The yards of multi-story residential buildings in the Historic Centre of Riga

Anna Šlosberga, Latvia University of Agriculture

Abstract. The study aims to define planning guidelines for the architectonic outdoor space of yards of multi-story residential buildings in the Historic Centre of Riga (hereinafter referred to as the HCR) based on the needs of the residents. The work includes a literature review and the empirical study.

The literature review examines the historical development of the building in the suburbs of Riga, the regulatory laws of the yard management. Also an insight into the planning principles of the cultural and historical city environment is provided based on the needs of the residents in the urban outdoor space. In the literature review, the character of the yards of multi-story residential buildings of the HCR is studied using the historical and contemporary photographs. The example of Copenhagen is discussed as a positive foreign practice in planning and management of yards of multi-story residential buildings.

In the empirical study, by population surveys, the intensity of use of the yards and the activities revealed in them are identified. Also the residents' views about the importance of different functions and their provision are found out, and the yard perception is studied. Within the empirical study, the study of the outdoor space of the multi-story residential buildings of the HCR is carried out, using the comparative matrix that fixes the functional zoning and the structure of the yards. The residents' favorite landscape elements and the development scenarios for the yards are identified by applying the photography method.

The study confirms the hypothesis that the yard landscape utilities does not match the needs of the residents due to insufficient provision of children's playgrounds, recreation and decorative functions. The obtained results indicate that the current practice of the management of the yards uses its recreational and social sustainability potential very poorly, thus reducing the total value of the HCR as an unified ensemble.

Key words: needs of the residents, yards.

Introduction

The HCR as a cultural and historical value of international importance is included in the World Heritage List of the United Nations Educational, Scientific and Cultural Organization since 1997. The unique value of this area creates an indivisible whole, which includes the structure of planning and architecture, the city's panorama and skyline, natural elements and greenery, a certain way of life and other diverse values [5].

In the architecture sub-sector, studies on the landscape of the HCR are mainly carried out in the context of greenery, with special attention to the gardens, parks and squares. While in the yards, so far the effects of the greenery on micro-climate [6], the building planning and development of the structure of the yards have been studied. Although in the architecture sector, several studies have been carried out on the development of the urban construction, the habitat and the city's architectural space, the yards of multi-story residential buildings of the HCR have been addressed only indirectly [3, 5, 26]. The study examines the yards in the section of the needs of the residents, thus including an aspect so far unstudied.

Since the multi-story residential buildings are mainly concentrated in the nucleus of the HCR and the external parts of the nucleus, the study’s general set consists of the yards of multi-story residential buildings of these two distribution areas of the HCR. The study does not include Old Riga, the Boulevard circle and the area of the Central Market.

The yards in the HCR take a considerable part of the outdoor space, but currently only narrow and specific population groups are permanently using them. The observations of the initial study and interviews point to a need for new approaches to the planning of the yards, so as, without parking and waste disposal functions, these areas would also be used for recreation and communication.

Literature review

Historically the nucleuses of the HCR and the external parts of the nucleus have been created as a part of the suburbs of Riga from the 14th century. The current regular street network in these HCR zones has remained without major changes since the 19th century, while the principle of parcellation of the block of houses “back to back” dates back to earlier times – in the Riga city construction projects it appeared in the 17th century. The parcellation established orientation of the facades of the multi-story residential buildings against the street that along with the fences created the street front, while the ancillary buildings and the gardens were located inside the blocks of houses. Gradually, the areas
covered with gardens decreased to small patches located in the depth of the plot, initially giving place to the woodsheds, stables and coach houses, but later – to the warehouses, factories, workshops [2, 3, 17, 18, 19].

Its current features, the nucleus of the HCR and the external parts of the nucleus obtained due to the rapid changes during the period of the second half of the 19th century to the World War I, when, following the cancellation of the ban on the construction of brick stone buildings in 1858, the suburbs of Riga were under the transition to the closed perimeter building, mostly in the form of high-rise rental buildings. Along with the building density and intensity growth, the vacant parts of the parcels often were reduced to the minimal size set in the building regulations, while small gardens or yards with greenery were maintained mostly in the depth of the external part of the parcel of the nucleus of the HCR [3, 17, 18, 21, 25].

In the yards of multi-story residential buildings, the historically dominant household functions were fixed in the postcards of the early 20th century and until today it is a popular storyline in photographers’ works, thus confirming not only the practical need of these functions, but also their importance in the creation of the character of the location. The communication of the residents in the yards during various household activities and the children playing are often reflected in the photographs of the socialist period. In the contemporary photographs it is substituted by the socialization that takes place in the framework of recreational activities [10, 29]. In turn, as evidenced by the photographers’ creative work and field studies, the modest and heavily worn improvements of the yards in many places have remained unchanged from the time of socialism mainly due to the existing binding laws.

Under the effective legal provisions, the involvement of a certified landscape architect is mandatory only in the development of improvements of the public outdoor space, thus for the most part of the yards of multi-story residential buildings of the HCR, this requirement is not binding. The analog principle is also applied in the case of greenery – the involvement of an arborist is only mandatory for public greenery. Similarly, the recommendations for the hard coverings in the yards suggest high-value, stylistically appropriate materials for the cultural and historical environment only for the public outdoor spaces. However, in order to ensure development of the yards of multi-story residential buildings of the HCR conformity with public interests, they should be subject to the same requirements as the public outdoor spaces.

The positive foreign practice is examined on the example of Copenhagen as the yards of multi-story residential buildings in Copenhagen built at the turn of the 19th and the 20th centuries resemble the yards of the nucleus of the HCR and the external parts of the nucleus by the building type, structure and scale, enabling to compare the techniques used in their planning and management. As the yards of multi-story residential buildings houses are part of the urban green structure, their development is determined by the city’s overall development strategy. Although, the development strategies of both cities are based on the principle of sustainability, the long-term vision of Copenhagen for a complete abandonment of fossil fuels by 2050 is concrete and measurable, while the vision of Riga “Riga - opportunity for everyone!” is not only non-measurable, but also abstract and ambiguous in interpretation [4, 12, 16, 24, 28].

In the development program of Copenhagen, such directions as energy, transport, water supply, waste management, environmental quality, etc., are mutually integrated with each other and clearly serve for attaining long – term aims. Accordingly, the yard planning, creating them as the shared areas for residents of the surrounding houses, is part of the Copenhagen’s commitment to its “Eco - metropolis” status, where green areas are close the residents, providing opportunities for physical activities, recreation and meetings [16, 28].

In the management of the yards of multi-story residential buildings houses of the HCR, the experience of Copenhagen should be adapted. However its literal takeover, creating the shared outdoor space inside the block of buildings, in the most part of the HCR is impossible due to the configuration of the building therefore it is not desirable as it would result in a fundamental change of the historical structure of the building and the character of the place. Using the Copenhagen experience, a gradual pulling down of the garages would be desirable in the yards of the HCR, along with the construction of the aesthetic high-quality sheds for sorted waste containers, laundry drying and bicycles. Also the use of recyclable materials and ecologically appropriate species is necessary for the promotion of sustainability and biodiversity.

Methodology of the empirical study

The empirical study of the yards of the multi-story residential buildings houses in the HCR is carried out, using three methods: population survey, field studies and photography method.
the multi-story residential buildings and to study the perception of the yards. The survey took place from January to October 2012, bringing together 535 respondents. In order to discuss the specifics of the yards of the HCR at the city level, the residents of were interviewed from both the nucleus of the HCR and the external parts of the nucleus, and the rest of the area of Riga – 237 and 298 people, respectively. Thus, the general set of the survey is formed by residents of the multi-story residential buildings in Riga, and at the confidence level of 95 %, the error of the study is 4.2 % [7]. The inquiry forms were distributed in both paper and electronic format, to the randomly selected respondents. The paper format survey forms were found incompletely filled in approximately 20 % of cases, these inquiries were not included in the data processing.

The key questions of the survey include 3 blocks according to the features studied in them. As the first, staying of the residents in the yard is studied - both by its frequency and distribution in the daily and weekly perspective. Within this block, specific activities practiced in the yards are also studied. The second block of the questions regards the opinions of the residents of multi-story residential buildings upon the functions of the yards – their importance and compliance with the needs of the respondents. The attitudes, feelings and associations of the residents are studied in the final part of the survey.

The data collected in the survey are processed by computer, using the software SPSS 14.0. Each of the factorial features had an empirical distribution line to assess the suitability of their varying frequencies to carry out the analysis of the contingency. In the case of too low frequency of some factorial features the regrouping of the data was found. The primary information analysis was done for all the questions, using the empirical distribution lines, medians or mode determination. In the secondary analysis of the information, the analysis of contingency was used. In the section of the results, only coherences with 90 % of the significance level (p < 0.1) were interpreted.

The field studies

The field studies were carried out with the aim to identify the current state of the yards of multi-story residential buildings of the nucleus of the HCR and the external parts of the nucleus, based on the evaluation matrix. During the yard inspection, the information about zoning, functions, improvement elements of these areas and the emotional aesthetic resources were fixed in the matrix.

The field studies were carried out in the periods without snow - from October 2011 to September 2012, in total, there were surveyed 207 yards in the area of the nucleus of the HCR and the external parts of the nucleus. Accordingly, at the level of confidence of 95 %, the error of the study is 6.8 % [7]. The evaluation matrix data are processed using the software SPSS. The data have undergone both the primary and secondary analysis. The primary analysis of the information includes creation of the empirical distribution lines and determination of the median in several cases. In the secondary analysis, the analysis of the contingency is carried out. In the section of the results, only the coherences with 90% of the significance level (p < 0.1) are interpreted.

The photography method

The photography method is used to study the impact of the landscape elements on the preference of the yards thus finding the needs of residents in relation to the yard improvement. The method is borrowed from the studies of the major American environmental psychologists, the doctors of psychology of the University of Michigan - Dr. Rachel and Stephen Kaplan [11, 13, 14, 22]. The method is based on the evaluation of the preference of photographs. Preference is defined as a value, showing the extent to which the individual prefers the photograph or to what extent it is pleasant [11]. According to the studies carried out, the preference is interpreted as an intuitive moving towards effective functioning [15, 27]. While the evaluation of the preference is considered to be a valid and reliable way of evaluating the quality of the environment for over 40 years [1].

The study was carried out in 2012, from March to May, 90 students of various undergraduate and post-graduate study programs of the Latvia University of Agriculture and 2 lecturers participated in it. Accordingly, at the level of confidence of 95 %, the error of the study is 10.2 % [7]. Each of the respondents evaluated the preference for 20 yard photographs according to the 5-level scale, where “1” represents the lowest and “5” - the highest level of the preference. Each photograph was displayed for 5 seconds. In all the photographs, the backyard type yard was displayed in the nucleus of the HCR and the external parts of the nucleus. Half of the respondents evaluated original photographs, but the other half - photomontages in which one of the elements of the landscape was replaced by another.

Various widely spread landscape elements of the yards were mutually replaced: greenery, cars, elements of household and recreation. In the photomontages, the elements under the study were freely replaced one by another, except in individual cases, where due to the specific location of the elements, they were consistently replaced by an equivalent element in terms of the location. In the study, elements were mutually replaced rather than through photo montage added or removed from in
order to avoid the impact of different compositions on the evaluation of the preference. Due to similar reasons, all the photographs were converted to black and white ones, to eliminate the impact of the colors. When processing the data with the software SPSS, the average preference evaluation of each original photograph and the photomontage was determined. For the obtained results, the contingency analysis was carried out to determine the effects of the mutual replacement of the landscape elements on the level of the preference of the yard. Also the impacts of various factorial features to the preference level were tested. In the section of the results, only the coherences with 90% of the significance level (p < 0.1) were interpreted.

The results of the empirical study

The results of the empirical study of the yards of multi-story residential buildings in the HCR were obtained using the method described above – surveys of the residents of the apartment houses, field studies and the photography method.

The specifics of the yard perception and usage in the HCR

As in other parts of Riga, in the yards of multi-story residential buildings of the nucleus of the HCR and the external parts of the nucleus, the majority (53.2%) of the residents uses them at least once a day. However, analyzing in the week's perspective, the HCR is specific, with a larger proportion of the residents that use the yards only on working days. The analysis of contingency shows (p = 0.09) that they are mostly people to whom the apartment is not the only permanent place of residence. Overall, about 10% of the residents in the HCR use the apartment and the yard only on working days, which is two times more than in Riga in total. However, the main tendency everywhere in Riga is the use of the yards regardless of the day of the week, being characteristic to nearly half (48.5%) of the respondents.

Studying the intensity of the yard use in the 24-hour perspective, a gradual increase in the use of yards for the evening in the HCR is stated, while on the whole in Riga, the yards are used equally intensively during the day and in the evenings. Summarizing the information provided by the respondents on the stay in the yards, it is evident that approximately a quarter (24.5-27.0%) of the residents does not use and not stay in the yards of the HCR at all, that within the margin of the error coincides with the data obtained for Riga as a whole.

The necessary activities such as waste disposal and car parking prevail within the activities implemented in the yards of the multi-story residential buildings of the nucleus of the HCR and the external parts of the nucleus. Among the optional activities, the most popular are sitting on a bench and children playing, which is done by only every fifth of the apartment house residents. The social activities occur as a result of the necessary and optional activities and are carried out in the yards by approximately a quarter of the respondents in form of communication with neighbors. Other optional or social activities suggested by the inquiry have not exceeded the threshold of 10% (Fig. 1) from which it is concluded that the environmental quality of the yards is low and most people stay there due to the need and not by their own choice [8, 9].

Fig. 1. The activities carried out in the yards of the HCR, where necessary activities, optional activities, social activities. 1 – waste disposal, 2 – car parking, 3 – communication with neighbours, 4 – sitting on a bench, 5 – children playing, 6 – walking with a dog, 7 – smoking, 8 – improvement, 9 – gardening, 10 – reading, 11 – firewood preparation, storage, 12 – bird feeding, 13 – picnic, 14 – laundry drying, 15 – sunbathing, 16 – individual sports, 17 – bulky waste disposal, 18 – walking with a cat, 19 – car care, 20 – team sports, 21 – rainwater collection, 22 – composting, 23 – pet care, 24 – board games
[Source: the author’s based].
In order to compare the activities carried out in the yards of the multi-story residential buildings in the HCR with the overall situation in Riga, the analysis of contingency was carried out. For all the activities, where the frequency of their carrying out is statistically related to the location of the yard (p < 0.1), in the HCR all activities were stated less frequently, that gives evidence of a relatively lower quality of the environment in this part of the city.

The significance level of the functions and their provision in the yards

In order to judge the importance of different functions of the yards of multi-story residential buildings, the respondents were asked to evaluate the functions according to their importance in the scale of 5 from “extremely important” to “completely unimportant”. For analyzing the data of each given function, a median was determined that expressed the average significance level of the specific function among the respondents. As a result, by their importance to the residents, the functions are divided into 3 groups (Table 1).

The importance of some functions differs between genders - for women household (p = 0.089) and socialization (p = 0.084) functions in the yards are more important than for men. While the importance of recreation of a particular individual depends on whether the apartment is the persons only residence - for those respondents that part of the time live in a private house, summer cottage or farmstead, a recreation in the yards is less important (p = 0.051). It can be concluded that the residents of multi-story residential buildings, who have the opportunity to choose, prefer a recreation in private outdoor spaces.

The actual provision of the proposed functions in the yards of multi-story residential buildings of the HCR is evaluated as inadequate to the needs of the majority of the respondents. Compared to the HCR, in other parts of Riga, the residents are more satisfied with the functions provided in the yards (p = 0.009). The respondents think that in the yards of the HCR, the provision of children’s playgrounds, representation, calm and active recreation functions is insufficient. With the provision of the representation function in the yards, particularly dissatisfied are respondents to whom the apartment in the HCR is not the only permanent place of residence (p = 0.006). This could be due to higher requirements for the visually aesthetic quality of the environment and with opportunities to compare the yard with another private outdoor space available for them. The residents who live in the particular apartment for a long time are particularly dissatisfied with the provision of the representation and decorative functions in the yards. As dissatisfaction with the decorative function of the yard rises in a direct proportion to the duration of the respondent’s living in the multi-story residential building (p = 0.046), it shows the gradual degradation of the environment in the yard over a longer period of time, which is respectively visible, when living for a longer period of time in the given location.

While evaluating provision of the function of socialization, men are less satisfied with it than women (p = 0.006). Since socialization is the resultant to other activities in the yards, it must be concluded that the existing improvement, in particular, for men, does not provide a sufficiently long stay in the yards to meet the need for socialization.

Based on the levels of the importance of the functions for the residents and their actual provision, and also taking into account the presence of the particular zones in the yards identified in the field studies, in the yards of multi-story residential buildings in the HCR especially problematic is the provision of the function of children’s playgrounds. While from this aspect, the decorative and peaceful recreation functions in the yards of the HCR are averagely problematic (Table 1).

The perception of the yards

Half (48.9 %) of the respondents perceive the yard as their own area, and almost as many (45.6 %) permanently or at least occasionally engage in the improvement and care of the yard. The respondents that own the apartment rather than rent it more often perceive the yard as their area (p = 0.006) - 57.3 % and 36.2 %, respectively. The trend to perceive the yard as their area and engage in its improvement and

<table>
<thead>
<tr>
<th>Functions</th>
<th>Significance level</th>
<th>Provision, %</th>
<th>The zone being present in the yards, %</th>
<th>Problem level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>Important</td>
<td>71.0</td>
<td>94.2</td>
<td>Low</td>
</tr>
<tr>
<td>Car parking</td>
<td>Important</td>
<td>64.8</td>
<td>91.3</td>
<td>Low</td>
</tr>
<tr>
<td>Decorative</td>
<td>Important</td>
<td>33.1</td>
<td>52.4</td>
<td>Med.</td>
</tr>
<tr>
<td>Children's playgrounds</td>
<td>Important</td>
<td>26.9</td>
<td>3.4</td>
<td>High</td>
</tr>
<tr>
<td>Socialization</td>
<td>Quite important</td>
<td>61.4</td>
<td>-</td>
<td>Low</td>
</tr>
<tr>
<td>Peaceful recreation</td>
<td>Quite important</td>
<td>35.9</td>
<td>14.6</td>
<td>Med.</td>
</tr>
<tr>
<td>Active recreation</td>
<td>Minor</td>
<td>35.2</td>
<td>1.0</td>
<td>Low</td>
</tr>
</tbody>
</table>
care also gradually increases with the increase of time of residence of the respondent in the particular apartment (p = 0.008 and p = 0.005).

In the survey, the respondents were asked to indicate the first association that they felt at the thought of the yard of their multi-story residential building. Although the question is of an open type and the respondents could give a completely free response, it was possible to group the findings; in addition, many of the first association representative words precisely repeated many times (Fig. 2).

In comparison with the city of Riga, the inhabitants of the HCR associated the yard with greenery and the children's playground less frequently, while pits, narrowness and car parks, come to mind to the respondents even 3 times more frequently than in other parts of the capital (p = 0.053). No surprise that with the question of whether anything pleases the particular individual in the yard, in their responses the residents of the HCR were more denying – in this part of the city something flattering in the yards is spotted by only every third of the respondents, while elsewhere in Riga nearly half of the residents of multi-story residential buildings can find something positive in their yards (p = 0.003).

Greenery (60.0%) is the main source of joy to the residents of the HCR, and it is often emphasized that it is created and cared by themselves. Most respondents get joy from a variety of woody plants, among which especially highlighted are horse chestnut trees that, in proportion to their actual distribution in the yards, have been mentioned more often than other species. Without greenery, the respondents are also overwhelmingly pleased with the comfortable resting places, the possibility to place a car and a well yard care - each of these aspects are mentioned by about 7% of the respondents. While such characteristic, specific elements of the HCR as historic pavement and ancient concept, paintings are mentioned by only several individuals.

The functional and structural construction of the yards in the HCR

In the field studies, when recording the functions provided in the yards, 77.0% of cases show clearly readable zoning. Unfortunately, this is rather due to the small number of functions provided in the yards (Table 1) than due to a sound, rational layout of the yards. Actually, the yards are provided with the household (94.2%) and car parking (91.3%) functions. In addition, for the provision of the household functions, the required elements are mostly waste containers - woodsheds and sheds for drying clothes are recorded at 15.9% and 0.5% of the surveyed yards, respectively. In relation to woodsheds in private properties, an alarming trend is found from the point of view of conservation of the structure of the building of the cultural and historical environment - the demolition of the woodsheds with the aim to set up the parking lots (p = 0.011).

In the yards of multi-story residential buildings of the HCR, a great attention is paid to the delimitation of the area, in order to reduce both an unauthorized access and parking. Gates and various types of barriers in the gate space are found in 65.7% and 23.7% of the surveyed yards, respectively. When comparing the gate proportion in different possession of the existing properties, the municipal properties are equipped with gates less frequent, therefore in these yards the residents more frequently make various delimiting elements to protect the recreation and decorative zones from cars. Large-size stones, flower containers, wire and wood fences, metal chains are mainly used for delimitation in the yards.

The initiative of the residents in the personalization of the environment in the yards is reflected in the creation of objects of art, mostly wall paintings (Fig. 3 and 4). Although currently in the field studies these types of objects are seen in only 1.5% of the cases, they have a considerable potential in the creation of the identity of the neighborhood and the sense of community. The studies have shown [20, 23] that work invested by the individual is the determining factor to identification with a particular place. Thus, for the wall paintings to function not only as decorative elements but also to serve in promoting social sustainability, they must be planned and created by the residents themselves.

The study of the emotional aesthetic resources points to the problematic character of the yards in the HCR from the aspect of diversity — almost 3/4 the surveyed yards are classified as simple or ordinary. This issue also emerges in analyzing the data collected in surveys of the residents where “boring” is one of the phrases that are repeated in several occasions while describing the first association of the yard.
The needs of the residents for improvement of the yards of multi-story residential buildings

When analyzing the effect of various elements of the improvement on the evaluation of the preference of the yards, a statistically reliable correlation is found in 12 of 20 pairs of photos used in the study. The highest average increase in the preference was found for wall paintings and a variety of plants, less positive impact was observed for the surveillance cameras. While the depiction of the waste containers, cars and air conditioners in the photographs of the yards consistently reduced the preference level. The effect of such recreation elements as benches and playground equipment on the preference were ambiguous that is mostly due to the small number of photographs used in the study.

In comparing the average standard deviations of the preference, it is found that the respondents have been very united in their opinions of the undesirable elements and the solutions of the improvements in the yards, while concerning the positive practices a larger diversity of opinions has been observed. Analyzing the gender, place of residence and the study program as factorial features, their impact on the preference evaluation is not significant, demonstrating the possibility to create universal yard design guidelines.

The obtained results indicate the residents needs of the aesthetically high-quality waste container sheds, the reduction of car parking lots and air conditioner stands in the yards of the multi-story residential buildings in the HCR. Taking into account the narrowness and the specific configuration of the yards in the HCR, the wall paintings are considered to particularly perspective in the improvement of the quality of the outdoor space.

Mutually comparing the average preference evaluations of the photos used in the study, it can be concluded that the respondents prefer large, multifunctional yards. At the same time, small size yards got as high average preference evaluation, but only if they had vegetation or original elements. Thus, the respondents have outlined two different development scenarios preferred by the residents, depending on the configuration of the yard. In small, narrow yards of multi-story residential buildings, which are mostly localized in the nucleus of the HCR, a special attention should be paid to the increase of vegetation and emphasizing the individuality of the yards through original elements, while at the exterior part of the nucleus of the HCR the yards must be used most rational to provide the residents with diverse functions.
Conclusions and the design guidelines

For conservation and development of the cultural and historical heritage, in the binding laws the requirements set to the public outdoor space should be subject to all the yards of multi-story residential buildings in the HCR, identifying a suitably qualified specialist attraction to the development of improvement projects and the yard care. In addition, for an effective regeneration of the yard environment, it would be necessary to develop and apply financial instruments such as the real estate tax reliefs as well as the co-financing for reconstruction of the yards.

1) The yard improvement solutions should be developed in cooperation with the real estate residents, providing an opportunity to participate in all stages of reconstruction – design, development and maintenance.

2) Before the commencement of the project development, the landscape reading of the yard should be done for determining the historical planning structure, with special attention of the existing coverage constructions with the purpose to identify the authentic cobblestone paving.

3) The authentic cobblestone coverings should be reconstructed under the historic planning structure or integrated into the new planning if the original improvement structure of the yard is not determinable.

4) The authentic stone woodsheds and other outbuildings should be reconstructed and integrated in the new planning of the yard. The preserved woodsheds made of wood should be renewed, subject to a uniform stylistics within the yard.

5) The species for the greenery should be chosen accordingly to the growing conditions in the yards, preferring highly durable, decoratively stable and easy to care genus. The vertical greeneries is especially desirable.

6) The creation of stylistically suitable objects of art according to the character of the cultural and historical environment is desirable, in particular, wall paintings.

7) A gradual demolition of garages should be done, construction of new garages in the yards should not not permissible.

8) In plots of land where, due to the existing building density, it is impossible to fully ensure all the necessary functions, they should be implemented on the basis of the needs of the residents, primarily ensuring the household, decorative, children's playground, and calm and active recreation functions.

9) Parking lots are only allowed in the yards of the plots of land with the permitted building density of 60 %, primarily the household and recreational functions must be provided.

10) For the waste containers, functional and visually aesthetic, high-quality sheds should be created. In the cases of a sufficient yard area, similar sheds are also advisable for drying clothes and bicycle parking. Solutions of the household functions should be made in the most compact way, in order not to interfere with the provision of the recreational functions.

For the provision of more sustainable development of the yards of multi-story residential buildings, it would be desirable to involve residents in planning, thus strengthening the identity of the community and promoting the identification with the place. Although, the initiative of residents in the improvement of the yards of the HCR is already widespread the selected solutions often do not correspond to the nature of the cultural and historical environment. Therefore for a successful involvement of the residents in the planning, the work of public education on the preservation of the cultural and historical values should be continued at the State level, that Latvia has undertaken by ratifying the Convention on the protection of the world cultural and natural heritage.

While at the city level, it is necessary to define a clear vision for the development of Riga and specific, measurable long-term goals that include a consistent improvement of the outdoor space.

Acknowledgements

The study is developed by the support of LTD “ITERA Latvija” and the grant of the project of the European Social Fund “Support for implementation of the postgraduate study at the Latvia University of Agriculture”, Agreement No. 2011/0020/1DP/1.1.2.1.1/11/IPIA/VIAA/011.

Reference


INFORMATION ABOUT AUTHOR:
Anna Šlosberga has a post-graduate degree in Master of Architecture in Landscape Architecture; has obtained an undergraduate degree in Professional Bachelor in Landscape Architecture and Planning at the Latvia University of Agriculture.

Empīriskajā pētījumā, veicot iedzīvotāju aptaujas, apzināta pagalmu izmantošanas intensitāte, tajos realizētās aktivitātes, noskaidrots iedzīvotāju viedoklis par dažādu funkciju nozīmīgumu un nodrošinājumu, kā arī pētīta pagalmu uztevība. RVC daudzdzīvokļu māju pagalmu lauka pētījumi veikti izmantojot salīdzinošu matricu, kur fiksēts pagalmu funkcionalais zonējums un labiekārtojuma struktūra. Iedzīvotājiem ņemamā labiekārtojuma elementi un pagalmu attīstības scenāriji apzināti, izmantojot fotogrāfiju metodi pagalmu patikas vērtēšanai.

Pētījumā apstiprināta izvirzītā hipotēze, ka pagalmu labiekārtojums neatbilstību iedzīvotāju vajadzībām nepietiekamo bērnu rotaļu, atpūtas un dekoratīvo funkciju nodrošinājuma dēļ. Lauka pētījumos konstatēts, ka pašlaik pagalmos faktiski tiek izmantots tikai saimnieciskais un autostāvvieta izmantošana. Saļdzinot ar pārējo galvaspilsētas teritoriju, RVC daudzdzīvokļu māju pagalmi ir specifiski ar zemāku vides kvalitāti, kas galvenokārt ietver vien obligātā saimnieciskā darbību. Tāpat RVC iedzīvotāji ir mazāk apmierināti ar pagalmu vizuālu estētisko kvalitāti un apsaimniekošanu, salīdzinot ar situāciju Rīgā kopumā.

Pētījuma rezultāti norāda uz apstādījumu, jo sevišķi kokauku, nozīmīgo lomu iedzīvotājiem patīkamas daudzdzīvokļu māju pagalmu arhitektonisks ainaviskais telpas veidošanā. Saskaņā ar aptaujām esošie apstādījumi ir galvenais iedzīvotāju apmierinājuma avots pagalmos, ko apliecināja 60 % respondentu. Arī fotogrāfiju metode apstādījumu ievērojami un konsekventi ievieš pagalmu patikas vērtējumu. Pētījumā iegūtie rezultāti norāda, ka apstādījums ir daudzdzīvokļu māju pagalmu labiekārtošanas un apsaimniekošanas prakse, ko nepilnīgi izmanto teritorijai piemērošana rekreatīva un sociālā ilgtspējas veicināšanas potenciālu. Tādējādi apmazinot RVC kā vienota ansambļa kopējo vērtību.