards in the cities of Latvia. To establish and to interpret the obtained results, a monographic or descriptive method, which is based on the application of existing scientific findings, was applied.

Results and Discussion

The current condition of the analysed courtyards built in the 60's-80's of the 20th century

With the beginning of 1960 the construction of apartments in Riga and other Latvian cities was concentrated in large massifs, using free planning principles for housing location. It is mostly associated with the meridional orientation of buildings towards the Cardinal directions, independent from the street housing front (Dear, Scott 1981).

The construction of large-scale residential buildings in Latvia and Riga began at the end of the 50's, and it continued until the beginning of 90's. During this period almost 40% of the residential fund of Riga was built, of which the greater part is comprised of large panel residential buildings. According to the detailed plan, it was determined that every housing area was to provide a public centre, economic and service institutions, kindergartens, and other infrastructures. Unfortunately, the emphasis was put on the construction of apartment, leaving no free resources for building social institutions. The development of such apartment construction politics has led to a problem that in various cities there are unfinished residential building quarters or housing groups that divide the city structure, and there are inadequately long engineer-technical communication tracks that result in a significant energy loss (fig.1). The residents suffer from having to travel long distances from their homes to work, or to public institutions in the central part of the city. In general, the type projects were applied in building construction (Graudulis 2010). The free areas among the residential housing, the earlier greenery zones and children playgrounds were often used for other purposes (fig. 2). In the process of privatization, when the territory is divided according to the land of every privatized building, while the courtyards are used both for car parking, and for constructing different servicing objects, the principle idea proposed by the planners is distorted.



Fig. 1. Soviet period unfinished residential housing in Aizkraukle (source by author)



Fig. 2. Presently unfinished residential housing in a courtyard in Riga (source by author)

The idea originated from Le Corbusier's concept of greenery surrounded large-scale residential buildings (Zigmunde 2010). The processes of the last decade – the housing field reform (privatization and denationalization of residential fund), the social stratification of residents etc. have resulted in significant changes in the large-scale residential area issues (Treija 2008). The evaluation of the large-scale residential area courtyards, according to the material developed by the municipalities, is presented in table 1.

Table 1. 20th century second half residential area courtyards in the cities of Jelgava and Ventspils

No	The inconsistencies of residential courtyards established in the municipalities	Jelgava	Ventspils
1.	Courtyard roads and squares are in bad condition	+	-
2.	Lighting and infrastructure is outworn	+	-
3.	Post-war large-scale housing is of low quality	+	+
4.	Large amount of low quality residential fund, panel-type buildings with poor heat insulation, surrounding environment quality and environment accessibility	+	-
5.	Lack of recreational zones and children playgrounds or their infrastructure is outworn	+	-
6.	Insufficient courtyard insolation	+	-
7.	Undeveloped waste recycling system	+	+
8.	Lack of cycling roads, increased amount of transport	+	+
9.	Monotonous residential housing.	+	+
10.	Insufficient central technical engineering communications (sewerage and water pipe)	+	+

„+“ the fact established according to the research material; „-“ the research did not established such evaluation. Source: Ventspils city council 2007

The residential area housing forms a background of a unique urban construction ensemble, but the residents' everyday life takes place in the territory of courtyards. Therefore, the residential outdoor territory has to correspond not only to the functional, but also to the aesthetic requirements (Development Concepts 2010). A high aesthetic quality of the landscape is especially important in the urbanized landscape, because it serves as a living, working, and resting environment for the territory residents, who constantly evaluate the residential outdoor territory from different perspectives and aspects (Treija 2008, Zigmunde 2010). Consequently, the research established that the residents wish to improve the residential outdoor area with a few resources, raising the aesthetic quality in the courtyard. The development of the landscape spatial environment composition in the analysed large-scale residential courtyards has been neglected.

As a result, there are insufficient well-organized and functionally exploited courtyard territories that provide pleasant conditions for the large-scale residential area inhabitants. Today, these areas are degraded and neglected; they psychologically affect the society, and, as a result, it changes the attitude toward the public outdoor territory landscape elements. The research established that these elements in the Soviet period courtyards in Latvia are outworn (fig. 3 and 4).

These areas need to be landscaped: the lawns and pathways are to be renewed; children playground areas need new playground equipment, sand boxes, shelters, fountains etc. In places, where it is possible, sports areas and tennis courts should be constructed. The waste containers need to be renewed and relocated. It is essential to supply the territory with greenery, observing to the building regulations and projects (Treija 2008, Dear, Scott 1981). The informatively- emotional side of the housing is especially neglected,



Fig. 3. Demolished benches in residential area in Jelgava (source by author)



Fig. 4. Soviet period equipment in Vecmilgravis, Riga (source by author)

because it is not considered what impact the territory has on the resident, and what associations it creates. The scale and sizes are large both for buildings and areas, and during the construction boom the sizes continuously increased (Graudulis 2010). The research on the large-scale residential areas in Latvia established a mutual inequality in the landscape quality. The large-scale residential areas reflect multiple features that relate to the general irrational functional organization and exploitation of all the analysed courtyards. There are multiple free undeveloped courtyard areas (fig. 5 and 6).



Fig. 5. Unused free courtyard territory in Jelgava (source by author)



Fig. 6. Residential courtyard without greenery system in Jelgava (source by author)

It was established that either the initial plan was not realized, or the plan was simplified and later realized in a lower technical level; thus, discriminating the ideas of architects, and facilitating premature physical aging of the constructed objects. Especially, it is common in planning landscape, pedestrian pathways, and green areas. Today, archives have saved only a little amount of the multiple planning variations; therefore, unfortunately, it is difficult to distinguish what was or was not realized, and to what extent, because, according to the Soviet period politics of secrecy, the real projects were strictly kept in secret. This issue creates disharmony in the landscape of the city which facilitates the appearance of low quality structures and views (Treija, Bratuškins 2003, Zigmunde 2010). Therefore, presently these areas appear as unorganized territories with low quality residential outdoor territory.

The characterization of the analysed large-scale residential courtyards, according to the defined criteria

According to the criteria defined, the analysed courtyards were selected from the following cities – Daugavpils, Jekabpils, Jelgava, Riga, and Ventspils (table 2). The data obtained from the analysis objectively reflect the present condition of courtyards in the cities of Latvia. At present, more than a half – 54% of courtyards built in the second half of the 20th century in the city of Ventspils are in almost good condition, whereas, 66% of courtyards in Daugavpils are in average condition, and 25% are in a bad condition and low quality residential outdoor territories. A similar condition can be observed in courtyards of Jekabpils, but in Jelgava 70.8 % and Riga 62.5% are in average condition.

The established facts in table 2 prove that there is a mutual inequality among the courtyards. At present, in all the analysed territories the best characteristics from the criteria defined in the research can be attributed only to the transparency of the territory. Such result is achieved because all the territories are rather free and undomesticated. A gradual reorganization of courtyards can be observed in the city of Ventspils. The territory is supplemented by new and appropriate public outdoor territory landscape elements; thus, providing certain active recreation possibilities in the courtyard territory.

Table 2. Condition of residential courtyards in cities of Latvia

No	Analysed criteria in courtyards	1	2	3	4	5
1.	FUNCTIONAL PLANNING	A	A	A	A	AG
2.	INFRASTRUCTURE PLANNING	A	A	A	AG	AG
3.	Accessibility	AG	AG	AG	AG	AG
4.	Parking lots	A	A	A	A	AG
5.	Pedestrian traffic flow	A	A	A	A	A
6.	Pedestrian pathways in courtyards	A	A	A	A	AG
7.	division of transport traffic and pedestrian flow	A	A	A	AG	AG
8.	Accessibility of environment	A	A	A	A	A
9.	Traffic load	A	A	B	B	A
10.	SOCIETY INFLUENCE	B	B	B	B	AG
11.	ENVIRONEMTN POLLUTION	B	B	B	A	AG
12.	GREEN ZONES	A	A	A	A	AG
13.	Courtyard greenery	A	A	A	A	AG
14.	Landscape elements in public outdoor territory	A	A	A	A	G
15.	Technical quality of landscape elements in public outdoor territory	B	B	A	AG	G
16.	Children playground	B	B	A	AG	AG
17.	Active and passive recreation places for every age group	A	A	A	A	A
18.	COURTYARD INSOLATION	A	A	A	A	A
19.	CLIMATE CONDITIONS,DRAUGHTS	A	A	A	A	A
20.	INHABITANT SAFETY	A	A	A	A	AG
21.	Adequate planning of courtyards	A	A	A	A	AG
22.	Territory transparency	G	G	G	G	G
23.	Lighting	B	B	B	B	A
24.	CONDITION OF HOUSING	B	B	B	A	A

1–courtyards in Daugavpils; 2–courtyards in Jekabpils; 3–courtyards in Riga; 4–courtyards in Ventspils; G–good; AG–almost good; A–average; B–bad

Conclusions

The mass building of the large-scale residential areas in Latvia continues until the beginning of the 90' s. The research established that this notable housing process in the second half of the 20th century has greatly affected the historical planning principles, and consequently – the scale of the city. This resulted in multiple inconsistencies in the courtyards, and they rapidly degrade the landscapes of the large-scale residential areas. The low quality landscape in multiple Latvian cities is the result of the unfinished large-scale residential area housing quarters or groups built in the second half of the 20th century. The functional solutions of the large-scale residential area courtyards used to satisfy the requirements of residents who lived in these territories during the 60's – 80's, but nowadays they are not able to bear the intense business of the courtyard.

The performed research proves that the quality of 20th century second half courtyard landscape is diverse. Consequently, the research on the courtyards of the cities of Latvia reflects a significant insight in the established issues. In all courtyards where at least one of the analysed criteria was evaluated as average or low, it is necessary to carry out cardinal landscape improvements, modernizing the residential outdoor territory.

It is essential to consider the further development that would raise the quality of the present landscape. The territories need to be integrated in the urban construction processes, improving their functional zoning, housing system, technical solutions for landscape, greenery, and transport systems. The courtyards with good evaluation

are to be rationally maintained as previously.

As a result, one of the main topical tasks in the large-scale residential area courtyards is to provide its inhabitants with such living conditions in the cities of Latvia that correspond to European standards of social and sanitary hygienic and aesthetic requirements. The indicator of landscape quality greatly affects the comfort level of the residential outdoor territory for its inhabitants. The Latvian Soviet Period large-scale residential area courtyards require reconstruction of the living outdoor area, considering both the condition of the large-scale housing and the present condition of landscape and greenery.

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