



# LANDSCAPE ARCHITECTURE AND ART



PROCEEDINGS OF THE LATVIA UNIVERSITY OF AGRICULTURE

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### LANDSCAPE ARCHITECTURE AND ART

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#### INTRODUCTION

The proceedings of the Latvia University of Agriculture (LUA) "Landscape Architecture and Art" continues issuance of the periodical collection of scientific articles. The new edition summarizes research findings in architecture and art science made not only by the lecturers and doctoral students of the LUA and the Art Academy of Latvia but also by experts of the State Inspection for Heritage Protection and foreign scientists from Belgium and Russia.

The publications cover a wide range of research work related to the results of the research of restoration works of architectural monuments, the compositional searches of the green structure and sculpture work in the building of the urban space. The research relates to synthesis evaluation of the cultural historical landscape space, manor gardens and sculpture works of art, review of the legislation, the aesthetic quality criteria of the environment and ecological issues.

The publications of the first part of the journal result from the research in maintaining the cultural landscape, its transformation and development. In turn, the articles of the second part concern theories of formation of the modern landscape, evaluating not only experience of the scientists from Latvia but also from other countries in the development of the cultural environment.

The recent year's economic crisis in Latvia makes local governments assess attraction of more serious funding. In particular, it is relevant to the urban development of the environment, where within the framework of the economic regime, reconstruction, restoration or renovation works are often carried out on a case-by-case basis in separate construction stages, so visually changing perception of the specific urban construction space. It also applies to the context of the density and compositional placement of the green structure in the urban environment.

The summary of the architecture and the science of the art collection of articles provides important insights for further scientific activity which are required not only by the doctoral students and master students but also by the leading specialists of local governments to evaluate the adoption of important decisions on the development of the area. In recent years, there has grown the number of new architecture and art researchers which points to the interest in the necessity of order in the visual aesthetic quality of the landscape space.

#### PRIEKŠVĀRDS

Latvijas Lauksaimniecības universitātes (LLU) zinātnisko rakstu izdevums "Ainavu Arhitektūra un Māksla" turpina aizsākto zinātnisko rakstu periodiskā krājuma izdošanu. Jaunais izdevums apkopo pētījumu atziņas arhitektūras un mākslas zinātnē, ko ir devuši ne tikai LLU un Latvijas Mākslas akadēmijas mācībspēki un doktoranti, bet arī Valsts Kultūras pieminekļu aizsardzības inspekcijas speciālisti un ārvalstu zinātnieki no Beļģijas un Krievijas.

Publikācijas ietver plašu pētījumu spektru, kas saistīts ar arhitektūras pieminekļu restaurācijas darbu izpētes rezultātiem, zaļās struktūras un tēlniecības darbu kompozicionālajiem meklējumiem pilsēttelpas apbūvē. Pētījumi pieskaras kultūrvēsturiskajai ainavtelpai, muižu dārzu un tēlniecības mākslas darbu sintēzes izvērtējumam, likumdošanas, vides estētiskās kvalitātes kritēriju un ekoloģijas jautājumu apskatam.

Žurnāla pirmās daļas publikācijas izriet no pētījumiem kultūrainavas saglabāšanā, tās transformācijā un attīstībā. Savukārt, otrās daļas raksti skar mūsdienu ainavas veidošanās teorijas, izvērtējot ne tikai Latvijas, bet arī citu valstu zinātnieku pieredzi kultūrvides attīstībā.

Pēdējo gadu ekonomiskās krīzes situācija Latvijā liek pašvaldībām izvērtēt daudz nopietnāk finansējuma piesaisti. Īpaši tas ir attiecināms uz pilsētvides attīstību, kur taupības režīma ietvaros nereti rekonstrukcijas, restaurācijas vai renovācijas darbi tiek veikti fragmentāri atseviškās būvniecības kārtās, tā vizuāli izmainot noteiktas pilsētbūvnieciskās telpas uztveri. Tas ir attiecināms arī uz zalās struktūras blīvuma un kompozicionālā izvietojuma kontekstu urbānā vidē.

Krājuma arhitektūras un mākslas zinātnes pētniecisko rakstu apkopojums dod svarīgas atziņas tālākai zinātniskajai darbībai, kas nepieciešams ne tikai šīs nozares doktorantiem un maģistrantiem, bet arī pašvaldību vadošajiem speciālistiem, lai izvērtētu svarīgu lēmumu pieņemšanu tālākā teritorijas attīstībā. Pēdējos gados ir audzis jauno arhitektūras un mākslas zinātnieku skaits, kas norāda uz interesi par ainavtelpas vizuāli estētiskās kvalitātes sakārtotības nepieciešamību.

**Aija Ziemeļniece** Editor in Chief

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### **Auguliena Manor over the centuries**

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Abstract. Auguliena Manor (*Roseneck*) [3] which in German is also called *Augul* and in Latvian translated as Ozolmuiža or Auguli [2] is located in the Belava Parish of the District of Gulbene, approximately 15 km away from Gulbene on the bank of Lake Auguliena. The building of Auguliena Manor, along with other individual buildings, is included in the national list of protected cultural monuments. The Manor building consists of the manor house, two servants' houses, a house for servants with a household building, the feedlot wing, a threshing barn and a few other buildings. The history of the Manor is associated with the family of von Transehe–Rosenecks. Over the years the building has changed a little but the planning structure has survived. Renovations in the Manor take place, so its study is topical.

Keywords: architectural heritage, manor architecture and history, monument protection.

#### Previous study of the Manor

Auguliena Manor has so far not been studied, namely, not any significant study is devoted to it. It is mentioned only passing by in a few works, it has not been important even to the 19<sup>th</sup> century essayists on the manor history such as H. von Hagemeister [4] and L. Stryk [10]. In comparison with other manors, a very limited information about Auguliena is also on the Internet.

#### Manor owners over the centuries

Auguliena Manor is largely associated with the family of von Transehe. This family tree can traced back through the centuries. be The first representative of this family is Matthias who moved to Vidzeme in the midst of the 16<sup>th</sup> century from the southern provinces of the Netherlands which is now in Belgium. His son Gerhard worked in Gramsden (Courland) as a pastor. In October 1641, Queen Kristina of Sweden granted Gerhard's son Joachim and his descendants the title of a knight, adding the predicate von to the surname and his wife's Magdalene surname Roseneck. In 1663 Joachim's half-brother Valerius is admitted in the Swedish chivalry whose descendants are associated with the Vidzeme knighthood-in the beginning as von Transehe but later re-registered as-von Transehe-Rosenecks [8]. The wealth of this family grew at the end of the 18<sup>th</sup> century and at the beginning of the 19<sup>th</sup> century when new purchases in Vidzeme, in the present territory of Estonia, and even in the Russian borderland were added to the manors received as a heritage. With the family's name there are associated the following properties-Jaungulbene (Neu-Schwanenburg) Krape (Kroppenhof), Annenieki (Annenhof), Mārciena (Martzen), Taurupe (Taurup) and other manors.

The history of Auguliena Manor, in comparison with other surrounding manors, is relatively recent and originally it was not as a separate manor but rather a part of Vecgulbene Manor. In 1763, Empress Catherine II gave Vecgulbene together with Litene as a gift to Count Ernst Münnich as compensation for the property taken away in the year 1742-Rencēni (*Ranzen*) Manor [11]. In 1788, the Manor was inherited by his son Chamberlain Count Burkhard Christoph Münnich. In 1789, the Manor was bought by Secret Councellor Otto Hermann von Vietinghoff. Around this time, from Vecgulbene was separated Jaungulbene as a separate manor and together with it- Auguliena.

As a heritage of Landrat Karl Otto von Transehe, 1838 the Manor became his son's-a in lieutenant's and later the county deputy's Paul Wilhelm Georg von Transehe property [11]. Since 1888, the Manor belonged to Major-General Georg von Transehe-Reseneck who lived in St. Petersburg but from 1899 the Manor was managed by its manager Leon Hellmuth [9]. From 1907, the landlord of the Manor was Paul Otto von Transehe-Roseneck who lived in Jaungulbene Manor. Auguliena was managed by Erhard von Transehe who also undertook a forester's duty but the manager was Rūdolfs Mucenieks [9]. At the time of the Latvian agrarian reform, the property was alienated. During the Soviet period, the Manor buildings were used for a variety of purposes-people changed and the function of the building as well. The manor house was a club. Since 1990, the center of the Manor had been privately owned but nothing was done to save the historical buildings and they were not used. The hopeless situation only changed in 2005 when the owner of the Manor became LTD. Augulienas muiža /Auguliena Manor/.

#### The manor house

In the Soviet time, there was a club in the manor house and in 1983 the building was no longer used. It was exposed to danger long before. As shown in the photos of 1978, the windows are still in place, the main entrance door as well, the roof is in a good condition and the ironwork over the ridge as well. The terrace railings are partially collapsed at the main entrance and in front of the facade once grew shrubs and the trees give evidence of leaving everything to the mercy of fate. In 1994, the building was still relatively in a good technical condition but threats to the further existence is already felt [12]. Today, the building is in a very poor technical condition. The cover of the intermediate floors is falling in, the windows and doors are partly lost, the exterior stucco crumbles, in the state of the collapse there is the terrace at the main entrance.

Simple and at the same time modernistic paraphrase of non-baroque is the manor house of Auguliena Manor built for the family of von Transehe-Rosenecks where the roof of the mansard was the sole stylistic motif that threw a bridge to the 18<sup>th</sup> century samples [1]. So the manor house was described by the art historian Dainis Bruģis. In fact, the building's stylistics, like the building history, is a big enigma. Undoubtedly, the roof form of the building built in the early 20<sup>th</sup> century shows a willingness to look in the direction of the 18<sup>th</sup> century samples. But the totally ascetic facades, the only adornment of which is granite rusts around the main entrance opening and perfectly mortared broken rubble masonry socle floor show rationalism orientations. The ironwork of the roof ridge is rooted in different stylistic nuances. In essence, this building is stylistically unique but provincial and nonuniform which cannot be attributed to one particular stylistic direction. The creation formal and modifications of of the building are also important.

The current site of the building does not coincide with its location in the land plan of 1873-1874. In the historic material, the building is presented in parallel to the bank of the lake with a small waterfront construction (terrace) against it. Is the present building built in the last quarter of the 19th century and rebuilt in the early 20<sup>th</sup> century by afterwards pulling down the adjacent manor house? The following questions could be answered by probing. It is likely that the manor house was built in two stages. The oldest part is of one storey, the latest-two-storey part is built later, creating an unusual volume solution which is basically clumsy and architecturally not particularly impressive. The architectural solution of both parts of the building is partially coordinated, creating by the means of rubbles a nice socle floor but it's all-the roof connection looks heavy, the roof eaves are different-the one-storey part-with decorated rafter ends, the two-storied one-a box built of boards.

It is impossible to judge about the original design of the building as a whole as there have not survived any historical materials. Today, the technical inventory file largely shows the result of modifications of the Soviet period. But some rooms have retained their original solution. It could be the entrance to the hall which housed the staircase to the second floor and the room to the left in which there was the later mentioned interior with decorative finish on the walls, ceiling.



Fig. 1. The manor house of the Auguliena estate (photo 1978) [Source: State Inspection for Heritage Protection, Monument Documentation Center]



Fig. 2. The manor house of the Auguliena estate [Source: photo by the author, 2009]



Fig. 3. The manor house (1978) [Source: State Inspection for Heritage Protection, Monument Documentation Center]

From this room there were reachable the rooms in the one-storey space the design of which is completely changed. On the second floor of the twostorey part, there are two rooms-the stars bring us in one of them and through it you may come in the second room.

Until our days, there has not survived the interior with the artistic finish. However, historically such one has had at least in one room. This is evidenced by the photo fixation of the 1970s. The decorative interior finish of the hall on the first floor of the two-story part dates back to the late 19th century. The walls and ceilings were adorned by molded decors made from papier-mache material. In the rest of the rooms, according to the information provided in 1983 [12], no significant interiors have been found but already at this time the fireplace-type stove was broken. It was made of monochrome glazed tiles. Above the fireplace and stove, in the top there were molded cornices. The photos of 1978 are the only evidence of this lost value in Auguliena. This room with the artistic interior finishes was square. At the top of the walls there were landscape paintings in small

#### The Manor building

The oldest information available so far about the Manor building is drawn from the land plan of 1873-1874 which was copied in 1907 [6]. It appears that the center of the Manor consisted of eleven larger or smaller buildings and structures. The largest of them is the feedlot of which is left only one wing, the manor house, two servants' houses, the servants' and household buildings behind the manor house and more away, a building standing on the other side of the road-a threshing barn.

In the center of Auguliena Manor, there are two servants' houses built almost parallel to each other. Entering the Manor, a view opens to one of them-a one-storey-building which is covered by a gabled ridged roof with partly sloped ends. The building, in the end pediments of which there is used a timber frame and infill structure, is built of red bricks. Already in 1994, this building was in a poor technical condition but when the author of this article surveyed the Manor building in the 1980s, it was still partly inhabited. In the course of time, due to the critical technical condition the building had to be dismantled and in 2000-2003 it was rebuilt maintaining the original shape. This building, in comparison with the second one parallel to the servant's house, was newer. This is evidenced by many clumsy volume spatial structure peculiarities, mysterious earthiness of the roof forms and other particularities. The second servants' house was a little different from the first one. It was built as a cornerjointed building, then lined with red bricks, which, in turn, were plastered. This building was heavier, with a gabled ridged roof with sloped ends-the



Fig. 4. The manor house (1978) [Source: State Inspection for Heritage Protection, Monument Documentation Center]

rectangular frames. The dominant was the southern landscape with mountains and tree groups, and other scenes. For example, in one of the landscapes, there was seen a castle on an island with large mountain ranges in the background. In another scene, there was a small building covered with a gabled ridged roof with a landscape characteristic of Latvia in the background. In another scene, it was possible to see quite strange buildings in a wide, swamp-like place.

highest, namely, the volume form was more classic and antique for the Manours' building. After the end facade, the pediments were also made in the timber frame and infill structure. In 1994, this building still had six pane windows, tile roofs but in the 1980s it was still inhabited. Just as the first servants' house, this building, not repaired, gradually went to rack and ruin and in the 2000s-2007s there was no choice but to dismantle the building and build a new one similar to its original appearance. Now both servants' houses are connected by a one-storey walkway and serve as guest accommodation places. The technical inventory plan of 1992 shows that the design has changed over times, the building has three entrances, it is believedcommunal flats [12]. Both servants' houses can be seen in the above mentioned land plan of 1873-1874.



Fig. 5. The land plan of Auguliena Manor. A copy of 1907 from the plan of 1873-1874 [Source: Latvian State Historical Archives]



Fig. 6. The servants' houses (photo 1975) [Source: State Inspection for Heritage Protection. Monument Documentation Center]



Fig. 7. The servants' houses [Source: photo by the author, 2009]



Fig. 8. The threshing barn with the drying-kiln [Source: photo by the author, 2009]



Fig. 9. The household building (forge) (photo1975) [Source: State Inspection for Heritage Protection. Monument Documentation Cenger]

Quite an interesting building is the threshing barn with the drying-kiln which consists of two parts- the part built from the rubbles, covered by a gabled ridged roof partly sloped at both ends of the ridge forming a small triangular window and later a red brick extension with an imposing chimney was added. This building has largely retained its authenticity. As shown in the photos of 1994, the building was covered with a temporary bituminous cover and waited for its further fate [12]. It turned out to be favorable and today the building pleases with its tidiness and renewal of the original appearance. The entire volume of the building is rather strange-a combination of the oldest and newest parts. It resembles the manor house's volume where to the rectangular building, covered with the gabled ridged roof, there was illogically additionally built a two-storey volume with a complex roof connection. The threshing barn with the drying-kiln is the same kind of building- the traditional, supposedly, the midst 19<sup>th</sup> century volume is adjacent to the 19<sup>th</sup> century final part in the place where it fits the least, forming a complex roof connection where, according to our climate, there will always be problems. Anyway, this unusual building is an important part of the Manor building and is a testimony of a peculiar reconstruction technique of the 19<sup>th</sup> century.

The household building (forge) is located further away from other buildings of the Manor, nearer to the lake. It was a rubble stone masonry building with small granite chip dents in mortar, covered by a steep gabled ridged roof with partially sloped ends. In 1994, the building was still in a satisfactory technical condition. The building, built in the midst of the 19<sup>th</sup> century, was not spared by time and in 2006, only the rubble stone masonry walls were left. These unstable structures were dismantled and from the remaining building materials, the building was reconstructed in 2007-2008, forming a different volume which generally fits into the historic building of the Manor.

Until our days, in the form of ruins there has remained the cattle-shed which, supposedly, is one part of the feedlot seen in the plan of 1873-1874. The building consists of two parts-the cattle-shed and the threshing barn. In 1994, as shown in photo fixation [12], a part of the threshing barn was still under the roof but from the rest parts was left only rubble stone masonry walls and the chimney. Today, the walls of the cattle-shed part have still fragmentary remained but both ends of the threshing barn with the pediments built from red bricks still exist, though the middle part is almost collapsed. There have also remained windows of the threshing barn part- typical for a cattle-shed-small, with a segment-type lintel. The same ones were also in the



Fig. 10. The cattle-shed (photo 2009) [Source: State Inspection for Heritage Protection. Monument Documentation Center]



Fig. 11. The distillery (photo 1975) [Source: State Inspection for Heritage Protection. Monument Documentation Center]



Fig. 12. The cattle-shed near the servants' house [Source: photo by the author, 2009]

Another servants' house is a small building built from rubble stones in lime mortar squeezing in small granite chips. Supposedly, the building was built in the midst of the  $19^{th}$  century as it is a characteristic testimony of this time's manor building. It is covered by a steep gabled ridged roof, around the openings in the facades there are made the characteristic white tinted plaster borders. The building is located close to the lake and it's also seen in the plan of 1873-1874.

It is likely that the building, which could have been a distillery, is seen in the photos of 1975 -it is long, with a steep gabled ridged roof cover [12]. For the walls, as for the nearby servants' house, there are used rubble stones and squeezed in mortar granite chips. cattle-shed part. During this time the building had, to a large extent, still retained its authenticity which is now entirely lost. Near the servants' house there is located the cattleshed, built of red bricks and covered by a steep gabled ridged roof (the end of the 19<sup>th</sup> century). The building next to the servants' house creates a kind of a household ensemble which also includes the already mentioned cattle-shed, the possible feedlot part. Over time, the initial amount was supplemented by extensions-on both longitudinal facades which don't decorate the original appearance of the building at all.

It is interesting to see various documents relating to the history of the Manor. In the cash book of the Head of Gulbene Vicarage [7], we can find the people who lived in this place and have been associated with Auguliena. They are: Roseneck Jurre Sautz- (1871), Roseneck Jurre and Jahn Krautz (supposedly, the surname is the same, just written down otherwise), Peter Grün (1872). In turn, in the register of documents sent by the parish of Gulbene Vicarage or as we say today in the register of the the outgoing letters it is mentioned: to the highly regarded landlord G. von Transehe in Auguliene. According to the circular, on 21 September a protocol is sent to the venerable landlord G. von Transehe ... from the aforementioned. ... on the increase of payment to the rector of the parish. The document is dated by 1871. In the land books of Valka District in 1882, in the context of the Manor there are mentioned the following farmsteads and half manors: hoflage Kattrin, buschwachter Mitzpop, Targup, buschwachter Schkapper, Schkapper I, Schkapper II, hoflage Rimstau, Gemeindehaus und schule. In the same year, there are mentioned the following peasant farmsteads: Meesiht, Slisser-four houses with the same name, Jaunolleksch -two houses with the same name, Mikkit-two houses with the same name, etc. Just there it is possible to get to know about other peasant farmsteads, for each of which there is also mentioned the landlord's surname: Kreewing (Karl Puschis), Kreewing (Jahn Gaggan), Kreewing (Andrei Schwirstin), Jaunkreewing Rakofsky), Weesen (Otto (Otto Wessmann), Ambenek (Jacob Otlan), Siehle (Thom Otlan), (Otto Dseggus), Siehle (Otto Meiss), Siehle (Adam Turk), Siehle (Jacob Dseggus). Siehle The same names for the houses have arisen because the buildings are located in the village or cluster of buildings and in the land plan each of them has also its own number, not just the landlord's surname. 1900, it is mentioned In that the mail from Vecgulbene was delivered on Wednesdays and Saturdays, from 1894 the head forester was Sellenthin and he lived in Gaujiena. The half manors were rented by: Kattrin half manor-A. Kalning, Meesit half manor-E. Knoch. During the same period. in the Manor worked the blacksmith J. Kupz, carpenter R. Neuberg, the innkeeper Ernst Knoch in the manor pub but in Preedelkrug-the innkeeper R. Leelpeter) [5].

The park



Fig. 13. The park part with the view to the lake [Source: photo by the author, 2009]

The area of the park of Auguliena Manor consists of 1.3 ha and it is laid out during the time of the family of von Transehe-Rosenecks. The park's original layout has unfortunately been lost. There are preserved plantations in the east from the manor house along the lake bank where there is a stone staircase and the European larch groups. The park's relief is flat and its expressiveness, to a large extent, is enhanced by closeness to the lake. Over the past few years the park is under care. It is home to a local tree species-the usual spruce, maple, black alder, white alder, birch, ash, bird-cherry, aspen, etc. There are also the introduced species-the European larch, plain philadelph, wrinkled rose, white willow, brittle willow, etc. The path system of the park is presented in the plan of 1873-1874 [6]. It is suspected that the park is a landscape type park, only a small part of the feedlot and the manor house are planned on a regular basis-with paths crossing each other.

It appears that Auguliena Manor does not rank among the oldest and culturally historically most important Vidzeme manors but attention worth are the ordinary objects of the time-with their own peculiarities and evolution of the spatial structure of the building history of individual buildings and planning of the whole ensemble. The research of Auguliena Manor allows discovering its architectural historical evidences that as a result of the changes and modifications over the course of time, as well as due to neglect and misery have survived and continue to be taken care of. It is the structure of planning on building of the Manor's center, still existing park elements and the original historical substance of separate buildings as the manor house and the barn with a drying-kiln. Auguliena Manor, as revealed by its lengthy study on the site, is a characteristic example of how nowadays problematically changes the environment, giving a new function to it. But would it be better that such manor center, not used and abandoned, goes to rack and ruin as it happens not just in one place in Latvia?

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In 1979, **Jānis Zilgalvis** graduated from the Riga Technical University, the Faculty of Architecture. In 1990, he defended the doctoral thesis on the theme: the architecture of the Latvian Manors in the late 19<sup>th</sup> century-the early 20<sup>th</sup> century. Since 1995, Head of Department of Architecture of the State Inspection for Heritage Protection and since 2001–an associate professor of the Faculty of Architecture and Town Planning of the Riga Technical University. Since 2007-a corresponding member of the Latvian Academy of Science, since 2012 full member. Over 170 scientific and popular science publications and the author of 17 books (some co-authored). The main research trends-manor architecture and cultural history, sacral architecture and art, protection and use of the cultural heritage.

Kopsavilkums. Augulienas muiža (Roseneck), kas vācu valodā saukta arī Augul un latviski tulkota kā Ozolmuiža vai Auguļi atrodas Gulbenes rajonā Beļavas pagastā, aptuveni 15 km no Gulbenes Augulienas ezera krastā. Augulienas muižas apbūve, kopā ar citām atsevišķām ēkām ir iekļauta Valsts aizsargājamo kultūras pieminekļu sarakstā. Muižas apbūvi veido kungu māja, divas kalpu mājas, kalpu māja ar saimniecības ēku, laidara spārns, rija un dažas citas ēkas. Muižas vēsture saistīta ar fon Tranzē – Rozeneku dzimtu. Laika gaitā tās apbūve nedaudz mainījusies, taču plānojuma struktūra saglabājusies. Muižā norisinās atjaunošanas darbi, tāpēc tās izpēte ir aktuāla.

### Latgale Upland Church landscape reading though spatial indicators

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Abstract. Research territory is Latgale Upland. In this territory there are vivid lake and sacred landscapes. This paper describes the Latgale Upland church landscape through assessment of landscape visual character using theory-based visual indicators. This landscape research is less about identifying what makes landscape better or worse, but more about describing landscape. Methods and systems come from landscape character assessment in England and Scotland, developed by the Countryside Agency. In this paper, a focus is put on imageability. In research fields, landscape indicators are being used only recently. In this research, it is necessary to clarify, if is it possible to use indicators for smaller territories. The imageability method on orthophoto has to be used in combination with field observation. Field observation is needed to correctly identify indicators, landscape background and other possible landscape features and character. The base map size and scale depend on the landscape type and open spaces. Landscape size and intensity of indicators can be used as base for characterization of landscape and possible developmental means. In church landscapes, we can find range of variable characters.

Key words: landscape indicators, landscape reading, church landscape.

#### Introduction

Latgale Upland is chosen as the research territory. The landscape of Latgale Upland is a picturesque mosaic landscape with lakes, serpentine roads and diverse relief, woods and fields. Unlike other Latvian landscapes, Latgale has vivid lake and sacred landscapes, as the whole Baltic Sea region has been a meeting place for various cultures – Orthodox from the east, Christianity from the west, and Islam with the Tartars [9]. Thus, this territory stands interesting because in this age of globalization, we can still observe the meeting of different sacred landscapes in the Latgale Upland territory.

In the landscape research area, there still exists no precise landscape definition. As there are many types of landscape, there have been developments of various methods for landscape research [4]. This paper describes the Latgale Upland church landscape through assessment of landscape visual character using theory-based visual indicators. This landscape research is more about describing landscape, and not just about identifying what makes landscape better or worse.

The development of landscape indicators at the European level has become important in policy and the research field [13]. At the European level, a number of policy initiatives have underlined the special role of landscape in the future environmental and social-economic development [14]. Characteristic landscape features are important for landscape protection, as it is stated in European Landscape Convention [3]. Landscape Character Assessment is a tool that can be used by landscape architects as well as other professions involved in landscape influencing processes. Latgale Upland

churchyards and church landscapes are different, but these differences give common character to landscape. Landscape character in this research is defined as "distinct, recognizable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse" [11]. As this research is focused on landscape character, the landscape itself has definition connected with it. This landscape definition has been developed at an international workshop: "Landscapes are spatially defined units, whose character and functions are defined by the complex and region-specific interactions of natural processes with human activities that are driven by economic, social and environmental forces and values" [13].

Methods and systems have been developed for landscape character assessment in England and Scotland by the Countryside Agency, and the Scottish Natural Heritage has been implemented across Europe [7, 14]. Nine visual concepts have been identified, which together characterize visual landscape - complexity, coherence, the disturbance, stewardship, imageability, visual scale, naturalness, historicity, and ephemera [7]. These nine concepts were for the first time introduced by Tveit et al. [12]. They can be used in different combinations, separately or all together. Church landscape is a specific cultural landscape and has the ability to create strong visual image in the observer [1]. Church landscape has a very strong connection to the church building, and it gives strong dominant point to it. However, this dominant landscape is not always so unequivocal. Such cultural landscape has many historical elements with strong

symbolic meanings; for example, church and crucifix, but these elements are never alone in landscape.

In this paper, a focus is made on imageability. It reflects the ability of a landscape to create strong visual image in the observer. Imageability is related to theories of - spirit of place, genius loci and vividness [7]. Word, "imageability," was developed by Kevin Lynch in his book, "The Image of the City" [5]. Imageability comes from visual aspects of the landscape. While it is usually used on local scale and needs field observation, some aspects can be defined by aerial photographs. In research fields, landscape indicators have only been used recently. It is important to understand that an indicator alone provides only little information, and it is valuable when an indicator is used together with a wider system, as each indicator is to have - representativeness, accessibility, reliability and effectiveness [2]. Indicators can be very variable, depending on what they aim, but in this paper, indicators are understood as "landscape metrics that highlight quantitative information regarding the landscape structure, characteristics and functionality" [10].

Usually indicators are used for big scale landscapes – state, planning region, etc. – to find differences and transformation in this territory, and to define its character [11, 14, 10]. In this research, it is necessary to clarify, if it is possible to use indicators for smaller territories, like local landscapes, to find specific features and landscape characters in each

#### **Materials and Methods**

Imageability indicator method application for church landscapes was made as a part in expedition of churchyards of Latgale Upland. The expedition was carried out from June till October in 2011, where a survey of 68 churches in the Latgale Upland was conducted. It was made in good weather conditions during the daytime. From these objects, some were chosen randomly for imageability method, in order to mark out on each object landscape indicators that are seen on field observation. Nine square kilometers of

#### **Results and Discussion**

Out of 68 churchyards, observed in the expedition, imageability indicator method was chosen randomly for church landscapes. For the final research eight landscapes were observed altogether.

With the first attempts to use imageability method on orthophoto, it was clear that without field observation, it would not be possible to correctly identify indicators, landscape background and other possible landscape features and character. Main road axes are the starting point for each territory observation. Traveling by every possible road to the church, the elements were drawn and the viewpoints were noted. Visibility is the next step in defining landscape borders.

TABLE 1	L
Definition used in paper [Source: construction by the author]	

Term	Definitions	
Landscapes	Are spatially defined units, whose	
	character and functions are defined by	
	the complex and region-specific	
	interactions of natural processes with	
	human activities that are driven by	
	economic, social and environmental	
	forces and values	
Landscape	Distinct, recognizable and consistent	
character	pattern of elements in the landscape that	
	makes one landscape different from	
	another, rather than better or worse	
Indicator	A means devised to reduce a large	
	quantity of a data down to its simplest	
	form retaining essential meaning for the	
	questions that are being asked for data	

church landscape and to get some description together from these territories. The frequently used data sources are: land cover data, aerial photographs, landscape photographs and field observation [8]. Objectives of this research were:

- 1) to find appropriate indicators for small scale research territories;
- 2) to identify territory boundaries;
- 3) to recognize most valuable indicators.

It is important to understand the context of church landscape by examining how approximate the landmarks to other landmarks are, or whether there even is background.

orthophoto in scale of 1-to-10,000 were taken. "Google Maps" satellite map of Latgale Upland was used. On the map, indicators were marked by conditional symbols. It was important to start with the main road axis that leads to church. In expedition, emphasis was on churchyard elements [6], but here by imageability method, a connection is made on church with its surrounding context, and relationships between dominant and other landscape elements.

TABLE 2

Imageability method bases [Source: construction by the author]

Concept	Indicators	Used Data source
Imageability	Spectacular,	Field observation
	unique and	together with ortophotos
	iconic built	
	features	
	Landmark	Field observation
	Historical	Field observation
	elements	together with ortophotos
	Density of	Ortophotos
	viewpoints	





In case of Dubna church landscape, no distant viewpoints were found. Close to the road there are not only forests, but also dense road side overgrows (Fig. 1). It is a similar case with the Kovaļova church landscape. There are some dwelling houses around the church with orchards and dense road side overgrows. Behind these elements there are big open spaces, but they cannot be seen (Fig. 2, 3). Use of only some indicators already gives image of this place and opens the church landscape character.

Piedruja church landscape has a noticeable negative effect of hidden landscape elements. Less than 100 meters from the Catholic Church is River Daugava, but because of overgrown river banks, we cannot see it. Landscape space penetrates between dwelling houses and small gardens behind them. Dwelling houses are not tall, but are placed close to the narrow road. It only allows very narrow views to church landscape dominants – churches (Fig. 4, 5, 6, 7).

The well-known church landscape in Latvia, Aglona basilica landscape, has a wide range of landscape indicators that could be used for describing landscape, starting with the simplest – church, crucifix, and adding water, massive fencing, and industrial buildings. Balance between relief, tree growing and building structure makes landscape more variable. The most distant viewpoint is almost two kilometers from the basilica (Fig. 8, 9). Relief can define not only the furthest viewpoints, but also the closest view boundaries. For example, Ezernieki church is placed on steep relief elevation. Around this elevation there are high buildings and then comes a forest border. Landscape is squeezed in a small space with different elements. All landscape observation results in small distances and narrow views (Fig. 10, 11).

An interesting case of relief and tree growing combinations can be seen on Bērzgale church landscape. From the southern part, a church building opens in a distance more than one kilometer with tree coulisses on both sides. Then it disappears from the view and shows again after four hundred meters.



Fig. 3. Kovaļova church [Source: photo by the author]



Fig. 5. Piedruja church landscape [Source: photo by the author]



dwelling house; massive fence.

Fig. 8. Aglona church imageability scheme [Source: construction by the author]



Fig. 9. Aglona church [Source: photo by the author]

But from the east, growing trees are covering view at times and the church appears only in less than hundred meters' distance. On the map, there are lakes in and around the landscape, not too distant from the road, but in the field observation, we cannot see them due to the lake shore overgrowing (Fig. 12, 13).

Škaune church landscape can be described as very narrow and extended. Almost all dwelling houses are one- or two-storied ones, but they have gardens around the houses, and big trees and shrubs growths on the side of the road. Because these houses are hidden from the view, the landscape forms into long green corridor. Also, the landscape has a surprise illusion. From a distance, it seems that we see a church, but in a closer distance, it becomes clear that it is only a free standing bell tower, and the church is a little bit deeper hidden among the trees (Fig. 14, 15). Complexity of different church landscapes can be determined by a number of the indicators used to define the image of this landscape, as well as by the element combination, and the scale of landscape.

It has become clear that not in all the cases a nine square kilometer big base map is needed. The base map size and scale depend on the landscape type and open spaces. In case of Andrupene church landscape, the most distant viewpoint is two and a half kilometers long. The view disappears just for a moment in close distance. In this landscape, a free standing bell tower stands as one more dominant point only in a closer distance of fifty to twenty-five meters (Fig.16). In the case of Andrupene, a need for generalized symbol for a dwelling house territory appeared, as it was felt as being integral. Use of the imageability indicators for characterization of the church landscapes of Latgale Upland clearly shows main differences. Landscapes differ by size, indicator, element intensity and complexity. Indicators for church landscapes in this research shape the basic description of church landscape imageability.





Fig. 11. Ezernieki church [Source: photo by the author]



Fig. 13. Bērzgale church [Source: photo by the author]



[Source: construction by the author]

#### Conclusions

Landscape indicators are important for capturing further landscape transformation process. The use of each method means examining the landscape in different ways. Each landscape has its own character and for each aspect, we can use the most suitable method.

Landscape size and intensity of indicators can be used as base for characterization of landscape and possible developmental means. In church landscapes, we can find a range of variable characters. One common indicator is road side trees and shrub growths, as are water and relief complementary indicators. The intensity of work done on building structures serves as indicator of people's presence.

For small scale research territories, more detailed and divided indicators need to be used. The height of dominants and other surrounding objects need to be included. This imageability depiction requires that two dimensions and third dimension need to be included. Territory boundaries may be identified easily in field observation, but they cannot be defined on maps. All indicators are usable and valuable.

Separate research is needed for defining the necessary steps for valuable landscape elements and characteristics preservation necessity. Landscape indicators on small landscape level have to be improved, in order to use them not only in research, but also in policy field.

Next step for this method is to list indicators, and to make more detailed characterization of each indicator in each case.

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Kopsavilkums. Kā pētījuma teritorija ir izvēlēta Latgales augstiene. Latgales augstienes teritorija ir bagāta ar izteiksmīgām ezeru un sakrālajām ainavām. Pētījums apraksta Latgales augstienes dievnamu ainavu caur ainavas vizuālā rakstura noteikšanu, izmantojot teorijā balstītus vizuālos indikatorus. Šis ainavas pētījums ir vērsts uz ainavas aprakstīšanu, neveidojot sadalījumu par to, kas veido ainavu, labāku vai sliktāku. Ainavas aprakstīšanas metodes un sistēma ir attīstījusies no rakstura noteikšanas Anglijā un Skotijā, ko ir izstrādājusi Lauku Apvidus Aģentūra (Countryside Agency). Rakstā uzsvars ir veikts uz "imageability" metodi un dažādiem ainavas indikatoriem. Dažādās zinātnes sfērās, ainavas indikatorus pielietoti tikai nesen. Pētījumā bija svarīgi noskaidrot vai ir iespējams šādus ainavas indikatorus pielietot mazām ainavas teritorijām. "Imageability" indikatoru metode tika pielietota dažās Latgales augstienes dievnamu ainavās, kuras tika izvēlētas pēc nejaušības principa. Izmantojot "imageability" metodi uz satelīta kartes ir noteikti nepieciešams veikt arī apsekojuma lauka darbus. Vietas apsekošanas dabā ir nepieciešama, lai precīzi noteiktu indikatorus, ainavas robežas, fonu un citas iespējamās ainavas iezīmes un raksturu. Pamata kartes izmērs un mērogs ir atkarīgs no ainavas tipa un atvērtajām telpām tajā. Ainavas telpas izmēri un indikatoru blīvums var tikt pielietots kā pamats ainavas raksturošanai un iespējamiem attīstības veidiem. Dievnamu ainavās ir iespējams atrast lielu ainavu raksturu dažādību.

# Case Study: The Authenticity and Integrity Assessment of the Eleja and Remte Manor Parks

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Abstract. The analytically comparative approach of authenticity and integrity qualities has been applied in the case study of the Eleja and Remte manor parks aimed at raising awareness of the value of the cultural heritage on a local scale, using the historical evidence of the manor houses as the unifying element – the analogy of the property rights and architecturally artistic manifestations.

The case study example included data acquisition, processing and analysis, as well as the methods of the field case study, which included the evaluation of the current situation in nature, photo reportages and records in accordance with the proposed study principles and criteria. The field study took place by personally surveying the specific territories in the period from 2010 to 2012. On the basis of data acquisition, processing and analysis scientific theoretical provisions and international normative decisions in the assessment approaches of historical research and authenticity and integrity were used. With the help of the proposed approach in the case study example the principles of evaluation and awareness raising of the cultural heritage of the historic gardens and parks were analysed, which are essential for the sustainable development of the rural environment.

The study results of the historical evidence of the Eleja and Remte manor parks are divided into 7 development stages during the period from the 19th century to the 21st century. During this period, both manor parks experienced both the architecturally artistic quality boom, and decline in the impact of the political, social and economic factors. On the other hand, the authenticity degree of the Eleja and Remte manor parks is from minimum to maximum in almost all proposed positions, which can be explained by so far disorganized and unsystematic planning and work implementation activities not only on a local, but also on national scale. To ensure further preservation of the identified authenticity and integrity levels at an optimum level, conservation of architectonically artistic elements and structures and elaboration of the management plan is necessary.

Key words: authenticity, integrity, historic garden and park, assessment.

#### Introduction

The quality of the historic gardens and parks, especially in the last few years, has been discussed through the understanding of terms 'authenticity' and 'integrity' in the research literature. The terms 'authenticity' and 'integrity' were established in accordance with the guidelines developed by the UNESCO World Heritage Centre in 2005 [28]. The term 'authenticity' was not an exclusive criterion, not even the keyword in the beginning of the history preservation movement [19, 1]. However, nowadays, especially in the last years, among researchers it becomes an increasingly more significant criterion and a measurement for any cultural and historical landscape and for the conservation techniques and value awareness of the existing elements and structure [20, 21-36; 6, 319-356; 9, 1-16]. From a more general viewpoint, the term "authenticity" includes ethics, emotional feelings, chances to keep and to take initiative in future, as well as creative aspects, including both education and aesthetics. It is one of the key words for the communication to action-oriented planning and management processes, linking the past with the future. The better authenticity understanding and its various dimensions, the more possible it is to act more diversely in the context of conservation, landscape and society. Authenticity is closely linked with the aspects

of history, correctness, perceptual clarity, dynamics, time flow, creativity, scale, object, or idea based strategies [6]. Authenticity assessments are complex [9, 1-16], and there is no united criteria system. Besides, it depends on the tangibility conception of authenticity that most directly relates to the historic gardens and parks. The *Nara Document on Authenticity* that was signed in 1994 defines the authenticity forms in the context of the world's and cultural heritage biodiversity [21], which must be used as the base for the historical and cultural landscape policy.

However, the term 'integrity' was applied earlier than the term 'authenticity' and its meaning is more related to the ability to maintain the physical and mental integrity over time [20, 23]. Integrity is defined as the measure for natural and/or cultural heritage wholeness and integrity [28, 22]. Integrity appears equivalent to the popularity of authenticity discussions in the scientific research community, but in most cases in the analytic approaches of the different and equivalent meanings of both terms [20, 21–36; 9, 1–16]. The authenticity and integrity assessment of the historic gardens and parks is essential from two aspects: (1) in the context of conservation, management and development and (2) in the context of the cultural and natural heritage resource awareness and integration.

The artistic structure and elements identified in the cultural and historical landscapes are compared in the historical context, defining both individual elements and structures, and total authenticity and integrity of the landscape space. Consequently, in order the authenticity and the integrity assessment of the historic gardens and parks would be adequate, a thorough historical research of the landscape should be carried out. In the scientific research literature increasing attention is drawn to the research approaches of the historical evidence of the parks and gardens and several aspects have been accentuated that are particularly important for the research of the historic landscape. The research of the historical evidence of gardens and parks can be relatively divided into four following categories:

- research is based on material or measurable units, where the garden and park consists of several separate elements: (1) buildings and land forms that relatively change and can be anticipated, (2) environmental factors such as seasonality and climatic conditions that are changing and reoccurring, (3) the vegetation, which is not only unexpected, but also dynamic [18, 146; 23];
- 2) research is based on the analytic study of the historical events and activities [25, *32*; 11];
- research is based on modern technological options, including gardens archaeology [5, 57–66];
- 4) research is based on joint research approaches borrowed from all the categories mentioned above [4, 27].

The order of the proposed research principles is based on the analytical study of the historical events, thereby gradually revealing historical evidences and discovering the understanding not only of the particularity of the physical elements and structure, but also the ideological context of it.

The aim of the research is to assess and analytically compare the authenticity and integrity degree of the Eleja and Remte manor parks. To achieve the aim, the following tasks were proposed:

- research the historical evidences of the Eleja and Remte manor parks analytically comparing them;
- 2) carry out the authenticity and integrity assessment of the Eleja and Remte manor parks;
- 3) mutually compare the authenticity and integrity degrees of the Eleja and Remte manor parks.

Nowadays, the Eleja and Remte manor parks are located in different planning regions. Also, the architecturally artistic analogy without exploring the historical evidence is not visible. Archival materials of the Remte manor ensemble which are available at the Latvian State Historical Archives (hereinafter referred to as the LSHA) and at the Monument Documentation Centre of the Latvian State Inspection for Heritage Protection (hereinafter referred to as the LSIHP) are limited. Whereas, the archival materials on the Eleja manor ensemble are plentiful in the same archives. The Eleja manor ensemble has been researched more extensively and appears several times in publications of I. M. Janelis [7, 8], I. Lancmanis [12, 13], D. Brugis [1] and J. Zilgalvis [26]. Particularly remarkable is the scientific action collective of the Rundale Palace, which under the guidance of I. Lancmanis have invested essential and immeasurable work to collect and study the historical materials of the Eleja manor house, collecting materials in one place from different Latvian archives and various places around the world for the purposes of the exhibition dedicated to the Eleja manor house in 1989 and the catalogue issued in 1992 [14]. On the other hand, the Remte manor ensemble is studied little, and the only available source that nowadays hints to former glory and wealth of the Remte manor park is the book 'The History of the Parish of Remte' by K. Tigers issued in 1934 [22], which is the basis for all the following studies and descriptions of the park [17, 31]. The materials documenting the planning of the historical situation of the Eleja manor ensemble is the Eleja manor ensemble plan of the 19<sup>th</sup> century [29], the park extension plan designed by G. Kufalts in 1905 [14, 108], the sketch of the Eleja manor ensemble made by Fred Medem in 1953 [14, 152] and the reconstruction drawing made by A. Celmala and I. Driveika in 1989 [14, 82]. However, the materials documenting the historical situation of the Remte manor ensemble have been lost and only schematic park plan from 1993 made in the framework of inventory has been preserved [38]. Despite the fact that the archive materials, for example, park plans and detailed park element drawings are little available in Latvia, the illustrative material of the Remte manor house park is largely replaced by rich intangible heritage - stories, legends and other oral manifestations [16, 55-56; 24, 303-353], which have been collected and issued with the support of the Latvian State Culture Capital Foundation in 2004 and 2010. The life story of Latvian writer J. Jaunsudrabins is also linked with the history of the Remte manor house, as he worked in Remte at the end of 19th century and later worked and lived nearby at the Smukas manor house. Although the Remte manor park as a cultural monument during the period of the Soviet Union has been under the national defence since 1957 [38], which is nearly about 20 years longer than the Eleja manor park, which was placed under the national defence only in 1975 [41], the documental evidence in terms of the content of the Eleja manor house in the archive materials of the LSIHP Monument Documentation Centre are more abundant than the

documental evidence on the Remte manor house. This may be explained by the fact that since 1920 the Remte manor house has been under the guidance and management of the educational institution [22, 69], as well as by the fact that the Remte manor house is at geographically distant area away from the main state roads. Also, the oldest documents obtained from the LSIHP Monument Documentation Centre on the Remte manor house date back to 1923 with the correspondence on the swimming tower or Baden tower adherent to the Remte manor ensemble [39]. Whereas, documents on the Eleja manor house have survived from 1925. In these documents the issue on

#### The materials and methods

The characteristic features of the culturally and historically abundant, and thus highly valuable and unique landscape are manifested in the architectural and artistic output of the formative elements ad structures [3, 49] and at the degree in which these values have been preserved until nowadays. Consequently, the values of the Eleja and Remte manor parks were determined by identifying the historical evidence and assessing their authenticity and integrity. Study approaches of both manor parks correspond to the historical evidence research process principles applied by British researchers D. Lambert, P. Goodchild and J. Roberts [11]. Whereas, the analytic comparisons have been drawn using the available archive materials, scientific and popular scientific sources, as well as area research studies during the study period. For the purposes of analytical research and comparison of the obtained data the theory by Tom Turner [23] and archive materials on both manor houses from the LSIHP Monument Documentation Centre resources and LSHA have been used. Yet, the authenticity and the integrity assessment is based on the scientific knowledge and theory assumptions [6, 10, 15, 19, 20, 21]. As a result, the authenticity and integrity degree assessment for the established criteria and evaluation matrix has been elaborated (see Table 1 below). The marking assigned

restoration project and remains destiny of the Eleja manor palace dominate [34, 35]. The LSIHP archive materials point both to the objects particular to the Eleja manor park environmental and elements conservation efforts, and the use for different purposes, during the pre-war and the USSR period, as well as nowadays. A significant source is the manor park inventory issues or park descriptions [41, 38], which were implemented from 1991–1996 under the guidance of the LSIHP. These documents allow one to compare the existing park situation with the results of park study obtained approximately 20 years ago.

to each criterion is used in the cartographic material, which is reconstructed on the basis of the historical evidence study of both manor parks. The historical and the existing situation of the architectural and artistic elements and structures have been revealed in the compiled cartographic material. The historical elements, which in the current situation are no longer found and visually are not discernible in nature, have not been marked in the cartographic material. The construction volume and other elements that were placed in the park after the World War II are assigned a special mark. The degree of authenticity is determined for all composition elements in the architectural composition: relief, the vertical and the horizontal structure, vegetation and water bodies.

On the other hand, the integrity degree of the historic gardens and parks comparing with historical situation is evaluated regarding the territory's ownership and the architecturally compositional structure. The authenticity and integrity assessment reveals the historical evidence conservation degree of each park today, as well as determines the total value level of the parks. In the examples of the Eleja and Remte manor houses parallels can be drawn regarding the park development using the comparative analytic approach, thus reflecting the diversity of the cultural and historical heritage, the uniqueness and richness.

TABLE 1

No.	Authenticity degree	Characterization	Mark
1.	Very high	Preserved in details, without stratification	
	(5 points)		
2.	High	Preserved in details, with little stratification or changes	7777
2.	(4 points)		(111)
3.	Medium	Preserved in the amount, but lost in details	
5.	(3 points)		
4.	Low	Preserved in the amount with the essential stratification or changes,	
4.	(2 points)	which have been achieved by rebuilding or restoring the element	
5.	Very low	Not preserved in volume, but the place has survived (e.g. remains)	,,
э.	(1 points)		L
6.		New construction volume, brought into the park landscape after the	
	-	WWI or the WWII	

The characteristic and assigned marking of the authenticity assessment degree [Source: construction by the author]

#### The results and discussion

The historical events of Latvia can be vividly noticed in the cultural and historical landscape, leaving various consequences of the rise and fall of political, social and economic situation. The architecturally artistic qualities of the Eleja and Remte manor parks were determined by various landscape development factors that historically have been divided into the following seven steps:

- 1) the prosperity phase of the Eleja and Remte manor houses in the beginning of 19<sup>th</sup> century under the governance of Baron von Medem's family. Brothers von Medems, Kristof Johan Friedrich also called Janno and Charles Johann Friedrich, when 22 and 23 years old, inherited both the Eleja and Remte manor houses together with other houses after the death of their father Johann Friedrich von Medem. [22, 126]. Both brothers were the main authorities, who determined the prosperity of the Eleja and Remte manor houses, according to the fashion trends of the time. Accordingly, both manor parks were created pursuant to the fashion trends and ways of thinking, which were based on the principles of English landscape style - bright romanticism manifestations, depicted through the liberal design of parks, convoluted line, the naturalness and memorial nature buildings:
- 2) the architecturally artistic contributions to the Eleja manor ensemble and the Remte manor park mellowness at the end of 19th century and the beginning of the 20<sup>th</sup> century is the last landscape quality peak until today. In connection with the Eleja manor house Georg Kufalt the main garden architect of Riga, is mentioned. He made the park expansion project by the order given by fon Medem, thus bringing into the landscape two new objects: Baron von Medem family graves and the pavilion or the rotunda. Up to the first quarter of the 20<sup>th</sup> century both the Eleja and Remte manor houses experienced 5 owners - all of them of the Medem family [14, 33; 22, 127–128];
- 3) in the 20<sup>th</sup> century essential changes occurred in the life of the Eleja and Remte manor houses, especially beginning with the house burning revolution in the 1905 when the nearly 100 years long management and prosperity years were destroyed in one moment. During the Manor House Burning Revolution, or the so-called Partisans' year, the Remte manor house ensemble suffered most substantially [2];
- 4) the damages suffered during the World War I caused significant architectural losses for both manor houses and its parks. In 1915, when Eleja became part of the front line and the Russian army pulled back, the Eleja manor castle was

burnt down [14, 34] and in further years did not experience any revival;

- in 1918 the Republic of Latvia was officially 5) declared in a proclamation procedure. It was followed by the agrarian reform in 1920, consequently the manor lands were divided among Latvian citizens [8, 245]. The Remte palace was reconstructed according to the demands of an educational institution [30], despite the damages caused by double burning. At the same time, the walls of the Eleja castle were more damaged and beginning with 1925 designing and coordination works for the palace reconstruction as a school and a public house took place [34, 35, 32]. Unfortunately the reconstruction failed, and in 1993 it was decided to demolish the ruins [33]. Eight years later the destiny of the Eleja castle was decided several evidenced times as by the intense correspondence between the Monuments Board and the Eleja Board Council [36, 37]. All the events mentioned above left an impact to the scenic qualities of the manor parks. architectural forms, including Small commemorative elements, in the Eleja and Remte parks suffered from vandalism, and just in the beginning of 1930s, the Monuments Board started to identify their values;
- if until the World War II both manor houses 6) underwent a similar course of events, the WWII period completely broke the connection between the two estates. In 1945 the Soviet totalitarian regime brought new awareness and activities in relation to manor parks and their values. In case of the Remte manor park, it perfectly served to the needs of the school located in the castle. Most of the park management works were the responsibility of the Remte Forestry Office. Whereas, the destiny of the Eleja manor park was decided by the Eleja municipality board that in comparison with the Remte municipality considerably Board was more active. The documents available at the LSIHP Monument Documentation Centre suggest that that environment of the Eleja manor park was attractive to meet both cultural and sports activities [40];
- 7) since the renewal Latvian independence in 1990, the agrarian reform has been implemented, during which the former owners and their heirs were able to regain the land. If the Remte manor ensemble ownership was unquestionable and largely unchanged already from the first period of Latvian independence, the Eleja Manor ensemble, beginning with the second period of Latvian independence to the present day,

has experienced significant changes leaving consequences in the overall condition of the landscape. In less than 30 years the Eleja manor ensemble has been divided into 4 properties.

In a bit more than the last 100 years, both manor parks have survived major and minor significant changes, which clearly have not raised their cultural and historical value. Having performed the research of historical evidences of both manor parks and comparing the obtained results with the current situation, the architecturally artistic compositions – the degree of conservation of the elements and structures or the degree of authenticity and integrity has been determined. The authenticity and integrity assessment of the Eleja and Remte manor parks is graphically illustrated in Figures 1 and 2 below.

Over time, both manor parks both in the area as a whole and in details have preserved their original land form without significant changes. Unique minor changes associated with the relief have appeared because of the open-air stage brought into the Eleja manor park. Nor have all the artificially built mounds survived on which the monuments were placed. As regards the authenticity comparison, the vertical structure of both parks is in an equal authenticity degree amplitude - from the disappeared park element to a very high authenticity degree. However, as regards the Remte manor park, the average indicator of the vertical structure authenticity is one unit higher than the Eleja manor park. Consequently, the vertical structure elements of the Eleja manor park are with a lower average level of authenticity. This is due to the main element of the Eleja manor castle ensemble - loss of the new and the old castle construction volume, as well as the disappearance of separate elements, for example, the ninepins pavilion and separate monuments. However, in this case, the comparison is quite relative, since there is no available remaining information on recreation elements of the Remte manor castle, as well as any other significant Medem's family monuments, which could be located in the park.



Fig. 1. Authenticity and integrity assessment of the Eleja manor park [Source: construction by the author]

Marks: 0-5 authenticity degree value scale, where 5 - very high; 4 - high; 3 - medium; 2 - low; 1 - very low; 0 - element has disappeared



Fig. 2. Authenticity and integrity assessment of the Remte manor park [Source: construction by the author] Marks: 0-5 authenticity degree value scale, where 5 – very high; 4 – high; 3 – medium; 2 – low; 1 – very low; 0 – element has disappeared

However, six vertical structure elements at the Eleja manor park and seven vertical structure elements at the Remte manor park have been assessed as with a very high and a high degree of authenticity. The very high authenticity degree has been assessed for the arched bridge of the Eleja manor park and the adjacent hollow stone, which is embedded in the boulder fence in D part. The hollow stone is an ancient worship place, which is consciously embedded into the fence and possibly was found in Eleja surroundings. Also, without any significant stratification, but with some losses the boulder fence with arches has remained. The tea pavilion also has a high authenticity degree, but it is fast losing its excellent values due to the atmosphere and the impact of vandalism. The same destiny has been observed for several vertical structure elements of the Remte manor park, which have survived without any stratification, therefore they have been assessed as with a high authenticity degree. Yet, in the current situation, no conservation works have been carried out, consequently, the unique value is gradually lost. The cave, the hunting tower with the ladders, as well as the love island has survived with a high authenticity degree in the Remte manor park. On the other hand, the degree of authenticity of the Remte manor park bridges is controversial, because



Fig. 3. The Love island in the Remte manor park. Wooden bridges without railing in 2008 [Source: photo by the author]



Fig. 5. The pavilion or rotunda in the Eleja manor park in 2009 [Source: photo by the author]

in the past few years their configuration has significantly changed, as illustrated in Figures 3 and 4 below.

The 19<sup>th</sup> century bridges mostly were with handrails on both sides, and at least one side. But in this case the newly set bridges with railings are typically massive which prevent to perceive the Love island itself. One of the most significant English landscape park elements – the pavilion or the rotunda – in both parks has significantly lost its values. Although these structures are separated by almost one century, both are in a nearly equivalent position, as it is illustrated in Figures 5 and 6 below.

If no conservation works for the Eleja manor park rotunda shall be carried out, unfortunately it will have the same fate as the Remte manor park pavilion. The horizontal structure of both manor parks has also been preserved at different authenticity degrees, but in this segment the area and roadway networks of the Eleja manor park are with a significantly higher degree of authenticity than the Remte manor park. This, in turn, can be explained by the regular landscape management of the Eleja manor park over the past 20 years, as well as the fact that the historical maps and plans of the road network planning of the Remte manor park are not known. As a result, the road network existing



Fig. 4. The Love island in the Remte manor park. Wooden bridges set by the Latvian State Forests in 2012 [Source: photo by the author]



Fig. 6. The pavilion or rotunda in the Eleja manor park in 2012 [Source: photo by the author]

nowadays has been created with a logical connection between the vertical structure in the park. However, in terms of the track pavement quality, the Remte manor park is more accessible than the Eleja manor park, where the historic track network is visually clearly perceivable, yet it is not suitable for walks. The park track network that is neglected on a regular basis, quickly overgrow both with lower and higher vegetation groups. Nowadays, as regards the vegetation authenticity degree, both parks have suffered from non-professional collective works, as well as arbitrary tree cutting. The Remte manor park significantly suffered during the storm in 2010, when several large trees in the park territory were uprooted. In both parks the alleys have been preserved in a good quality - both the Remte manor chestnut alley, which is the main driveway to the manor castle, and the Eleja manor oak alley, located in the centre of the park in the view from the castle to the tea pavilion. In turn, the double limetree avenue once magnificent at the Eleja manor park, nowadays unfortunately is completely lost as a vegetative value. The orchards of both manor castles, located in both sides of the new castles, have been preserved as green areas with a few apple trees that were planted during the Soviet times.

#### Conclusions

Comparing the scenic and architectonic transformations of the Eleja and Remte manor parks, it must be concluded that the parks of both manor houses are equally authentic in all architecturally compositional conditions. Though, it must be noted that authenticity is proportionate to the amount of the architectonic elements in each park individually. Also, the particularly high level of authenticity of some of the elements partially decreases the destruction of other elements. In order to preserve the authenticity qualities identified nowadays to a maximum degree and not to allow an on-going degradation and even destruction of the park elements and structures, a prompt strategic longterm plan for their conservation and management is necessary. The elaboration and implementation of the conservation and management plan can be

While, the park water elements are with a high authenticity degree in terms of their configuration; however, both manor parks have a water flow and circulation problems, which have occurred due to the occasional and non-professional care activities. Consequently, the two park ponds and canal systems are rusted and non-aesthetical, and they fail to fulfil the visually so important role of the English landscape park as a reflection.

Nowadays the public territory integrity in the aspect of both ownership and composition is very essential, as it allows implementing the development visions driven to one goal as well to escape from various conflict situations. The integrity degree of the Remte manor park, and thus the whole ensemble in the both mentioned aspects, is high and thus a smooth, coordinated park development has been ensured. However, the integrity degree of the Eleja manor park in both aspects is diametrically opposed to the Remte manor park situation. Nowadays the Eleja manor ensembles, including the territory of the Eleja manor park house extended in the beginning of the 20<sup>th</sup> century, are divided among 11 owners, which inevitably have caused the fragmentation of the composition.

carried out in several stages, beginning with the park structures and elements that are in need of prior conservation works. Although the Eleja manor park looks rather hopeless in terms of documentation, its popularity, active cultural life and nearly threefold increase of visitors during the last few years (in 1994 the Eleja manor park was visited by 3400 visitors, but in 2011 – around 8000) keep alive the hope that the core values of the park will be preserved and transferred to future generations as qualitative. Whereas, the Remte manor park, although slightly forgotten, is a potential object of regeneration of another English landscape park. In the case of both the Eleja and the Remte manor houses the historic parks are significant material and immaterial cultural and natural heritage, as well as the identity carriers of the local environment.

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Kopsavilkums. Autentiskuma un integritātes kvalitāšu analītiski salīdzinošā pieeja izmantota Elejas un Remtes muižu parku izpētes piemērā, ar nolūku aktualizēt kultūras un dabas mantojuma vērtības un nozīmību lokālā mērogā, par vienojošo aspektu izmantojot muižu parku vēsturiskās liecības – īpašumtiesību un arhitektoniski māksliniecisko izpausmju analoģija. Šī pētījuma mērķis ir novērtēt un analītiski salīdzināt Elejas un Remtes muižu parku autentiskuma un integritātes pakāpi. Mērķa sasniegšanai izvirzīti sekojoši uzdevumi:

1) analītiski salīdzinot izpētīt Elejas un Remtes muižas parku vēsturiskās liecības;

- 2) veikt Elejas un Remtes muižas parku autentiskuma un integritātes novērtējumu;
- 3) savstarpēji salīdzināt Elejas un Remtes muižas parku autentiskuma un integritātes pakāpes.

Izpētes piemērs ietvēra datu ieguves, apstrādes un analīzes, kā arī lauku pētījumu metodes, kas ietvēra esošās situācijas novērtējumu dabā, foto fiksācijas un pierakstus atbilstoši izvirzītajiem izpētes principiem un kritērijiem. Vēsturisko liecību dati par Elejas un Remtes muižas parkiem iegūti no Latvijas valsts vēstures arhīva (LVVA), Valsts kultūras pieminekļu aizsardzības inspekcijas (VKPAI) dokumentācijas centra materiāliem un iepriekš veiktajiem pētījumiem I. Lancmaņa, D. Bruģa, I. M. Janeles, K. Tiģera u. c. autoru publikācijās un aprakstos. Iegūtie arhīva dati salīdzināti ar lauka pētījumos iegūtiem esošās situācijas datiem. Lauku pētījumi noritēja personīgi apsekojot konkrētās teritorijas no 2010.–2012. gadam. Teorētisko datu ieguves, apstrādes un analīzes pamatā izmantoti zinātniski pētnieciskie un starptautiskie normatīvie lēmumi vēsturisko liecību izpētes un autentiskuma un integritātes novērtējuma pieejās. Ar izvirzīto pieeju palīdzību izpētes piemērā analizēti vēsturisko dārzu un parku kultūras mantojuma apzināšanas un novērtēšanas principi, kas ir būtiski ilgtspējīgas lauku vides attīstībā.

Elejas un Remtes muižu parku vēsturisko liecību izpētes rezultāti iedalās 7 attīstības posmos laika periodā no 19. gs. līdz 21. gs. Šajā periodā abu muižu parki piedzīvo gan arhitektoniski māksliniecisko kvalitāšu uzplaukumu, gan kritumu politisko, sociālo un ekonomisko faktoru ietekmē. Savukārt, salīdzinot Elejas muižas parka un Remtes muižas parka ainaviskās un arhitektoniskās transformācijas, ir jāsecina, ka abu muižu parki ir vienlīdz autentiski visos arhitektoniski kompozicionālos nosacījumos. Elejas un Remtes muižu parku autentiskuma pakāpe ir no minimālās līdz maksimālai gandrīz visās izvirzītās pozīcijās, kas skaidrojams ar līdz šim neorganizētām, nesistemātiskām gan plānošanas, gan darbu realizācijas aktivitātēm ne tikai vietējā, bet arī nacionālā mērogā. Lai maksimāli saglabātu mūsdienās konstatētās augstās autentiskuma kvalitātes un nepieļautu turpmāku parka elementu un struktūru degradāciju un pat bojāeju, ir nekavējoties nepieciešams stratēģisks ilgtermiņa plāns to konservācijai un pārvaldībai. Konservācijas un pārvaldības plāna sastādīšanu un realizāciju var veikt vairākos posmos, sākot ar parku struktūrām un elementiem, kam ir nepieciešama prioritāri konservācijas darbi.

# Sculpture and environmental design in the cultural landscape of the European countries and Latvia

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outlines Abstract. Based on from various European countries, including examples of development of historical parks in Russia and the Duchy of Courland, the author of this research offers a review 20<sup>th</sup> century. sculpture parks the of the emergence of of In evaluating inidvidual sculpture parks created in Spain, Italy and Scandinavia, particular attention is paid to the inclusion of historical parks, their landscape elements, sculpture and environmental design objects in today's cultural environment. The aim of the article-through mentioning ensembles of matching landscape and sculptural synthesis rooted in the international experience, is to provide the reader with a visible background on the phenomenon of appearance of Latvian sculpture parks and their regional specificity.

Key words: cultural environment, cultural landscape, sculpture park, environmental design, sculpture.

#### Introduction

A cultural value is often judged by the quality of its components and the amount and force of its emotional effect. just as cadastral value is evaluated for land and real estate in accordance with commercially comparable criteria. It is axiomatic that a manor house placed in an ancient park, sourrounded by a cultivated landscape impressive relief, gardens, driveways with complemented by paths, a mirror of water and, a close-by forest will cost more than a lonely mansion built in an empty space. In the same way, an environment rich in constituents, located in an urban and sparsely populated area, a site intact or regained from nature, well-maintained according to the artistic canons of taste, sends a specific set of signals in the direction of our consciousness.

Nowadays, it is increasingly important to define the rate and scale of development of fast-growing urban society and its cultural environment, a development that exposes and permanently transforms the environment shaped by the symbiosis between humans and nature during previous centuries. International organizatons for the identification and protection of cultural heritage, including world-wide and in Latvia, both UNESCO (United Nations Educational, Scientific and Cultural Organization) and ICOMOS (International Council on Monuments and Sites) are fully aware of this inevitable evolution. With the theoretical, administrative, organizational and practical assistance of the State Inspection for Heritage Protection, they seek to control and stabilize the most valuable cultural landscape ensembles and resistance of individual sites as far as

possible against the inevitable degradation and environmental transformations. The aim of such efforts is to highlight and preserve the historical values of the cultural landscape designed in accordance with the stereotypes of the style culture [4].

In order for the prospects of our civilization not to seem too pessimistic, it can be noted, for consolation, that in parallel with the transformation the historical cultural environment and of its degradation, improvements are also becoming apparent. There is ongoing correction of the planning errors of the previous decades and humanization of the Soviet time's urban and industrial environment, backyards of housing blocks are endowed with modern design elements or decorative gardening techniques. These efforts are coordinated by specialists, whose aesthetics contrast with those of backyards spontaneously landscaped by their inhabitants and playground facilities threatening children's lives. A new environment is being created, through properly designed and gradually developed areas, that become conceptually complete facilities, forming a new synthesis of landscape and environment created by architects. In it, as socially necessary, components of the cultural environment have objectively incorporated elements of the landscape formed by natural relief with its components, vegetation and man-made environmental object facilities and design articles as well as the small forms of architecture and a variety of artworks suitable for an outdoor display.

#### Each garden as the seventh wonder of the world

Since the times of the mythical hanging gardens laid out for the pleasure of King Nebuchadnezzar II Assyrian in the capital of Babylon over 2,500 years have passed, but literary sources, imagination, legends and history researchers' assumptions talk about the unique architectural design of the gardens laid out by skilled and talented craftsmen, the complex irrigation system and with legends entwined abundance of vegetation. It is possible that this and similar fabulous perceptions of the layout of the hanging gardens in the Persian, Mesopotamian and Anatolian partly incarnate the biblical myth of the garden of Paradise, with eternal summer and the blossoming and fruitbearing vegetation of the whole world, in the primitive harmony of which the innocent human beings-the first people - could enjoy their life in nature. [8]. It was to them-his most complete creatures- that God gave five senses to make them appreciate the earthly splendor.

Since the "creation of the world" nothing has changed. Through the senses-sight, smell, taste, hearing and touch-the individual perceives and evaluates the environment around him as useful, beautiful or ugly. The followers of the Renaissance humanism philosophy developed the idea of Utopia further and, bordering on heresy, compared the individual of the time with the Creator, as due to his talent and creative ingenuity man had become like God. Whether we look at the garden of Villa Adriana decorated with sculptures and pergola at Tivoli near Rome or wander about in Villa Pratolino of the Demidov family near Florence, admiring the rock-like Apennine Colossus made by Giovanni da Bologna, countless caves, water cascades and ravaged by time mechanical, hydraulic and acoustic devices intended to amuse and impress any visitor of the park, we have to think about the universal man of the Renaissance who, daring to challenge God, in his unbridled imagination tended to resemble him. With the help of the scientific and technical

### The political semantics in the development of the historical environment

Every country has a full list of cultural monuments with fascinating examples of the historical cultural environment. For example, the closest to us-the park of the Drottningholm Palace in the vicinity of Stockholm, the park of the Peterhof Palace near St. Petersburg and let us compare their geometrically symmetric part with the park plan, the greenery, the diversity of the sculptural objects of the Versailles ensemble designed by Andre Le Notre and Jules Hardouin-Mansart or our own reconstructed Rundāle Palace according to the project motivesof Francesco Bartolomeo Rastrelli. The historic



Fig. 1. An example of a degraded cultural environment of Zlēkas Manor [Source: photo by O. Spārītis, 2012]



Fig. 2. The restored Mālpils Manor and the facilities of the place indicate of the possibility to adapt the components of the cultural historical environment. [Source: photo by O. Spārītis, 2011]

possibilities of their time, using them to supplement the already rich and unique nature, the artist acted as architect or engineer, creating a new, admirable cultural environment, as a monument to the customer's whims and his unique abilities. The modern architect or artist acts likewise, implementing the through product of his imagination in the environment.

environment created according to the taste of terms of one era is valuable in its uniqueness and conformity with the nowadays neglected Baroque culture clichés. The monarchs' selfishness of the absolutist era which was comparable to their financial capabilities, the ability to unleash their architects' imagination to such an extent that they tended to outshine what had been seen and created before them, choose the most unexpected and the most effective natural environment for the royal residence to be built for the ruler's prestige which in itself would be able to arise joy and surprise.



Fig.3. The reconstructed part of the Rundāle park. [Source: photo by I. Lancmanis, 2012].

The expressiveness and emotional value of the architectural and garden ensembles of royal palaces in many European countries often result directly from their geographic and landscape location. However, it should be borne in mind that exactly the royal residence status of those palaces and park ensembles imposes the semantic burden of political programs. On the outskirts of Paris, the magnificence of the ensemble of the Versailles Palace lies in its scope and opportunity in the falling slope at the foot of the ruler's palace to create possibly the largest ensemble of a symmetrical landscape in the world. In its creation A. Le Notre used the same building materials as the Creator: earth, water, air and vegetation which were successfully complemented by architecture, spectacular fountains and garden sculpture matching the perpetual flowering, summer and allegorical feelings of youth [6]. But the selfishness of Louis XIV could be flattered the most in this ensemble by "the navel of the world" or the center feeling which was reached by the environment makers with space, architecture and artistic means: the radial water canals, opportunity from afar on the horizon to see the silhouette of the Paris towers but for identification of the monarch proclaimed as the Sun King with the Universe monarch's feelings definitely served the sculpture of Apollo set up in the center of the water basin.

The Swedish Royal Palace of Drottningholm is much smaller in scale, but to arrive at the sunny oasis with Adrian de Vries's bronze sculptures, fountains and superior court theater you do not have to go on foot or walk along dusty roads. It is possible to approach it by water with a real fleet of ships moving through the fjords and a rock labyrinth. Such directing of the a dapted environment and subdued natural disasters fully complied with the desire of the Swedish monarchs to position themselves as the rulers of maritime super power who like Neptune reign waters. Russia claimed for this honor as well magnates who still in the time of Peter I in all the economic and cultural spheres focused on Netherland's models but after the victory in the Great Northern War fully appropriated the dominant superpower status of the northern seas that monarchic representation led to ambitions. Most visibly it was reflected in the ensemble of the Peterhof Palace and the park which in many ways can deliberately compete with countryside residences of the French and Prussian kings in Versailles and Potsdam. That is to say, in the location of the Peterhof Palace on the steep ancient sea coast of the Kronstadt Bay there has helped Nature itself so as several architects-Jean-Baptiste Le Blond, Niccolo Michetti. Mikhail Zemtsov and Johann Friedrich Braunshtein-at the foot of the Palace could create a spectacular fountain cascade and the ensemble's central axis in the direction of the sea where the view perspective is continued by an endless water mirror.

In the summer residence of the Dukes of Courland in Rundāle, the architect's genius of F.B. Rastrelli allowed Ernst Johann Biron to feel like the Land's ruler as he was in fact-the largest owner of the possession dependant on the political will of super powers. The palace and its park in the flat and vast Zemgale plain on its mood match the semantic image of "Paradise Regained". Being well acquainted with the growing territorial claims of the Russian empire, both the duke and the ingenious architect conceived and created Rundāle as an idyllic island of happiness in the sunniest part of the duchy's border and, possibly, also as a deliberate contrast to the Northern metropolis St. Petersburg with its rulers' stark political greed to which in 1795 Courland was forced to surrender. The Rundāle Palace, surrounded by green fields and forests, and only 12 hectares large flowering baroque garden fully compensated this oblivion feeling and the Paradise, and the artificially created Paradise in the endless Zemgale plain, allowed its inhabitants to come closer in Latvia to the playful lifestyle in the clearly implemented labyrinths of the French garden and imagine illusion of the meadows of Arcadia, the Tuscany landscape and the endless summer [11].

#### The twentieth century

In the geographical environment specific to each country there are scenic places with high concentration of aesthetic elements of nature. It is natural that overpopulation makes people use intact natural areas and add artificially created components to them. On the paths of cognition of the world, quite naturally we find them in places where our century's human talent, organizational capabilities and resources are transformed into an analogue of the Paradise of the industrial and postindustrial 20<sup>th</sup> century.In order to escape from the growing bustle of the city, the Swedish sculptor Carl Milless created the "paradise" of his life and work in the rocky terrace of the Melar fjord in his place of residence where he had built a house and a studio.. After the death of K. Milless, in 1955 the sculptor's students transformed it into a real museum with an open park-like sculpture garden.

In the Scandinavian countries, it is not the only example of a high quality new cultural environment. The Norwegian Government understood in a timely manner, the talent level of its nation's genius Gustav Vigeland and supported the idea of the sculptor to create a large-scale sculptural ensemble in the Frogner Park in Oslo. On the 850 meter long central road, on the squares of its sections as well as on the terraced hill from 1924 to 1943, there are placed around 800 bronze and granite sculptures of a symbolic content [7]. Their various aspects express the artist's philosophical reflections on the human life from birth to its physical end and reflect the diversity of individual, family and human emotions. In this park of significant size, human life passes by in time, space and spiritual dimensions as the visitor walks in the joy that is inevitably accompanied by the rich association layer encouraged by sculpture. The wealthy Danish merchant Knut W. Jensen in 1958 decided on a philanthropic project and purchased Villa Louisiana with just 1.2 hectares of a cultivated and greened parcel of land on the beautiful coast of the Oresund Strait. There he started to build the Museum of Contemporary Art, known as Louisiana Museum of Modern Art (Louisiana Museum für Moderne Kunst). With the huge financial investment that come both from

private resources, State and local funds, in fifty years a rich collection of modern art was created there, the main part of which is devoted to sculpture. The high coastal slopes and terraces surrounded by tall trees resemble deliberately created and carefully kept landscape park. The sides of the paths, the crossroads, slopes, glades and spots, display works of about 60 of the world's top sculptors of the  $20^{\text{th}}$ century, creating an international and unusual cultural environment [1]. By thinking pragmatically and purchasing at the right time works by Henry Moore, Pablo Picasso, Jean Dubuffet, Alberto Giacometti, Alexander Calder, Sigmar Polke, Robert Rauschenberg, Yves Klein, Andy Warhol and sculptures of many other famous sculptors, the Louisiana Museum of Modern Art has become an extremely successful financial contribution to the the emotional and intellectual enrichment of the nation's citizens.

One of the key words of the Spanish city of Barcelona's attractions is the name of the legendary architect Antonio Gaudi. The wealthy businessman and magnate Eusebi Guell purchased a large area in order to lay out an English-type public park and a garden town with 60 parcels of land for sale. For this purpose, he addressed an architect full of inexhaustible fantasy. As early as 1903, A. Gaudi started to work on the implementation of the project. A. Gaudi was a fervent Catholic who tried to comprehend the theological principles of religion down to their fundamental depth. In addition his active period coincided with the peak of the Art Nouveau boom and it is no surprise that his rich imagination generated details of stylized antique architecture, decorative animal and plant forms, fantastic ornaments, Christian symbols, all of which were embodied in the park architecture, decorative sculpture and countless environmental design objects. Using materials and technologies of the modern industrial age, Gaudi's project created the grand staircase, fences, gates, pergolas and viaducts, countless sculptures, pavilions and garden facility elements [3]. Construction of the objects in the park was completed in 1914.

By means of magnate Eusebi Guell's resources, in this park laid out in the early 20<sup>th</sup> century A. Gaudi has created a synthesis of the environment and art which most of the public still perceives superficially as witty fun and colorful attraction. A few others look for and find in Guell's park a landscape plan and relation of objects that express A. Gaudi's symbolism and religious mystic thoughts on the correlation of the human, God and the Universe. The technical and aesthetic novelty of the park laid out on the slope of the natural landscape of the hill and the extraordinary expressiveness and charisma of the environmental objects created by the unusual talent of the architect were the key criteria by which in 1984 UNESCO experts based their decision to include Guell's park in the world heritage list with the serial number 84 [12].

Among the many attractions offered by Tuscany, near the Capalbio and Garavicchio settlements tourists will find Giardino dei Tarocchithe Tarocchi garden. Between 1979 and 1996, its author, the architect and sculptor Niki de Saint Phalle (1930-2002), turned the abandoned stonequarry area in the Maremma plain into a buoyant kitsch architecture and art park. With the help of architect Mario Botta whose entrance gate serves not only as a guarantee of seriousness and quality, of the intentions of the project's creator, but also as a signboard for the welcoming commercial management of the Park, N. de Saint Phalle entirely changed the industrial location character of the abandoned stone-quarry. In the space with diverse relief de Saint Phalle placed 22 large-scale

#### If we want, we can! It comes together as it is

How big is our experience in the creation of sculpture gardens and parks? Since the 17<sup>th</sup> century, the taste canons of the Baltic Germans demanded that manor gardens, parks and later cemeteries be filled with mausoleums and mortuaries built in the forms of the baroque and classical style, and that trained gardeners install stone urns, obelisks, grieving death geniuses and angels, columns, broken oak trunk renderings and the embossed stelas in graveyards -in other words, replicas of what was created two thousand years ago in the classical period by the Greeks and Romans and the altar, grave monument forms which the Romans had developed after the adoption of Christianity. In this regard, the Alūksne and Jaungulbene parks are a positive exception, as in them the use of relief and its creation art are well suited to the placement of small architectural objects and sculptures in a dendrologically rich greenery environment. The lost romance of the parks of Remte Manor and Eleja Manor and the faded wealth of the parks in Preili and Varaklani, nowadays can only delight knowing people who in the labyrinths of overgrown paths, undergrowth and in the ruins of pavilions are able to "read" the character context hidden in the landscape. The largest but not yet studied, classical, baroque and 19th century neo-style sculpture gallery is waiting to be interpreted here in Riga-at the edge of Miera street created Great and Pokrov Cemetery, in the Tornakalns, Martins and Katlakalns Cemeteries on the left bank of the Daugava river. In these necropolises the park like greenery under its canopy hides monuments with a forgotten symbol, emblem and allegory language which eloquently tells about the interests of the deceased, memories of the family, changes of the kinship's genealogy and in a literary document the

sculptures, habitable architectural constructions and environmental design objects in such a way that the recreated garden world allow visitors to engage in naive fun and game, which at any age would make to feel years younger [10]. An experienced observer will instantly identify the artist's sources of inspiration: the ornamental mosaic of Antonio Gaudi, the effects of the surrealistic compositions of Salvatore Dali and Joan Miro, the infantile and joyful color world of Friedensreich Hundertwaser and many more creatively revised quotations from the international culture collections. Whatever the artistic value of the new park, rather than moralize, it is important to recognize the instructive example of the industrial landscape implemented being recovered and into a successful -business project with the help of the environmental greening, design and art objects with a cheerful content.

best that was created by thinkers, poets and relatives of the deceased.

Since the ramparts in the 60s of the 19<sup>th</sup> century were pulled down, the public outer space of Riga has obtained a vast greening area and a landscape park where in addition to the rich variety of the rare dendrological species, water attractions were created and sculpture works with a decorative, historical and political significance are to be found. The art of laying out these parks was masterfully managed by the legendary directors of the city's gardens and parks-Johann Hermann Cigra and Georg Kufaldt whose contribution to the art of lay-out of open parks, squares, gardens and their greening, is in any case invaluable. By following these traditions, a school of Latvian professional gardeners and landscape architects, has created in the 20s-30s and the second half of the 20<sup>th</sup> century the best parks of the time - Ziedondārzs, Grīziņkalns and Dzegužkalns reconstructions, the Brothers cemetery and Rainis cemetery ensembles.

In the overgrown greenery of the canal embankment of Riga and at the greened foothill of Bastejkalns, the 60s and 70s of the 20<sup>th</sup> century have left a number of decorative sculpture samples which are located in miniature glades, greenery, at the walking path sides and lawns. Trying to create something similar to the Elysian fields or the Louvre courtyard in Paris for the sculpture garden or public exposure in the open air, a superb quality granite and bronze collection of Latvian sculptors is located there. As in the reading-book, you can see here the poetic sculpture of Aleksandra Briede "My land" (1967), the intimate moods' work of Jānis Zariņš "The morning" (1958), the three figure composition of Pārsla Zaļkalne "Peace dance" (1970), the sculpture



Fig. 4. Arvīds Voitkāns. A memorial stone to the camera man Gvido Zvaigzne near Bastejkalns in Riga [Source: photo by O. Spārītis, 2007]



Fig. 5. The commemoration ensemble of the centenary of the Song Festival as a complex structure in the historic Keizardārzs in Riga with a pool, a memorial wall and a rough granite monument [Source: photo by P. Apinis, 2007]



Fig. 6. Just a few decades the cultural environment of the Old Town of Riga was decorated by the Sculpture Garden. In the picture- the Lithuanian sculptor Roberts Antinis (senior) at his work in 1976 [Source: photo from the archive of R.Čaupova]

of Mirdza Lukaža "In the bathhouse" (1958), the bronze sculpture "The steed" made by the children's favorite sculptor Gaida Grundberga (1970) and several others. As the documents of the tragic events of January 1991, among the lyrical nature of the artwork there are placed the red-brown granite memorial stones to the shot cameramen Andris Slapiņš, Gvido Zvaigzne, the militia officer Sergey Kononenko, the pupil Edijs Riekstiņš. Made by the sculptor Arvids Voitkans (1941-2009), these laconic forms remind of expressive victims' altars but due to the colorfulness of their natural material and simple form, they could still become part of the landscape of Bastejkalns and the canal embankment being not in conflict with the decorative sculpture placed there. The exceptional density of the sculptural works in this area is already approaching the limit of risk when the spatial concept of the whole ensemble becomes problematic and questionable. It raises the question: are sculpture concentrations of different handwritings accidental in this place, so to speak, due to the good will exaggerating the number of works of sculpture in a limited area and intentionally provoking the artistic impression of abundance? It can be responded with a counter question: will a lower density of anthropomorphic sculpture in this area of the park be more favorable to the meditative nature of reflection encourage philosophical reflection and on universal rhythms of nature and coherences? Another example. In honor of the centenary of the General Latvian Song Festival in 1973, the former Ķeizardārzs which in the inter-war period had become Viesturdārzs, was renamed to the Song Festival Park and in its center a pool, a memorial wall with composer bas-reliefs was placed, and as a monument was erected from a boulder weighing 36 tons.

The structure of the park since its founding in 1711 has been changed many times and the once baroque geometric Keizardārzs with the summer residence has in the course of time acquired the character of a landscape park. The creation of an ensemble in the center for commemoration of the centenary of the Song Festival in 1973 (architect Georgs Baumanis) introduced in its landscape a stylistically incompatible scale and element contrasts that received political acceptance. It corresponded to the voluntary decisions of the Soviet ideology to allow any destructive or conflicting activities in the historic environment if they displayed a sharply negative attitude to the past heritage-in this case, towards the garden and the park created in the period of Tsarist Russia with its semantic associations and with the political symbols of the monarchy or the independent Latvia.
#### It comes together and even well comes together

In the restricted area between the bastion built for the defense of the Riga Castle and the horse stables or, more specifically, in the northern side of the castle in the early 19<sup>th</sup> century, there was laid out a small-around 0.4 hectares large-flower garden with walkways, a fountain pool, separate plantings of trees and shrubs. Organizing the first sculpture exhibition in the open air, the architect Ivars Strautmanis in 1967 proposed to use for this purpose the closed garden of the castle [5]. The successful precedent created the basis for a stable and popular international sculpture exhibition, for organizing of exhibitions exactly in this area, urging to rename the garden in the Sculpture Garden. It is true that every year and even more often, the number of sculptural objects and location in the Sculpture Garden changed several times, thus we cannot talk about a long-term and lasting exposure. With the Riga Castle being changed to the residence of the State President in 1995, the Sculpture Garden ceased to exist as a publicly accessible sculpture exposition and became a closed, green inner garden, part of the architectural ensemble.

Since the nationwide celebration of the 150th birthday of Krišjānis Barons in 1985, we can also talk about the first large-scale and consciously designed sculpture park of the Gauja valley surrounded by the steep slopes of a narrow tongue of land in the area of the former fruit garden and walking park of Turaida Castle Manor. From the point of view of aesthetics of the landscape, in the extremely well chosen, a minutely undulated mountain plateau, surrounded by groups of pictorial trees, by the creative support of the administration of the Turaida Museum (now called in he funny name, not found in any dictionary of the Museum Reserve), author's-painter а single and sculptor's Indulis Ranka-sculpture park started its existence. Originally, in it, there were placed around 10 large-sized sculptural works, chambers-style in dimensions, made of stone which based on the artist's own feelings and opinion were freely placed in the landscape and arranged both by the route principle of rich philosophical associations and principles of the creation of a pictorial composition. In subsequent years, the number of sculptures has grown and in 2012 it reached 25 monumental granite sculpture works which, to some extent, can compete with Gustav Vigeland's sculpture park in Oslo. They encourage reflections on individual and universal themes, on the interaction between people and part of the family, modern societies, traditional culture and mythology paradigms. The sculptures convince through their poetically expressed language



Fig. 7. Indulis Ranka. "Velu boulder" in the sculpture garden of Folk -Song Hill /Dainu kalns/ in Turaida [Source: photo by V. Mašnovskis, 2011]



Fig. 8. In the landscape of the ancient valley of the Abava river there are organically included the objects of the exposition of Pedvāle Open-Air Art Museum – architecture, objects of the environmental design, installations. The installation created by the sculptor Kalvis Zālītis "The ferryman" in Pedvāle Open-Air Art Museum in 2002 [Source: photo by O. Feldbergs]

by way of generalized images, stone processing textures and completely irrational moments-such as the stone graininess, texture, color alteration and attempts to discover pictorial moments of the stone surface. It is possible, of course, to discuss if the area limited by the dimensions of the mountain plateau for a significant number of sculptures is too small or if the viewing distance of each sculpture is sufficient for an intimate dialogue of the visitor with the artwork, if the emotional strength of the sculpture is not masked by the energy of another sculpture work? It is possible that the architect's spatial vision and the choice different from the current viewpoints would lead to another, perhaps a looser location of the sculptures, but Dainu Hill is a typical single author's concept of artwork from conception to realization. It can be liked or subjectively not liked but just because it is the author's responsibility and success story, it bounces off any arrows of criticism.

In the end phase of the era saturated with the Soviet ideology-in the 80s of the last century,

а number of Latvian sculptors, including Ojārs Feldbergs, oriented their art in the direction of the Western cultural influence. Regaining of the State's independence, created, for personalities full of initiative, pre-conditions for the implementation of their initiative and O. Feldbergs used it in a full extent. With the support of the State Inspection for Heritage Protection and using the opportunities provided by international sources of financing already in 1992, he privatized around 150 hectares of land in the picturesque valley of the Abava river where he arranged a private Pedvale Open-Air Art Museum. This vast area is rich with historical manor buildings, an attractive relief, diverse vegetation, water mirror in the winding banks of the Abava river and other natural resources which by the help of the 19<sup>th</sup> century graphics and photos of the 20th century provides a great deal of attractiveness. It was successfully invested by sculptor O. Feldbergs in his art and business project. Through regular international symposia, the Latvian and Baltic sculptors and installation authors' open-air workshops, performances and other attractive contemporary art promotions, during the twenty years of the existence of the Pedvāle Open-Air Art Museum created by O. Feldbergs, several dozens of artworks have been collected. Among them there are sculptures created from eco-friendly materials, land art objects with a meditative character and sometimes works devoted to the historical relief of Kurzeme, the Balt mythology, space themes which use permanent components as building materials, such as the landscape of the ancient valley of the Abava river, the land relief, soil and trees and also the variable "materials" -the man, seasons, atmosphere, light, the sky, bird songs and other elements found in nature at the level of feelings. The sculptures and installations are freely located in the wide area of the museum and viewing of the significant collection for every guest is an attractive and meditative journey made both in space and time and a vivid emotional adventure as well. For the protection of historical and valuable cultural landscape and its adaptation to modern forms of use, for a skillful management of the process, for the reflection of essential for the culture spiritual searches and trends in artworks, Pedvale Open-Air Art Museum created by Ojārs Feldbergs has won with the UNESCO awardedthe Swedish born actress's of Greek origin and politician's Melina Mercouri (Melina Rezevska, 1920-1994) award. It is no wonder that such international experts as Jimena Blazkuez Abascal, class Valerie Varags and Raul Rispa who are familiar with sculpture parks across Europe and who have devoted to this theme a considerable research "Sculpture Parks in Europe. Art and Landscape Guide", have recognized exactly Pedvale Open-Air Art Museum created by the sculptor Ojārs Feldbergs as the only sculpture park to be taken seriously in the Baltic States [2].



Fig. 9. The scupltural group "Suitu wives" created by Līvija Rezevska 1980) in the town garden of Kuldīga [Source: photo by O. Spārītis, 2012]



Fig. 10. The restored Rūmene Manor and the perfectly attended park have become a benchmark for the attitude full of understanding in the preservation of the historical cultural environment [Source: photo by O. Spārītis, 2012]



Fig. 11. Ernests Vītiņš. The glass sculpture "Stilla" in the park of Rūmene Manor [Source: photo by E. Vītiņš, 2012]

In the park of Kuldiga Livinian Order Castle, no less rich with expressive environmental components which is known by the name of Kuldīga Cultural and Recreational Park or in abbreviated form as the Town Garden, since 1970 in a number of active landscape planning periods there are located twenty-two sculptures made by the sculptor Līvija Rezevska (1926-2004). 1951, In she graduated from the Sculpture masters' workshop led by the Latvian sculpture classic Teodors Zalkalns of the Latvian Academy of Art with the

sculpture "The violin player Lida Rubene" which has found a place full of poetic moods on the bank of the Venta river near the building of the Kuldiga Region Museum. Other sculptures, in the 1950s-1980s made of concrete, bronze, fire clay and granite, are successfully included in the Town Garden reconstructed in 2009-2011 that for the art of Līga Rezevska as a freeman of the town of Kuldīga has become a permanent sculpture garden. The Town Garden of Kuldīga is a landscape complex structure in the improvement and use of which the landscape architects and designers have had to count on a small area-typical variable ground relief, the foundations and fragments of ruins of the Livonian Knight Order Castle, a large variety of historical buildings, old trees and accents of the modern ornamental gardening, a complicated system of walkways, stairs and bridges adapted to the significant flow of the town's residents and tourists as well as the need for concentrated, safe area to locate the sculptor's invaluable and generous donation to the town. On the way to the nomination of the historic center of Kuldiga and the cultural landscape to be included in the list of the UNESCO world cultural heritage, the organizational and practical measures of the local government of by investing significant resources and Kuldīga imagination of architects in the improvement of the design environment of the town, in raising the aesthetic quality of the landscape and in exposing the cultural values of their own district can be welcomed only approvingly.

A completely new quality in the preservation and development of the cultural environment is shown by individual initiatives in restoring residential buildings of manors and historical parks in the ensembles of manors as well as engaging in the maintenance of the landscape in a wider area. Two of these positive examples, Kukši Manor and Rūmene Manor are located near Kandava in the area of Kurzeme and they are available for public viewing. The residential building of Kukši Manor houses a high class hotel, conference center and a popular restaurant. The owner of the complex-Daniels Jahn by his own ingenuity, efforts and resources maintains the bank of the mill pond, as a real element of economic activity of the Manor builds a rubble masonry fence to create a special micro-climate near the former servants' house, as a preventive measure maintains the old park trees and supplements the landscape with the pergola, pavilions, a boat dock, fountains and sculptures matching the garden scale Another example-the Karlsons family estate-Rūmene Manor with 60 acres of land which include a significant group of household buildings, a park planted in the 19th century, a small lake, cultivated meadows and fields in the relief landscape-since 2009 is excellently maintained, kept in an excellent technical and visual

quality and under the supervision of professional architects is constantly cared for.

By the care of the owner of the Manor-Dana Beldiman-Karlsons, the representative surroundings of the Manor are being brought to life- the edge of the lake, the bridges, the park's paths and glades, flower beds, the decorative bushes and dendrological plantations. The household buildings contain hotel rooms and are also meant for future use as a SPA complex, as well as souvenir or craft outlets for tourists. Respecting the owners' exquisite taste which focuses on the understanding of modern art and integration in the interiors of the Manor's residential house and the surrounding area, since summer of 2012 the park of Rumene has also become an exhibition place of contemporary sculpture. From August 27 to September 30, the young artist, graduate of the Latvian Academy of Arts-Ernests Vītiņš, MA, exhibited his glass sculptures created within the past year [9]. Both on the facade of the residential house and the household building in the yard, as well as deeper in the lawn and in the park, the sculptures allow visitors to admire the monumental and slightly stylized forms and feel the atmospheric phenomenon, light refraction and reflection in this amorphous and so unusual material of the sculptures.



Fig. 12. Ernests Vītiņš. The glass sculpture "Ascendit" in the household yard of Rūmene Manor [Source: photo by E. Vītiņš, 2012]

In designing and modeling the forms of the sculptures in the spatial 3D projection, the author got cut out stencils in the scale of 1:1, By means of a transparent binder paste the artist glued the individual sheets of glass cut based on the stencils, creating a vertical obelisk-like stylized organic forms. The inspiration source for these sculptures has been nature, looking at the changing nature of which, E. Vītiņš could reveal both the lively power of growth and artistic challenges, experimenting with glass edges and the texture effect of the edges. From the semi-transparent obelisks glued together from glass of different thickness and tonality, the stylized sprouts and seedlings very vividly involve in the changes of the black-and-white of the environment and in the playful mood of a game.

In reflecting the growth as a process, the apparent heaviness of the artist's sculptures and the greenish bluish materiality of the glass as the artistic means of expression convince of the author's ability to academically perfectly solve complex compositional tasks and defeat the apparent contrast of the weight and the body. To the contrary - the massive, sometimes heavy sculptures fascinate with the hidden paradox between the ease of the conception and the apparent heaviness of the material. In the sculptures "Pullulare", "Ascendit", "Stilla" and "Occultis", the transparency and the rich light reflections create an interaction with the surrounding environment-the lawn, trees, the sky and lighting. Thus, the park of Rumene Manor as a botanical and dendrological system obtains a modern supplementation with stylized sculptures nature images and the human of body organically incorporated into the park's landscape. This practice is both to be supported and encouraged in exactly the same way as a cross-sectoral and interdisciplinary dialogue between the types of art and genres predicting surprising results. The park's historic plantations should not be perceived as a dead dogma but as an open system where there are also possible modern intrusion by objects of a rather innovative nature of forms and materials.

# Conclusion

In summing up the international and the Latvian experience both in the adapting of a historic environment to the modern sculpture respected at maximum, exposition of the environmental design, applied art and a successful transformation of partially destroyed cultural landscape in a new content and emotional quality ensembles, may be admitted as **flexibility of the modern approach** and a skill to deal with a historically valuable and with a degraded cultural landscape. Everything becomes dependent on each individual case where the landscape architects, designers, sculptors and installation authors are able to creatively use the artistic style of the previous



Fig. 13. Ernests Vītiņš. The glass sculpture ""Pullulare" in the park of Rūmene Manor [Source: photo by E. Vītiņš, 2012]



Fig. 14. Ernests Vītiņš. The glass sculpture "Occultis" in the large glade of Rūmene Manor [Source: photo by E. Vītiņš, 2012]

centuries, the created values under the influence of taste and, without harming the traditional cultural landscape, to offer full-blooded, in terms of content and expression, innovative environmental art ensembles, sculpture gardens and parks. By comparing of the adaptation and transformation examples of the Latvian cultural landscape with the international context there a stable confidence about our high professional qualifications and professional skills is obtained, that sensitively matches historically important cultural objects with modern elements supplementing the environment and creating completely new and convincing artistic systems.

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**Ojārs Spārītis** (born in 1955) - Habilitated Doctor of Arts, the professor of the Latvian Academy of Arts studies the diverse cultural heritage of Latvia. A particular interest is focused on the issues of the sacral architecture and the art, formation of the cultural environment, public sculptural iconography and social contexts. He has published several monographs and articles on this subject.

Kopsavilkums. Raksta sākumdaļa veltīta vēsturiski veidojušās kultūrainavas tipa – parka un dārza – izmantojumam tēlniecības, mazo formu arhitektūras un vides dizaina objektu eksponēšanai. Lai ieskicētu tēmas kontekstu, autors ir pievērsies gan mītiska, gan reāli renesanses un baroka laikmetā pastāvējušu parku raksturojumam. Rakstā pieminēti arī 18. gadsimta Krievijas un Kurzemes hercogistes kultūrā augstāko kvalitāti sasniegušo ģeometriskā franču tipa dārza paraugi – Pēterhofas un Rundāles piļu ansambļos iekļautie parki. Taču galvenā vērība ir pievērsta starptautiskajam skulptūru parku rašanās fenomenam 20. gadsimta dārzu mākslā, kuras spilgtākie piemēri ir Karla Millesa villas dārzs Stokholmā, Gustava Vīgelāna veidotais Frognera parks Oslo, Luizianas Modernās mākslas muzeja skulptūru kolekcija Villa Louisiana parkā Dānijā netālu no Kopenhāgenas, Giela parks Barselonā un Taroki dārzs Toskānas reģionā Itālijā. Īsi raksturoto Eiropas zemju skulptūru parku veidošanas pieredze kopš 1960. gadiem ir ietekmējusi arī mūsu zemes kultūrainavu un savā reģionāli savdabīgajā formā atspoguļojas vides un tēlniecības sintēzes ansambļos Rīgā un Latvijā. No tradicionālā ainavu parkā ievietotu tēlniecības darbu eksponēšanas pieredzes Rīgas kanālmalas apstādījumos, Dziesmu svētku parkā un kopš 1995. gada slēgtajā Skulptūru dārzā 20. gadsimta beigās un 21. gadsimta sākumā ir attīstījusies moderna pieeja parka, kultivētas ainavas un tēlniecības darbu sintēzes uzdevumiem. Dainu kalns Turaidā, Pedvāles Brīvdabas mākslas muzejs un profesionāli koptais Rūmenes muižas parks ar tajos ievietotām skulptūrām liecina gan par radošu vēsturiskās vides kopšanas un labiekārtošanas veiksmi, gan par pilnīgi novatorisku pieeju jaunu selektīvi izraudzītas ainavas, parku un dārzu mākslas ansambļu veidošanas praksei mūsdienās.

# The memorial ensembles of Latvia

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Abstract. The study deals with the experience of Latvia in the creation of cemeteries and memorial ensembles. The novelty of the study is determined by the fact that in many places within the context of a dense town planning space, a need arises to expand the current burial zones or create new cemeteries. In the world practice, there are still being created memorials to victims of a variety of accidents and victims of conflicts. The results of the study can be used in the search for new project ideas, invitations to tenders for work evaluation and in the learning process for students.

Key words: destiny of the nation, memorial ensembles, cemeteries, the national tradition of garden architecture, memorial landscape space.

#### Introduction

Cemeteries and memorial ensembles are public landscaped areas which largely reflect the nation's ancient traditions and the national cultural and artistic peculiarities. Their location may be created both in a densely populated town planning zone and a scenic open space with distant views of the lines which emotionally enrich the landscape architect's idea how to perceive the form of the commemorative message. A successful location of memorial monumental ensembles and their context with the expressiveness of the landscape space commonly accentuated by the topography, water, tree plantations or meadows-create a psychological, strong emotional perception, thus strengthening the nation's dignity, love and memory, keeping in memory both gone in the eternity dead people and the destiny of the nation in the context of historical events.

*The study methods* relate to the examination of historic cemeteries and memorial sites specific to

#### The results of the study

#### Latvian oldest burial and cemetery creation traditions

By receding of the last icing in Europe, the ancient tribes of hunters and anglers followed the reindeer. In the territory of Latvia, in some parts there have remained burial sites of these ancient tribes which can be identified by historical commemorative signs readable as contours of boats marked by stones. By the climate becoming warmer, the ancient tribes of the farmers settled in this territory. For cemeteries, there were chosen pinecovered dry sand or gravel hills. The graves were marked by wooden plates on which there was carved information about the deceased. Proof, that in ancient times great attention was paid to the funeral rites, is the luxurious gowns and jewelry found in archaeological excavations, the white sand cover in grave pits under the ancient burials and traces of pollen which shows that flowers were given as gifts to the deceased in the afterlife [1].

the Latvian national identity, so evaluating the never-fading values implemented in the memorial ensembles, peculiarities of the functional and compositional spatial planning and the choice of the green landscape space or plants and the importance of the artistic sculptural works in the creation and raising of the emotional experience. In order to evaluate peculiarities of the memorial landscape space in Latvia in comparison with objects of other countries, traditions of cemeteries and memorial ensembles were investigated in the neighboring countries of Latvia, in Scandinavia and elsewhere in Europe. The aim of the study - to use the results of the study in training students of architecture and landscape architecture and local area planners, so inspiring and allowing the participants to evaluate the architectural landscape space in the next area planning tenders as well as allowing the local commissions to discuss the results of tenders.

Starting from the second millennium BC until the end of the 1<sup>st</sup> millennium BC, in the territory of Latvia the local tribes burnt their deceased. Across all the territory of Latvia, there have been found ash urn cemeteries for this period of history. Up to the present day, ash type burial sites in Latvia are called cremation graves.

After disappearing of the the traditions of cremation graves, until today, in the territory of Latvia there has survived a tradition to lay out a cemetery in overgrown with pine sand hills, placing the deceased in wooden coffins. In all the Latvian cemeteries, there are grave gates and graveyards. In stony areas around the cemetery, there is usually piled up a stone wall. In rural regions, the sun rays penetrate through the sparse pine wreaths which allows grave sites to be planted with typical of the Latvian farmsteads cold-resistant flowers and small flowering bushes. In the burial site design, there is still seen the traditional white sand on paths and patches on the ground. By maintaining the traditional remembrance form, in the Latvian

Cemetery traditions of German colonists in Latvia from the 13th to 20th centuries

In the 13<sup>th</sup> century, up the rivers of Latvia-the Gauja River, the Daugava River, the Lielupe River and the Venta River, the land with fire and sword was conquered by the German colonists, introducing the burial traditions specific to the German feudal era. They were created near the invaders' towns and estates and following the Germany's style, they were often designed around churches. If a church was not in the vicinity, there was built a mortuary where the deceased was placed before the burial. Both for German and Latvian cemeteries, there were built cemetery gate as a boundary between this world and the other world. The cemetery gate or a separate tower was equipped with a bell that with the funeral bell sounds accompanied the deceased to the other world. Such burial sites were planted with linden

# The Forest Cemetery /Meža kapi/ -an innovation of the 19<sup>th</sup> century in Europe

In the late 19<sup>th</sup> century, in Europe there emerged an idea of a new type of cemeteries which was designed in the forest with a scenic free compositional design. In the German city of Hamburg in 1877, the Olsdorf Cemetery was opened which was the first forest cemetery in Europe. The new burial zone trend in Europe spread very slowly. Therefore, even today in many parts of Europe-in the Netherlands, Belgium, Italy,



Fig. 1. G. Kuphaldt. The project of Mežaparks (1901) [9]

cemeteries in the summer wind you can enjoy the smell of farmhouse flowers, especially the strong smell of phlox and lilies.

alleys, elms with hanging branches and other deciduous and coniferous trees. In old cemeteries, you can also see individual family vaults with pits excavated in the ground and poured in concrete for foundations to place coffins. Such burials were dominating in the ancient German nobles' family cemeteries throughout Latvia, also in the Great Cemetery in Riga (1773-1967) where in the cemetery were buried the deceased of various nationalities-well-off, rich and with honorable positions. In some places in rural districts, even in small rural cemeteries, you can see that in the early 20<sup>th</sup> century, the grave sites of wealthy Latvian families were made by constructing concrete underground rooms for placing coffins [7].

Germany, etc., a trend has survived to place coffins in concrete pits- not only in the old cemeteries but also in the newly built ones.

The People's Park and the garden town "Mežaparks" were proposed by the the director of Riga city gardens Georg Kupfaldt (1853-1938) in 1901. Initially, the People's park was designed to be closer to the city, in the place that is currently occupied by cemeteries. This is evidenced by the



Fig. 2. G. Kuphaldt. The design of Mežaparks (1918) [9]



Meža kapu projekts. G. Kūfalts, 1908 Fig. 3. G. Kupfaldt. The design of the Forest Cemetery (1908) [9]

topographic plan in the Riga History and Navigation Museum with the name "The People's Park" of the current territories of the Forest Cemetery and Riga Warriors' Cemetery.

The original intention was changed and the Forest Cemetery was designed closer to the city with the project coordination in 1908. The construction works of the new, modern cemetery were commenced. The manager's house, the cadavers' house, the main alleys, the arc path, other paths and walkways were built. The large chapel was designed on the main axis of the entry path to the Forest Cemetery which ought to have a beautiful cemetery gate.

The director of Riga city gardens Georg Kuphaldt (1853-1938) designed the Forest Cemetery in Riga or the garden city "*Mežaparks*" in 1908. The Forest Cemetery was created as in the Great Cemetery in Riga there was no longer enough space for new burials and near the old burial zone a site for the new cemetery had to be found [6, 10].

In contrast to the relatively regular design of European cemeteries, in the Riga's picturesque dune relief overgrown with pines-a new cemetery was designed as a memorial park where sculptors' created tombstones for significant cultural, art and public people were designed for viewing from the walking paths in such a way as the cemetery would become a zone for exhibiting visually high-quality sculptural artworks if in the cemetery there is no longer be space for new burials. It is possible that the idea of G. Kuphaldt of the cemetery as a future "after life's garden of souls "arose in 1906, desiring the abandoned Catholic cemetery in Riga to convert into a city park or the Piece garden [3, 7].



Fig. 4. A monument to the film director Juris Podnieks in the Forest Cemetery [Source: photo by the author, 1993]

Unfortunately, World War I broke out and neither the chapel nor the gate has been built. At present, functions of the chapel, as the case may be, are taken over by the Crematorium, located just outside the cemetery fence across the street.

The hilly dune relief was only slightly changed in the path places. In areas with a more pronounced relief, there were designed larger and more expensive family grave sites, winding the walkways over the relief depressions and hillocks. In the flat areas were planned blocks with straight walkways and smaller, cheaper grave sites for low-income families. The first burials in this cemetery were made in 1913. This was the first Forest Cemetery in Eastern Europe.

The garden director Kupfaldt acted quickly in taking care of the Riga Garden Directorate and the areas under its management, often getting the desired harmonizations later. The Board of Governors of the city officially harmonized the Garden City designed by Kupfaldt only in 1908. (Also the author of the Warriors' Cemetery, the student of Kupfaldt and later the collaborator Andrejs Zeidaks in the same way, without waiting for official harmonizations, dealt with the construction works in the cemeteries, gardens and parks designed by them).

The project harmonization and construction works continued until 1913 when the new cemetery was officially opened. In the hilly former part of the dunes, in a free planning G. Kuphaldt designed very picturesque placement of grave sites. The access path network and the most expensive family grave sites with larger areas were located in the dune relief elevations, in such a way that even in the project stage there were created picturesque view lines with freely in the relief positioned monuments and picturesque plant groupings [9]. In the plain, the grave sectors were designed with straight lines and for disadvantaged citizens. Throughout the entire cemetery there were forbidden metal or any other material fencing around the grave sites, high concrete borders atop the graves and it was forbidden to bring wreaths and bouquets made from metal or other artificial material into the place of the grave for the purpose of decorating it as well [7].

# Riga Warrior's Cemetery Memorial Ensemble. Garden Architect Andrejs Zeidaks [8]

At the start of the First World War, the tsarist officials falsely accused the German architect G. Kuphaldt in espionage and he was evicted from Latvia [2]. G. Kuphaldt's talented assistant Andrejs Zeidaks (1874-1964) began working as the director of Riga city parks. He was born and raised on the banks of the picturesque Venta river in the ancient, beautiful town of Courland-Kuldīga. In 1891, after the compulsory school and some years of work in the factory's office, A. Zeidaks learned the landscape gardener's profession and worked as an apprentice gardener in laying out manor parks in Kurzeme designed by G. Kuphaldt. In 1895, G. Kuphaldt recruited the talented young man in his project bureau in the position of a draftsman. The young person's diligence and talents were so outstanding that the boss quickly allowed Andrejs Zeidaks to independently develop many

The drawings of the monuments and grave slabs had to be harmonized with the management of the cemetery as well. The rules of use of the new cemetery were in line with the ancient traditions of Latvian cemeteries. Most of the population accepted these rules without any objections. However, the cemetery managers carefully monitored compliance with these rules. For the needs of other faiths, nationalities and burial traditions, separate cemeteries were created where in the grave furnishings often could be seen disclosed habits characterizing other national identity.

manor park was the chief architect of Warsaw. In the Riga projects, keeping only the signing right to the projects.

During World War I, in one of the corners of the Forest Cemetery, in 1915, there were buried the Latvian riflemen who were killed in the first three fights for the freedom of Latvia. The war progressed and with the increase of the number of the killed in the battles, later a memorial was set up here called the Warrior's Cemetery. The site was selected, ideas and the design were proposed by the director of the city gardens, the garden architect Riga Andrejs Zeidaks. The author of the sculptural works is the distinguished Latvian sculptor Kārlis Zāle (1988-1942). For the architectural compositional shape of the burial ground, there was responsible the architect Pēteris Feders (1868-1936) who before World War I Warrior's Cemetery, there are buried



Fig. 5. A. Zeidaks, K. Zāle. The ensemble of the Warriors' Cemetery in Riga (1930) [9]



Fig. 6. A. Zeidaks, K.Zāle. The central sculpture "Mother Latvia" of the ensemble of the Warriors' Cemetery in Riga [Source: photo by the author, 2010]

around 2000 soldiers who were killed in the fights for the freedom and an independent Latvia.

A. Zeidaks created a powerful, three-part linear memorial graveyard landscape space stressed by symbolism included in the greenery and sculptural works which is visually similar to the mindset of the church and which is brightened by the bell sounds during the commemorative services. The Warrior's Cemetery gate is expressively monumental and solemn. Before the gate, the entrance is guarded by images of grieving cavalrymen. The central longitudinal axle of the composition is emphasized by the sculpture of Mother Latvia which is visible in the distant view line. When a visitor approaches a hill overgrown with an oak grove and the eternal fire, when walking along the monumental six-row linden avenue, the symbolic perception of the Mother's image is raised even more powerfully. From the viewpoint of the Memorial Hill, the view lines overlook a blossoming graveyard field in the valley, the natural shrine altar wall and Mother Latvia who has bowed her head in grief over the killed sons. In such a synthesis of architecture and forms of art there is readable the ethnic originality of the Latvian nation which is most felt in folk songs and in the monumental simplicity, spatial composition, concerted details, proportions, scale and love of flowers peculiar to the farmstead [8].

# Salaspils Memorial Ensemble [4]

The Memorial Ensemble to the victims-civilians of World War II, is located on the outskirts of Riga, in Salaspils, in the place of the extermination camp established by German Nazi. In the camp were killed over 50 000 people from all over Europe. The Ensemble was opened in 1967 and its authors are the architects Gunārs Asaris (1934), Ivars Strautmanis (1932), Oļegs Zakamennijs (1914-1968), Oļģerts Ostenbergs (1925) and the sculptors Ļevs Bukovskis (1910-1984), Oļģerts Skarainis (1923) and Jānis Zariņš (1913-2000).



Fig. 7. K.Zäle. The Warriors' Cemetery in Riga. "The wounded cavalryman 2" [Source: photo by the author, 2010]

The killed soldiers buried the Riga Warrior's Cemetery were buried in straight lines, as once in line, going to attack or fight in the trenches. Throughout the graveyard field in straight lanes, there are planted shrub hedges that separate one grave line from the other one. On their background, in linearly parallel, long beds are planted perennial flowers, typical to Latvian farmsteads and rural cemeteriesprimroses, irises, phloxes and goldenrods. On the world scale, in public greeneries, perennials as the main accent of space organization and composition appeared only in the late 20<sup>th</sup> century. Prior to that, a wider use of the perennials was met only in the manor house garden collections and in exhibits of botanical gardens. This was the first place where in public greeneries the perennials stressed the compositional idea of the landscape space.

Emotionally, the Warriors' Cemetery is the most expressive and richest with flowers memorial ensemble in the world. After World War II, the ensemble served as a prototype of the World War II memorial ensembles for the victims of the Treptov park in Berlin (1949) and Piskaryov cemetery in St. Petersburg and many monuments, built for the killed soldiers during World War I and World War II in Latvia-in Krustpils, Asare, Cēsis, Ludza, Gulbene, Priekule, Salaspils, Vietalva and elsewhere, so continuing the traditions of the memorial sculpture, architecture and garden art of the Riga Warrior's Cemetery.

The complex occupies an area of 25 ha in size and it is designed in a modern, harsh minimalist style where both the gate wall and sculptures are made from a rough molded concrete. Passing along a curving path through the pine forest, from a distance there is seen the symbolic boundary of the monumentally unwieldy life and death gate-a sloping concrete wall, which is 105 m long and 12 m high. One end of this wall slides into a trench of the earth, the other one-lifted and supported on a one-storey construction volume which is bordered with black



Fig. 8. Salaspils Memorial Ensemble. [Source: photo by the author, 2010]

granite slabs. The overall context of the color, form creation, materials and surface structure of the inclined to one side gate line prepares the visitor for a full of drama page of history in the nation's destiny [4].

Behind the walls of the entrance, in the huge open meadow landscape there are already visible from afar the monumental sculptures- Unbroken, Solidarity, Rot-front, Oath, Mother, each of them emotionally intensely symbolizes human feelings. The highest of the sculptures reaches 16 m in height. Bypassing the lawn along the ring road, they are shown at different angles. The linear simplicity of the concrete forms, roughness of the material and the scale grandeur of the sculptural work from the compositional point of view are well displayed in the monotonous plain meadow, so symbolizing indifference of the political power against human emotional feelings. The visual expression of the very dramatically heightened landscape space is not additionally accented by flower and hedge plantations that visually might impair perceiving the overall message of the sculpture works. On the way back from the memorial ensemble, we come to the podium of wreaths which is lined with black granite slabs. Here softly sounds the heart beat of a metronome. The route continues along a 4 m wide

corridor and stairs inside the concrete wall where in the upper part there is the opportunity to see the memorial lawn and sculpture panorama. The concrete gate incline closes with the museum's exposition.

In the memorial greenery, there are maintained the growing birches and pines. Wild roses (Rosa rugosa) are planted instead of the former barracks. The gateway motif, the simplified sculptural forms in the wide lawn and minimalism of other means of expression have grown from the simplicity of the traditional Latvian farmyard, the composition simplicity of the yard and minimalism of architectural decors and other means of expression of the Latvian folk art. As in the Riga Warrior's Cemetery, in this ensemble as well, there has not been applied the folk pattern decoration in order not to distract attention from the expressiveness of the forms and the constructive logic. This site is not a graveyard, this is a commemorative site of the way of torture, so here is not used the rich application of flowers and ornamental shrubs of the Riga Warrior's Cemetery. The wild roses in the place of barracks are in tune with the wild rose hedges in the linden alley of the entrance to the Warrior's Cemetery-as a reminder of a way of people through thorns [5].

# The garden of destiny- one of the latest Latvian memorial ensembles

The ensemble of *the garden of destiny* is currently under creation in Koknese, on an island of the Latvian destiny river-the Daugava. It is created as a commemorative site of the people lost for Latvia during the last century's tragic events. The initiator and supporter of the idea-the entrepreneur Vilis Vītols whose family had to leave their homeland at the end of World War II in order to escape the fate of owners and entrepreneurs in Latvia who in 1940, and after the war in 1949 were shot or taken away in exile in stock cars to Siberia where in cold and starvation died many tens of thousands of Latvian families. On June 07, 2005, there was founded the public organization *Koknese Foundation /Kokneses fonds/*, with the aim to create a commemorative site for the Latvians who had died and suffered in the 20<sup>th</sup> century. The number of victims exceeds 600 000 but the exact total number is not known. Alongside with the creation of the memorial site, Koknese Foundation wants to know the exact number of the the Latvians killed in repressions, deported, imprisoned in the death camps, killed in the war and driven into exile by force. By the support of UNESCO, there was announced an idea competition for the commemorative site. There were received 207

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Fig. 9. "Garden of Fate" on the Krievkalnu Island, in Koknese [Japanese garden architect Shunmyo Masuno, 2005]



Fig. 10. A view from "Garden of Fate" to the Koknese Church [Source: photo by the author, 2010]

project applications from 31 countries around the world. The tender regulation stressed that the commemorative site may not awaken gloomy and depressing feelings, it should serve to lucid intervals and comfort. The island in the middle of the river Daugava must symbolize the graveyards of the Afterlife which gather the souls of the departed. A competent international jury consisting of 15 people evaluated project proposals.

In the tender, as the author of the best idea was declared the famous Japanese landscape architect, the Zen Buddhism priest Shunmyo-Masuno. The project proposed to split the islet into seven meditation centers and you can pass through the garden only if you visit each of these stages. The jury of the tender said the following about this project, "The author of the project invites every person to be able to pass through the circles of thoughts and feelings. In each of these meditation centers, the visitor will get a certain mood. It is created by the lights, flowers, trees, sculptures, creating the islet's drama. At one point of meditation it is intended to place wooden panels arranged in a circle on which there will be written 600 000 names of the victims. It is conceived that meditation has to reach climax in the form of a semi-circle built amphitheatre; it would be like an

# Columbarium

Returning to the burial traditions in Latvia, the study also covers the latest or to be more appropriate-a long-forgotten tradition of cremation of the deceased. Nowadays, more and more popular is becoming ashing of the deceased. The crematorium was built in Riga in 1934 and restored in 1994. The new ash cemetery *Columbarium* was designed to be located in the pine forest next to the old crematorium and the Warrior's Cemetery.



Fig. 11. The columbarium in Riga, in Varoņu street. A sketch project [landscape architects G. Lināre, A. Lauzis, M. Jurkāne, 2008]

ancient temple built of stone rubbles. It will be a gathering place where the Latvians will be able to come together during important State occasions– March 25, June 14, May 04 as well. The other side of the amphitheatre is under water People watching the

amphitheatre is under water. People, watching the water, are sensing nature, time flow mysteries; it symbolizes life and death. The Japanese culture is very close to the Latvian culture, we have a similar sense of nature. The author of the idea is not only a landscape architect but also a priest and meditation is a daily ritual for him. He skillfully knows how to create a meditative environment. This is the most professional project and it is a great job in a very aesthetic and philosophical level. Deep philosophy merges with beautiful simplicity."

The project is being implemented with the funds donated by the people. There are designed roads, an apple orchard is planted, a panoramic terrace is built, a relief for the meditation amphitheatre is designed, from which it is possible to see the sunset or a symbolic passing away to the Afterlife, meeting with the deceased's soul on the day of the Declaration of independence on November 18 in Latvia. However, until the result, there is still a long way to go.

In 2007, there was announced a tender for the best project for this type of the cemetery. The winners of the tender were the authors Gundega Lināre, Aigars Lauzis and Marina Jurkāne. The composition is based on a symmetrical design of the central part with emphasis on the gate, the circle by-pass road and the central sculptural work that remains to be clarified in the tender. Unfortunately, due to nonharmonization matters of the officials and bureaucratic errors, before starting work, all the pine forest, which grew in the scheduled area, was felled. Therefore, now the work is interrupted and it is not clear what will happen next.



Fig. 12. The central part of the columbarium. Visualization (2008) [Source: from author private archive]

#### Conclusions

traditions The study summarizes and compositional techniques of establishment of the earlier and contemporary Latvian cemeteries and memorial ensembles. Special attention is given to the architecturally landscaped design principles of these sights, techniques of the emotional mood creation, the use of the small form architecture and ornamental plants to create the mood and other issues that need to be followed in order to create corresponding to the traditions, philosophically sound and aesthetically appealing complexes of commemorative cemeteries and ensembles. The review of the examples and evaluation of the study once again vividly demonstrates that in the Latvian town planning environment or in the open landscape space there are well readable the trends of the national identity and traditions that are reflected in the synthesis of the architectural and artistic form creation language-so highlighting the heritage of the nation's cultural and historical traditions. Just as honoring the Latvian folk song and devoting the Song Festival to it, a second parallel to the Latvians is paying a tribute to the person's life with the commemorative zone devoted to it with emotionally vivid remembrance events which are entangled in folk songs, dainas and beliefs.

Just as honoring the Latvian folk song and devoting Song festivals to it, a second parallel for the Latvians is a tribute to the person's life and a memory zone with emotionally vivid remembrance events in which there are entangled folk songs, dainas and beliefs.

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Kopsavilkums. Pētījums aplūko Latvijas pieredzi kapsētu un memoriālo ansamblu izveidē. Pētījuma aktualitāti nosaka tas, ka daudzviet blīvas pilsētbūvnieciskās telpas kontekstā veidojas nepieciešamība paplašināt esošās apbedījumu izveidot zonas vai arī jaunas kapsētas. Pasaules praksē joprojām tiek veidoti piemiņas memoriāli dažādu negadījumu un konfliktu upuriem. Pētījuma rezultātus ir izmantojami jaunu projektu ideju meklējumos, konkursu darbu izvērtējumos un studentu mācību procesā.

Pētījuma metodes skar Latvijas nacionālai identitātei raksturīgo vēsturisko kapsētu un piemiņas vietu izpēti, tā izvērtējot memoriālajos ansambļos realizētās nezūdošās vērtības, funkcionālo un kompozicionāli telpisko plānojumu īpatnības, kā arī zaļās ainavtelpas jeb augu izvēles un mākslinieciski tēlniecisko darbu nozīmi emocionālā pārdzīvojuma radīšanā un kāpināšanā. Lai izvērtētu Latvijas piemiņas ainavtelpu īpatnības, salīdzinot tās ar citu zemju līdzīgiem objektiem, tika izvērtētas kapsētu un memoriālo ansambļu tradīcijas Latvijas kaimiņvalstīs, Skandināvijā un citviet Eiropā. Pētījuma mērķis – pielietot pētījuma rezultātus arhitektūras un ainavu arhitektūras studentu un pašvaldību teritoriju plānotāju apmācībā, dodot ierosmi un arhitektoniski ainaviskās telpas izvērtējumu dalībniekiem nākamo šādu teritoriju plānojumu konkursos, kā arī pašvaldību komisijām konkursu rezultātu apspriešanā.

# Architectural Theory in Russia: Holding on the Past or Looking to the Future?

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Abstract. This paper is devoted to issues in the development of modern-day Russian architectural theory. It considers a number of significant theoretical concepts put forward by representatives of the Russian architectural school. The paper consists of three essays: «From Avant-Garde to Rearguard. Historical lessons from 20<sup>th</sup> century Russian architecture», «Image and Morphology. From the Perceiving Individual to the Interpreting Individual», «From Architecture of Static Volumes to Variable Multilayered Environments» - which present the author's view of the sources of and possible prospects for theory of architecture in Russia.

Keywords: architectural theory; image and morphology; architectural object; processuality and dynamism; environment.

#### Introduction

One of the most important problems that Russian architecture faces today is loss of self-identity and development benchmarks. This may be generally explained by the long time of cultural isolation during the Soviet period, as a result of which Russian architecture fell out of the international architectural process, both conceptually and technologically. Currently, Russian architecture is trying to find a way back into mainstream architecture, struggling against a dilemma: to become an imitator of international achievements or create something original.

However, the creative potential of Russian architecture as a successor to the avant-garde's spirit of transformation is stifled with ideological constraints that keep plaguing Russian architectural theory, rendering it conceptually backward and unable to accept the tendencies that shape international achievements. The theoretical stupor has brought about stagnation in architectural creativity, which is mainly oriented to foreign «re-makes» or historical *a la Russe* stylizations. A glance at official Russian architectural theory and research reveals a range of important problems:

- 1) substitution of architectural theoretical research by direct transfer and borrowing of ideas and concepts from the humanities, which has determined overall technological backwardness in architecture;
- 2) methodological backwardness and a negative attitude to methodological issues, with all the

analytical instruments of official Russian architectural theory dating back to the mid-19<sup>th</sup> century; it is obvious that the contemporary logical and analytical body of knowledge cannot coexist with the postulates formulated within the centuries-old methodological framework;

- indiscriminate borrowing of terms from foreign languages in incorrect translations leading to multiplication of notions;
- orientation to ideal issues, vague cultural values and global generalizations, and reduction to averaged assumptions and anonymous customer;
- 5) orientation to traditional historical and theoretical research themes as priorities in architectural science.
- 6) There is a crying need for a critique of Russian theory of architecture, which has been acutely felt for the last two decades. A way out of the crisis in Russian architectural theory might be the development of a subject-oriented theory of architectural activity pursuing:
- 7) methodological renovation;
- 8) orientation of theoretical thought to the needs of architectural practice;
- 9) focus on new forms of practice, with theory paving the way instead of fixing the present and the past.

What follows is the author's concept and view of the evolution of Russian architectural theory in postindustrial society.

# From Avant-Garde to Rearguard. Historical lessons from 20th-century Russian architecture

The evolution of contemporary architecture is closely associated with breakthroughs in form that took place in the 1920s. The emergence of new architectural concepts in Russia is usually linked to the names of N.Ladovsky, K.Melnikov, I.Leonidov, M.Ginzburg, I.Golosov, the brothers Vesnin; V.Tatlin, V.Kandinsky, and K.Malevich. And we owe it to S.Khan-Magomedov [2], well-known Russian architectural theoretician and historian, that the ideas of Russian avant guarde have become popular internationally. The new developments in Russian architectural theory were mainly concerned Proceedings of the Latvia University of Agriculture Landscape Architecture and Art, Volume 2, Number 2



Fig. 1. From Avant-Garde to Rearguard [Source: from author private archive]

with compositional ideas of form building in architecture, and for nearly half a century the theory of composition held firm positions as one of the invariable obligatory research subjects in Russian architectural science. The creative concepts of the above-named architects present a series of premier achievements that have deservedly occupied a significant place in the universal heritage (Fig. 1). However, we should not overlook the fact that a lot theoretical ideas relating to form from that period fell into oblivion for decades.

Russian architectural avant guarde experienced an extensive ideological influence of the formal method in art studies and, later, «left-wing» movements in fine arts. The formal school created Art Studies as a scholarly discipline equipped with formal analysis techniques to study visual elements that make up the artistic whole and the rules and principles of their combination. An important role in the development of these ideas belonged to A.Hildebrand and H. Wölfflin, who had a profound influence on Russian scholars as well. Thus, A.Gabrichevsky and V.Favorsky studied in Germany. V.Favorsky translated into Russian «Das Problem der Form in der bildenden Kunst» A. by von Hildebrand. The development of the formal method and its critical analysis lasted in Russia till the end of the 1920s.

The ideas of the formal school received different interpretations in the Russian context. Thus, A.Gabrichevsky connected volume/mass and space into an indivisible pair as the foundation of form generation and as an embodiment of static and dynamic principles. N.Ladovsky and his school (V. Krinsky, I. Lamtsov, M. Turkus) of thought considered spatial relations as a basis for form generation. They believed that everything else was subordinated to the resolution of spatial problems, and architectural composition techniques served to reveal the geometric and other characteristics of an internal and external architectural space. I.Golosov gave the primary place to architectural mass (a large spatial form), giving preference to volume in issues of form generation. K. Melnikov assigned primary importance to such concepts as internal tension and external ease of the architectural form. I.Leonidov considered

interaction between simple geometric forms. A.Vesnin emphasized the aesthetic capabilities of materials and constructions, Ya.Chernikov conducted research into graphic combinatorics of regular geometric shapes and lines and had a considerable influence on the development of propaedeutic courses of composition, which are still taught at a number of architectural schools.

Theoretical findings and innovative breakthroughs of Russian architectural avant-guarde in the 1920s had broad international repercussions, but it was banned in the 1930s among a whole variety of concepts and movements that were rejected by the Soviet state as contradicting Marxism.

Thus, the rise of the Russian school of composition in the 1920s connected with Russian architectural avantguarde was followed by its formalisation in the 1940s, when the main objective of architectural science was proclaimed to be the creation of Soviet theory of architectural composition. Subsequently, in the 1960s, avant guarde's formgeneration concepts formed the basis of the propaedeutic courses of composition at Russian architectural schools. Composition, a major concept of the early 20<sup>th</sup> century theory of architecture, lost its leadership in the theory but maintained its positions in architectural propaedeutics and education. In the later interpretations of architectural propaedeutics, the originality and creativity of the avant-guarde's compositional ideas were largely lost. In its massive compositional propedeutic turn to courses. architectural education overlooked one of the main principles - focus on design and composition challenges aiming to develop creative thinking and independent search for original spatial solutions.

Although Russian architectural theoretical thought is commonly associated with research into relationships between composition and form in architecture, there were other movements along with the main stream. The most significant of them was the phenomenological movement, which falls outside the framework of the established «academic» notions of composition so much traditional for Russian architectural theoretical thought.



Fig. 2. Elements of «plastic art experience» [Source: from author private archive]

Today the phenomenological tradition in architectural theory, both internationally and in Russia, is associated with the names of western scholars. However, as early as in the 1920s Alexander G. Gabrichesvky, a Russian art theoretician and historian, formulated a fundamental concept that anticipated the later western and philosophical contemporary and theoretical interpretations of architectural form generation along the phenomenological lines. Unfortunately, it was impossible to get acquainted with A.Gabrichevsky's ideas until very recently. He published most of his works on theory of art and architecture in the 1920s, which were not republished for a long time. Some of his works on art and philosophy of art were not published at all and existed in manuscripts. In the 1930-1960s, A.Gabrichevsky published mainly comments on theoretical works of architectural classics and on history of art. In the 2000s, a full collection of A. Gabrichevsky's work was published and caused a sensation in Russian art studies.

For A.Gabrichevsky, the fundamental issue was that of primary elements in «plastic art experience» [1]: space and mass, thing and life, nucleus and shell. Leaving aside the pair «spacemass», which has been given a lot of attention in architectural theory, both Russian and international (in its «solid-void» interpretation), we will try to identify issues that are more relevant to the origin of the phenomenological movement in Russian architectural studies in the 1920s (Fig. 2):

- 1) *the bodily character of spatial experience.* The body is a carrier of primary contents: it is the main criterion for the set of values within which things are arranged depending on proximity to the individual, and a symbol of the three vital instincts (self-preservation, assimilation, reproduction),
- 2) thing as the fixing of a useful human gesture. The thing manifests its use through the form, the form captures and immortalizes the human gesture and makes a sign of it. The matter acquires the character of a gesture as a result of resistance to the space that presses against the shell. There are two distinct types of gesture : plastic – a gesture creating a plastic value, and dynamic – a gesture enveloping the nucleus;
- 3) form as a trace of the living on the dead, a kind of shell/boundary between Self and non-Self,

a fence protecting the individual from the elements. The individual is surrounded with a system of expressive shells arranged around his body, from the clothing to the building and the city. Types of shell may be distinguished depending on the field and character of activity and on the degree of its impenetrability, both tactile and visual. The morphology of an architectural object is two-tiered: the nucleus and the shell, the nucleus/shell and the environment (as the force field of a building, its projection into space);

4) image as a hieroglyph. The image (Gestalt) is some creative potential realized directly in the art object's form. The form as such is an act; it is immanent to the process; it is secondary, variable, evanescent. The synthetic reality of the Gestalt is composed of relationships between the component being assimilated (Inhalt – the canon, ready-made forms and materialized elements) and the assimilating component (Gehalt - the creative principle) where the image is an interpenetration of the element of becoming (Werden) and the element of being (geworden).

During the period of its development, the Russian phenomenological school had no actively practicing architects/followers capable of linking this theory with advanced design practice, materials and constructions. The phenomenological concepts were untimely in the 1920s, when there were no today's shell forms, «nonlinear» materialisations of gesture or vanishing, changeable, fully transparent multilayered barriers.

Gabrichevsky's complex theoretical concept had like minds such as V.Kandinsky, P.Florensky, V.Favorsky, and followers such as D.Arkin, V.Markuzon, etc. But the political and ideological situation in Russia in the 1920s was not conducive to its development, and Gabrichevsky himself had predilection for history of architecture and architecture neoclassical rather than latest architectural forms. As a result, the Russian phenomenological school did not happen, but its ideas anticipated a number of tendencies that were later developed by western theorists of architecture such as J.Itten, C. Norberg-Schultz [5], Ch. Day and that came to Russia much later, including through the interpretations of foreign authors such as M.Heidegger, M.Merleau-Ponty [4], P.Riccoeur, etc.

In spite of all the dissimilarity between the essentially positivist «academic» theory of composition and the phenomenological interpretation of form by Gabrichesvky they had a common root, which was the formal method. They influenced each other, particularly at the initial stages, but these two approaches are different philosophically:

- in the theory of composition, the basis is the position of the individual who stands opposed to the architectural object, and the character of his perception (mainly visual) determines approaches and suggests techniques and rules for creating new objects;
- 2) in the phenomenological concept, the basis is the position of the individual experiencing his bodily presence in the world of things where the vitality of his gesture leaves a trace on the dead matter and generates an object (or a system of objects) as a shell/boundary between Self and non-Self.

The phenomenological approach may be regarded as conceptually primary, as all postulates

# Image and Morphology. From the Perceiving Individual to the Interpreting Individual

In the context of consumer society, architectural activity should allow for a variety of values maintained by both the consumer and the architect, the engineer, the developer, the contractor, etc. Thus, it is important to understand the new role and place of the subject in the modern world and manage interactions between the architect and other participants of the design process.

In Russia, the evolution to this understanding has been connected with the development of ideas of form under the influence of various philosophical and psychological concepts relating to the «perceiving individual», the main ones being behaviourism, Gestalt psychology, the functional and formal schools, the activity approach, the cognitive approach, and the phenomenological approach, with their different interpretations of the concept of «image». These interpretations range from full denial as in behaviourism and holistic perception as in Gestalt psychology to those associated with the activity of the subject in the material world such as reflection and conceptualisation (the activity image semiotic approach); as а tool (cognitive approach); image as a form of attitude to the world and interaction with Dasein including a number of ontologic layers and sensory attributes (the phenomenological position reinstating the objective status of image in its rights). Generally, the concepts of image and form have been progressing (Fig. 3):

 from concepts of visual perception by some abstract individual to those of the 'Interpreting Individual' who humanizes architectural space with his presence; of the compositional school may be derived from it, but not vice versa. It looks to the origins – the bodily character of spatial experience and, accordingly, the «barrier-ness» of form; whereas the school of composition is concerned with regulation of formbuilding creative activity. Gabrichevsky's phenomenological concept sought to unravel human values and meanings in the vital form-building gesture and its fixing as a «trace» in material form.

The Russian phenomenological ideas in theory of architecture formulated by Gabrichevsky are in line with the contemporary humanistic views of the role and place of the subject in the world. It is to be hoped that they will not remain just history and find modern-day their way into architecture. Today's reflective, transparent, ghostly, nonlinear architectural forms may benefit a lot from formgeneration concepts such as nucleus-shell, shell-boundary, volume, and gesture spatial and trace, which seem to be more in line with the material and philosophical context of contemporary architecture.

- from the idea of socio-cultural determination of perception to the issue of «meaning», with a corresponding shift in emphasis from form building to meaning expression by means of architectural form;
- 3) from emphasis on the role of the languaged subject/interpreter who assigns meanings to material object to the priority of the subject/customer in architecture and inter-subject interactions in the design process.

In this context, there are two modern-day Russian architectural concepts, by Ilya G. Lezhava and Alexander G. Rappaport, that are worth considering. Both concepts are not alien to the phenomenological ideas but they interpret differently the role and place of theoretical research in architecture.

Ilya Lezhava - a futurist of the 1960s and ideologist of the Soviet «paper architecture» movement of the 1980s. According to him, to deconstruct the traditional theoretical views we need to [3]:

- overcome the functional determination of architecture and place emphasis on the essential poly-functionality of architectural form;
- emphasize the subjectivity of interpretations in semiotic concepts of architecture on the one hand and demonstrate the limitation, descriptive character and lack of practical output from such concepts on the other hand;

 demonstrate the limitations of traditional objectoriented architecture and art criticism terminology and its failure to meet contemporary requirements;

4) demonstrate the ineffectiveness of traditional architectural-psychological research into form



Fig. 4. Structural components of the image (a) – orientation; b) – recognition; c) – interpretation; d) - intuition) [Source: from author private archive]

and promote transition to the «barrier» concept of architectural form and search for the «foundations / principles of architectural geometry» that can help understand the essential narrow-mindedness of architectural theory as a theory of architectural form.

Alexander Rappaport's concept is less revolutionary, following the humanitarian interpretation of architectural theory. At its forefront is the problem of architectural myth as a carrier of form and meaning. Myth in architecture manifests itself in the problematics of the local and the global. Myth as an idea becomes the mainstay of architecture that lost faith in the firmness of its rationales. Spatial concepts of architecture are interpreted as carriers of rational ideas as opposed to the bodily tectonic aspect of architecture, which is revealed through the Dionysian, spontaneous world outlook. The rationalistic spatial architectural concept enters into conflict with the utter processuality of the current, rapidly changing world. The destiny of architecture in humanitarian culture unfolds itself through the construction of contemporary mythology of architecture [6].

The reference points of architectural theory shift from the object to the subject and, thus, from the Perceiving Individual to the Interpreting Individual. Therefore, the author of this paper sees the link between the image as carrier of meanings and the morphology of architectural object as the most significant direction of development for contemporary architectural theory.

Inter-subject relationships in architectural design may be described with the help of a concept of «semiotic mechanisms in architecture», i.e. communication mechanisms that determine the image of an architectural object and regulate the behaviour of the individual.

The semiotic mechanisms of image formation certain conditions and specificity. feature The conditions are the duality of the textual and activity functions, subjectivity of perception, relevance and momentariness of experiences. The specificity of the semiotic mechanisms in architecture consists in dialogue between the individual and the architectural object whereby architectural object plays a twofold the role - it defines the scene of action and acts as a communication tool that:

- 1) produces meanings in the process of interpretation;
- is a condition for entering into social relationships with others, where the meaning is a result of social interaction;
- prepares and defines the place of a possible event, generating essentially new unpredictable meanings.

Image is the basic concept for describing intersubject interactions in architecture and introducing а value component into design activity, which is essential for meeting various human needs in architecture. The image of an architectural object as the basis of the communication process may be structured based on a certain model. One such model is suggested below. The specific feature of this model is the processuality and layered structure of the image and the operation of semiotic mechanisms that control the formation of layers. These structural layers/components of the image represent various value manifestations (Fig. 4):

 the orientation component forms a psychological action space that determines the character of movement and emotional states of mind; it is dominated by the bodily sensory component; the semiotic mechanism of the orientation component establishes relationship between the



Fig. 5. The bodily spatial aspect is described by the system «barrier - stimulus» [Source: from author private archive]

material characteristics of architectural object and perception stereotypes;

- 2) the recognition component restricts the field of meanings by functional attribute and is characterized by the priority of the cognitive component; the semiotic mechanism of the recognition image establishes relationship between the model idea of architectural object and culturally determined speech equivalent; generates secondary meanings attached to the designation and performs the function of communication of information about the use of the object;
- 3) the interpretation component generates a range of socially predetermined meanings and subjective connotations; it is characterized by the priority of the cognitive component; the semiotic mechanism of the interpretation component performs the functions of translation of pictorial iconic representations, sensations and states of mind in the architectural environment into a natural language and generation of meanings during translation, and the function of semantic memory;
- 4) the intuition component represents the Dasein aspect of an architectural space, being determined by the priority of the bodily, sensory component; the semiotic mechanism of the intuition component accounts for self-reflection and existential experiencing of oneself in the world created by architectural design means.

The formation of the orientation and intuition components is predetermined by human corporeity and congenital stereotypes relating to the creation and perception of form, whereas the recognition and interpretation components are based on the natural language and socially predetermined mental schemas.

The need to allow for the changing needs of the subjects/participants of the architectural design process leads to a change in the basic reference points of the architectural object's consumer as a representative of postindustrial society. Given this, the primary role shifts to the specificity of interaction between the images that exist in the minds of various subjects/participants of the design process with regard to the future architectural object.

These images reflect, to a varying degree of divergence, the set of ideas about the functions, structure, comfort, identity and socio-cultural importance of the architectural object. It then becomes increasingly important to secure the preferred images in the morphological structure of the object.

It is obvious that the sensorily perceived morphological basis of architectural object cannot be reduced to compositional, typological or other characteristics, which is the traditional way of describing morphology in architectural studies. We need to identify fundamental components that underlie the «encounter» between the individual and the material-spatial world and mark its location. Such basic component is given by «barrier», which limits movement and defines space for possible action. It is supplemented with a «stimulus», coordinating and stimulating possible movements of the individual. We deal here with an essentially dual approach to describing the morphology of an architectural object: bodily spatial description position of introducing the the subject, and geometric description which does not include the position of the subject.

The bodily spatial aspect is described by the system «barrier – stimulus». It implies the bodily presence of the individual in the spatial object. Bodily spatial description rests on biologically inherited stereotypes determined by human corporeity, a special formation that determines the horizon of human experience before any thinking and, thus, anonymity, synthetic spatial experience without rational mediation or subordination to any function (Fig. 5).

The geometry is described by means of wellgeometric systems: shapes, known their superposition, modification. transformation. association with certain planes and surfaces and location, types of space and ways of their arrangement including linearity (unidirectionality) and nonlinearity (poly-variant type). This form of description presents an object as something «ideal» and abstract, existing independently from the subject. The fundamental principles of geometric description are represented by geometric archetypes. Archetype is a mental 'residue" of numerous ancestors' experiences, being quintessentially a form of inheriting the social, i.e. apriori comprehension and perception schemas that make the thinking possible. The fundamental principles, including the geometric ones, are present in the majority of historical, religious and philosophical works interpreting the issue of origin of the universe. The fundamental principles are manifestations of ideal Being in the form of living Being, which then becomes consciousness. The further existence of the fundamental principles appears as ideal realities, or geometric archetypes in our case, replicated in human creativity as a reflection of natural and cosmic laws. The emergence of ideal realities and the development of the process of alienation of the «ideal» from the «real» happen due to an operating system, natural language, which is a basis

# From Architecture of Static Volumes to Variable Multilayered Environments

The classical concepts of architectural objects as architecture of buildings are becoming the past. Nevertheless, the contemporary architectural process in Russia is still demonstrating orientation to the mass consumer playing postmodernist games of citation and rephrasing or even direct reproduction of historical forms. Even the projects of renowned architects such as N.Foster, D.Perro, J.Nouvel, D.Liebeskind. etc. cannot overcome the conservatism of the customer, potential consumer or authorities. It is therefore that for more than several decades the original creative line of architectural development in Russia has been moving from the building to the design project and then on to a theoretical concept. Experimental projects and theoretical concepts open up broader opportunities for realizing ideas in the rather conservative and bureaucratic state.

The distinctive feature of the latest architecture is *processuality and dynamism in the unfolding of the architectural object,* realized in concepts of neutral and processual architecture of barriers, shells, and veils. Architectural form generation is revealed through the poetics of the barrier's contours as the art of creating "boundary-ness" by means of which the individual enters into relationships with the Other: environment, culture, society.

An architectural object may be considered as a material entity *experienced by the individual from the position of his subjectivity*, the material entity being a unity of various semiotic realities, a communication tool in social activity and environmental processes. This structural approach exposes the essence *of an architectural object* as the result and condition of human activity and cognition – both as a place of being / action / possible event based on the corporeal experiencing of a defined / delineated space of action and as an

for the development of other artificial language-like formations.

The morphological structure of an architectural object understood through the system of barriers and stimuli is characterized by the introduction of the individual with his corporeity into space, where the body (not the geometry) determines a series of possible interactions with the object. This approach to constructing the morphological structure proceeds from the priority of the needs of various subjects and provides broader opportunities for architectural form generation without being limited to geometric shapes and their combinations, orthogonal systems of spatial combinatorics and systems of individual spaces and their relationships.

attitude to the world / environment / culture based on the plastic characteristics of the barrier plane / surface of the enclosure.

The dialogic nature of architectural object manifests itself in two aspects: as a space of action or being, and as an identity or 'face' of the object in the environment / culture. This is determined by the duality of sensory perception of the architectural object as a corporeal/tactile field with fixed boundaries of action, relationships between spaces and some degree of isolation, and as a visual *field* underlying the visual perception of these boundaries. The visual field of the object determines its perception as a system of barriers described by a varying degree of visual and light permeability, visual focusing or defocusing of the object's contours as a space of action, and structurality. The nature of the barrier determines dynamics in the relationship 'individual-object-environment' that unfolds through:

- 1) the fixing / demolition (and re-creation) of the spatial level of orientation;
- identification of the degree of inclusion or isolation of the object's internal space in the spatial/temporal context of the environment (simultaneity in the experiencing of the external and the internal);
- 3) determination of plastic attitude towards the environment as a basis underlying the values and environmental qualities of the object, through:
- a) traditional plastic techniques of treatment of the impenetrable enveloping plane;
- b) disorganization, duplication, distortion in the mirror reflection of the enclosure surface;
- c) disappearance and illusoriness of the visually transparent barrier;
- d) stage-by-stage distancing of the multilevel barrier;



Fig. 6. Determination of plastic attitude towards the environment [Source: from author private archive]



Fig. 7. From architecture of static volumes to enclosed systems and variable multilayered environments [Source: from author private archive]

- e) unstable geometry of the contour dissolving the form of the object in the environment and setting itself against the traditional orthogonal;
- f) mobility, variability, transformability of the barrier.

The relationship between the architectural object and the culture and history shows itself also through the characteristics of the enclosure surface:

- 1) traditionality, stability of routine forms of visually impenetrable barriers;
- the eventful character of unstable visual fields creating new orientation sets of objects with transparent, reflecting and contour-variable enclosures;
- 3) the paradoxicality of geometrical shifts in enclosure planes.

This way of morphological description suggests an idea of a developing typological system. Its principal difference from the traditional understanding of typology (in architecture) is its non-reducibility to classification as an extensive way of organizing scientific knowledge.

The basis of the proposed architectural typological method is constructing as an intensive and heuristic way of organizing scientific knowledge, i.e. creation of a synthetic cognitive construct, a system of genetic and typical relationships of both existing and potential architectural objects. These relationships underlie the values (consumer characteristics) and cultural significance of architectural objects. The architectural typological method is based on a concept of a developing typological system. According to this concept, the typological system is enabled to derive supplementary interrelated concepts from a common model to ensure the elaboration of specific aspects in the formation of an

architectural object. It also determines heuristic orientation of the typological system to a search for and construction of structurally new architectural objects and generation of new derivative types.

The greatest potential for the generation of derivatives is to be found in the development of enclosed systems and emergence of various derivatives of the basic types. The variability of an architectural object's structure and its adaptation to various rapidly changing human needs is ensured by the use of multiply nested systems and different degrees of penetrability of the barriers (both material and optical) set on chaotic (arbitrary) spatial grids. A nested system implies the presence of some multilevel spaces permeating the building and making it possible to achieve certain variability in vertical circulation. In а nested system, we parametrically set the character and quantity of nestings, the capacity and orientation of ultimate nested elements, and the construction of the barrier. It also enables transition from orthogonal planning grids to chaotic ones, implying the introduction of another variable - the degree of surface curvature and maximum allowable range of its variation (from the standpoint of convenience of use and maintenance). The character of the barrier may vary over a broad range (Fig. 7):

- from a multilayered barrier to a nested system of spatial volumes (both principal and buffer ones) and relationships between them;
- 2) in the degree of penetrability and optical characteristics of the material barrier;
- 3) in the visual permeability and stability / instability of the optical barrier;
- 4) the degree of inclusion of natural components as barriers (plants, water, etc.).



Fig. 8. Design experience. Student's master degree work: «Shell in the architecture of the futures» with project of multifunctional complex by O. Orzunova [supervisors – prof. Y. Yankovskaya, arch. V. Gromada]

The processuality of an architectural object emphasizes both its adaptability and its social essence organizing a series of interactions between subjects and providing conditions for meeting their needs (including potential ones). The main pre-requisite to the creative process in postindustrial society is essential orientation to the establishment of certain relationships between the psychological continuity and cohesion of the architect's personality rather than to the rigid personal identity of author/Demiurge with an ever-recognizable master's idiom. The emphasis on the priority of the perceiving subject/consumer does not at all deny the presence of author's personality and does not impair the creative process; rather, it reveals new, yet unknown facets through a mechanism of identification of the architect's personality with the Other (the consumer), which allows one to come to know the Other and oneself through the Other.

#### **Conclusion. Stagnation or Development?**

What is the way forward for Russian architecture? Are theoretical architectural concepts capable of outlining a development strategy for the future, or do they just fix the store of experience and generalize historical experiments? The traditional theory of architecture in Russia looks to the past. Dynamic concepts of architectural activity, progressive and open to development, may point to

In modern-day Russia, traditional architectural activities are being reviewed, largely under the influence of leading western architects who have matured in market-driven consumer society. towards more varied interaction between architect and society. Architectural design is gradually drifting away from a rigid administrative system, with a growing understanding of its polylogue character where each and every actor should have an opportunity to satisfy their needs without prejudicing the needs of another. An important role in this belongs to the basic neutrality of architectural object, its openness to change, multiple use and polysemy of interpretations (Fig. 8). The conceptuality and spatial-temporal variability of a modern-day building (and environment) is a basis for architectural design in the post-industrial context.

a way forward to the future, with distinctively original Russian architecture. Development along this line is oriented to optimization, provision of methodological support to architectural practice in modern-day consumer culture and emergence of professional marketing thinking and architectural management which are adequate to the new economic context in Russian architecture.

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# From interspace to interface: metaphoric nature of spaces in transition

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Summary

... more and more of our work, if we want to work towards sustaining cities, will be bound up with organizing hope, negotiating fears and mediating memories.

L. Sandercock [16]

Sandercock's conviction leads urban designers, artists and planners into a position which invites them to engage beyond the physical and to deal with - or rather start from – mental and social dimensions of space and its uses. This paper considers a phenomenon of heterotopia in contemporary public spaces and sketches a methodology which enables designers to take into consideration human dimensions of hopes, fears, desires and memories.

Transforming space throughout history, people assign new meanings to the artifacts by metaphorical transfer. Spaces in transition with undefined physical articulation and spontaneous use often enabled heterotopias, which influence feelings and change minds, attitudes and, finally, urban practices. These are communicated by spatially embodied images and imagined spaces. The paper introduces an idea of the research, inspired by findings of semiotics (F. de Saussure, R. Barthes, J. Lotman, B. Uspensky, U. Eco), symbolic anthropology (C. Geertz) and cognitive linguistics (G. Lakoff). Such research has to investigate, on the basis of selected case studies, the correlation between the metaphorical nature of an "embodied mind" [12] and spatially incarnated metaphor, to apply semiotic (semantic + syntactic + pragmatic) approach to urban planning, to elaborate appropriate research methodology and graphical tools ("semiotic mapping").

Using metaphor as a key for reconstructing human logic of built space, "city makers" together with politicians and artists as well as a diverse participation of the ordinary people, would be able to design identity (social and individual), feelings of Home, belonging and solidarity.

Key words: public space, spatial metaphor, interspace, spatial interface, heterotopia.

The world in transition

The 20th century, coming with wars, social, political and sexual revolutions, industrialization and materialization of the former science fiction ideas in development of technologies, "detonated" the meaning of the vernacular both in minds of the people and in physical spaces. Time which, until now, used "to go", grew wings and started "to fly". Ideologies, fashions, tastes and world outlooks are changing with a speed that mankind had not experienced before. Compared with mental landscape, denser and slower modifiable physical space reacts by creating spatial "pathologies".

Slowly the representatives that formerly symbolized families, groups and orders disappear from the stage they dominated during the epoch of the name. We witness the advent of the number. It comes along with democracy, the large city, administrations, and cybernetics. It is a flexible and contentious mass, woven tightly like a fabric with neither rips nor darned patches; a multitude of quantified heroes who lose names and faces as they become the ciphered river of the streets, a mobile language of computations and rationalities that belong to no one.

M. De Certeau [2]

Creating new and natural death of the old urban forms that earlier was the matter of several generations, now is taking place within the life of one. Fields became factories and, abandoned, turn into brownfields. Villages grew into mega-cities, overgrown by slums. Simultaneous shift in spatial functions, forms and meanings actualize the notion of anomalous spaces – zones". The image of Strugackianian Stalker [25] comes up when unpredictability and hidden forces of gated communities are spoken of: numerous slums become home to millions, but abandoned industrial areas



Fig.1 Cemetery-park is a metaphor for informally used The Great Cemetery in Riga: currently the former cemetery is most popular slow recreation place for the surrounding neighborhoods [Source: from authors private archive]

scare with polluted soils and energy. The surreal nature of transitive spaces compels the researcher to look for different from measurable –more irrational - "equipment". The tools appropriate to deal with the spatial irrationality can be provided by art which operate with poetical image and its "magic wand" metaphor. The next remark takes us closer to the bridge over the gap between poesy and city planning.

The elaborated anomaly, the effect of "without sense", is the condition of possibilities for creating a new significance. "One sees that the metaphor takes the precise position where sense develops into non-sense..." [22]

At once it is an index for the presence of a metaphor. It is the unusual, the misplaced (in-appropriate) [23]

Shift or misplacement, occurring within spatial and time dimensions, influences the core human feeling –privacy. Syncretization of modern life and "ritualization" of public space, namely, shrinking of the pure "private" and pure "public" as well as the increasing number of all imaginable hybrids of publicity and privacy (aspects of ownership and use) overlaps with the semantic diversity of the notions "public/private" in the contemporary human perception. The X - spatial axis of 'heterotopias" shopping malls, petrol stations, resting places along *autobahns*, brownfields, informally used urban green areas (Fig. 1) crosses with the Z axis of the perceptive (both sensual and rational) aspect of privacy/publicity; from publicity of "my threshold" through expressions "my street", "my town" – to privacy of "my country", which is bordering

with the notions of "individuality" and "national identity". Both the spatial, somatic X and the extrasomatic Z are organized in and by the time dimension (Z), (Fig. 2) which in a unique way shows itself in an ambiguous materiality of transitive spaces and creates an energy that is tangibly and perceptibly different from the "defined", "normal" spaces.



Fig. 2. [Source: construction by the authors]

#### Life between buildings: interface



... Now after a while the parents decided to place these two boxes across the waterpipe, so that they reached from one window to the other and looked like two banks of flowers ...

... The little girl had learnt a hymn, in which roses were spoken of, and then she thought of their own roses, and she sang the hymn to the little boy, and he sang too ...

#### H. C. Andersen [26]

The notion of interspace has multiple uses. Irrespective of whether it is being used as a metaphor for generalized software and domainindependent knowledge manipulation [27] or as a name of the company producing wireless PowerPoint control and traffic light indicator systems [28], the meaning of the word includes the dimensions of both time and space. It is a space between two things, an interval. Thus physicality of urban tissue is interplay between the statics of architecture and movement of the space in between. The roses of Kay and Gerda are flourishing between the houses of their parents, in the space "from one window to the other". In this "interspace" happens their Meeting; there they share Time together, Care about the roses and each other, their Friendship. They sing "the hymn of roses", by artistic act transforming Space between buildings into Life between buildings [11]. Without being revived by the art of Friendship, architecture is only "two boxes across the water-pipe" and parks and gardens are only "ugly roses, just like the box in which they stand". Shared friendship or, in Greek, *Philia*, is "the solidarity that keeps the polis together as a political entity. ... Philia can thus be defined as a "social sympathy". .. And it is particularly significant in a world where human fabrication has taken precedence over cosmic order" [16].

Thus interspace – defined broadly – can be seen as the physical section of an urban environment in its public representation, including its social aspect.

The notion of interface, mostly known in the field of computer sciences as a metaphor for the point of interaction between "hard" and "soft" components, is also applicable to the non-virtual dimension of life. There interface could be understood as an emanation of spatially articulated social action. Using Arendt's metaphor [1], the interspace is a table which humans divide and share in social interaction, but "life of feelings" and its incarnation in space can be understood as interface, or, in other words, as mediatory nature of interspaces.

Another layer of correlation "interspace/ interface" is perceptive: there interspace could be seen as a 'naïve' interpretation of how people can 'share' space, while interface could refer to a less naïve interpretation which starts from the conviction that public space has to be negotiated.

Ascribed to urban practice, the meanings of interspace/interface reflect the increasing tendency of modern world towards syncretization. Derived from modern Latin syncretismus, drawing on Greek  $\sigma v \gamma \kappa \rho \eta \tau i \sigma \mu \delta \varsigma$  and used differently in the realms of culture, religion and linguistics, the term 'syncretic', however, commonly means the merging of two or more categories in a specified environment into one [30], or conjunction of seemly dissimilar elements in one underlying unity. Syncretic unity of the early genres of arts - epos, lyric, drama displays the holistic worldview of the ancient people. Just like petroglyphs or pictographs, dance, song and performance are ritual acts not so very different from those of working, eating or procreating. The ancient ritual provides contact with cosmic order and ensures the physical existence. The range of transformation of the human consciousness from syncretic to the individual perception of the world appears in the oral and built art. National epos with the absence of an author, but containing the anonymous narrator, reflects the absence of division between "I" and "the World" in the mind of man and at the same time indicates a stage of transgression towards individuality.

> For all the individual initiative indicates, without announcing itself explicitly, such a stage of evolution when the individual creative act is already possible, but is not yet objectified in the consciousness as individual process which separates Poet from Crowd. The gift of song

does not come from him, but from outside: it could either be gained by trying the wonder drink or by becoming infatuated with the nymphsmuses. In Greek nympholeptos, which means poet, literally translates as "mad, obsessed with nymphs". That is the period of the great beginnings in the realm of poetry and educative arts. The national epos is anonymous, like the Middle Age cathedrals [18].

The ancient ritual evolved into modern genres of drama, lyric and tragedy. The archaic and classic Greek drama, according to Perez-Gomez, going back to the ritual of Dionysus, becomes a model for architectural representation. Ancient ritualized art containing public images of sentiments and symbolic

# Heterotopian nature of interspaces

Humans, being emotional as well as rational, take decisions and make steps in their lives according to or in opposition of what they feel about things. Information about feelings is provided by public images of sentiment, which are brought continuously through history by cultural expressions - art, mythology and rituals. Humans permanently perform different kind of rituals, from casual (like making morning coffee) to most solemn prescribed religious practices. In performing them we give structure and significance to our activities, minimizing chaos and disparity in our actions [13]. Poetical image, used by ritual as a symbiotic "carrier" of meaning is "tooled up" with an appropriate device - metaphor. The transitive nature of metaphor [21] fulfills the "high mission"- to preserve by transfer. It preserves a significant part of humanity's information by creating new forms, (re)creating 'deep', 'another' meaning, harmonized with the new chronological environment [20]. Metaphor is embodied in spatial tissue where environment should be perceived as a symbolic system. Ability of metaphor to "feel home" in the Different (hetero), transferred from noumenon to phenomenon at a particular place (Greek topos τόπος), creates heterotopias (Fig. 3).

PAST ←---> PRESENT ←---> FUTURE METAPHOR INTERSPACE ←----> INTERFACE RITUAL HETEROTOPIA ARTEFACT

Fig. 3. [Source: construction by the authors]

models of emotions through ages has been transformed into contemporary built environment.

Daidala are the constructions made of well-adjusted pieces, capable of inducing wonder and providing existential safety for a community. In later periods of Greco-Roman culture, the same wonder or thaumata remained the silent quality of artefacts that today we recognize more readily as "architecture", such as theatre, temples, and the space and political institutions of the agora and the forum [17].

Thus conjunction of "real" life, symbolic act in ritual and poetical image appears to be a basic quality both of architecture (building and landscape) as well as of human settlement in general.

In heterotopia metaphoric "playfulness" (similar/different/common) is embedded as an experience of the common in a place, as the exposition of the common in public.

In the book "Heterotopia in a post-civil society" the authors give the idea about the notion "heterotopia" as a place of "otherness".

Michel Foucault introduced the term "heterotopia" in a lecture for architects in 1967. pointing to various institutions places that interrupt and the apparent continuity and normality of ordinary everyday space. Because they inject alteration into the sameness, the commonplace, the topicality of everyday society, Foucault called these places 'heterotopias' - literally 'other places' [3].

This draws a line with the nature of the metaphor. However, metaphoric movement is the opposite – it "injects" sameness into the different. Metaphor creates a common place for the meaning during the meaning's lifespan. The same principles of transfer, difference and sameness express the nature of metaphor. Opposing Foucault's view, the editors of "Heterotopia…" argue:

Rather than interrupting normality, heterotopias now realize or simulate a common experience of place. Because of its special nature, heterotopia is the opposite of the *non-place*... Today heterotopia, from theme park to festival market, realizes 'places to be' in the non-place urban realm of Castells' 'space of flows' (De Cauter 2004: 59–63). In other words, heterotopia embodies the tension between place and nonplace that today reshapes the nature of public space [4].

The other common characteristic of metaphor and heterotopia is the presence of "the unusual" or "the inappropriate". Heterotopia is, argue De Cauter and Dehaene, "not appropriate" to the other, "normal" expressions of the human activities when analyzing the triadic model of ideal city of Hippodamus.

That 'third space' is neither a political (public) nor an economic (private) one. Rather, it is a sacred or *hieratic* space – to use Hippodamus' term *hiéran*. This qualification renders the otherness of other spaces – *les espaces autres* of Foucault – explicit. The other

# Methodology: from Space to Man

Unlike architecture, which traditionally is seen as a static "piece of art", public spaces are a quintessence of different kind of movements, a carrier of urban life in all its complexity. The methodological approach concerning research of public spaces thus has to follow the urban nature of public space itself. Therefore the notion "metabolism" is used as a metaphor for the research methodology in urbanism. Physiology understands metabolism as a set of chemical and physical processes in a living organism. In order to achieve

a scientifically and practically qualitative result, a research has to be seen as a live "organism", where the "physical" (raw material for research and theoretical discourse) is interconnected with the "chemical" (unfolding spatial etiology by designing the spaces). However, the aforementioned aspects draw a "two-dimensional" picture, where morphological and typological analysis of built environment is merely the initial step on the path leading to the understanding of the urban complexity.

The problematic of urban research methodology touches several aspects: the "scientific" character of the architectural studies, the cultural aspect (more specifically - history and art) in relation to open space, measuring of the human feelings – necessity and tools. Nowadays it is very important to develop knowledge about the historical section of cultural and social interrelations with its incarnation in the built fabric, thus understanding the meaning of the space is different from the *oikonomia* of the *oikos* and different from the *politeia* of the *polis* debated on the *agora*: heterotopia is the other of the political and the other of the economic [5].

According to the authors, heterotopias are also more time than space; it is time-space [6]. Similarly to the sometimes invisible sameness of the transferred meaning in metaphor, which invites to discover it, heterotopias also are places "where appearance is hidden but where the hidden appears" [7].

Metaphors and heterotopias are of a similar nature, where the latter, one might argue, is the incarnation of the former. If one understands heterotopias as an embodiment of metaphors, the answer to the question which De Cauter and Dehaene ask in the introduction to their book, "can the everyday of today survive outside heterotopia?" [8] appears on its own accord.

The symbiosis of ritualized metaphors and spatial publicity raises the vitality of spatial "carrying capacity" to the height of catharsis.

artifacts including the human being itself. Yet exploring the meanings is, according to C. Geertz [9], more an art of interpretation than a set of measurements. Interpretation as a methodological approach adds a third dimension to the investigation of human settlements – the one of human "life of feelings" (Fig. 4) [15]. A comprehensive method of analysis of environment should be elaborated within the contemporary urban studies. It can continue in the direction "shown" by K. Lynch [14] who applied the method of mental mapping to urban studies.



Fig. 4. [Source: construction by the authors]



Fig. 5. Heterotopian nature of the cemetery-park Assistens Kirkegård, Copenhagen, Denmark [Source: photo by the authors]



Fig. 6. Heterotopian nature of the cemetery-park Assistens Kirkegård, Copenhagen, Denmark [Source: photo by the authors]



Fig. 7. Application of the organizational principle of the software ALLPLAN to the research methodology. Conceptual sketch [Source: construction by the author's]

The term "mental mapping", also used as "cognitive maps", is applied to the learning methodology as well, where it means the graphical image of the impressions or the results of perception. In other fields like geography, sociology or urbanism mental maps are the graphical images of the perception of the space - landscape and environment. Lynch's research logic has developed during last decennia in interdisciplinary investigations as "semiotic mapping" (P. Andersen, A. Nielsen) [19], recently applied in urban studies as urban heritage analysis (D. Reinar, DIVE) [24].

The drawing software (ALLPLAN) can be used as a metaphor for analytical structure of possible research. The "files" can be organized in "folders" according to the same maxim of "thinness" and "thickness": from already metaphorically mentioned

#### To conclude

Growing complexity of spatial and social relational dynamics requires a shift of the professional attention and interests from "somatic", physical to extrasomatic sources of information, unfolding the meanings of the material and nonmaterial artefacts in particular cultural environment.

The use of both "interspace" and "interface" notions within one concept draws the line with the methodology of "thin" and "thick" description of Geertz (using G. Ryle's terminology) [10]. The application of this methodology to the analysis of urban environment:

1) enables the "scan" of the different "layers" (physical, social and mental) within the doorstep (min. complexity) to the heterotopia, for example, of Sunday market or music festival as a symbiotic ritual (medium or max. complexity) on different scales. In the range of case studies some "sacred places" with a strongly expressed heterotopian nature (like the Assistens Cemeterypark [32] - space-time) (Fig. 5), events with a meditative character (like music festivals) and virtual space (like websites - time-space) should be combined within research. All layers, files and folders are interconnected within one project and can be "switched on" or "off" in the process of research (for instance, the files of "I-perception" and "non-I perception" in connection to the "doorstep") (Fig. 7). The "whole picture" can be seen by "switching on" all layers in the design project.

particular "files" of public spaces in transition from "thin" to "thick" description, without unnecessary separation of these aspects;

- 2) inserts time dimension of the cultural realm;
- enables interdisciplinary approach, leading to a more comprehensive "picture" of the human settlements in minds of professionals.

The application of the findings of the research in everyday professional practice can bring to a new approach to urban practices in general, when the topdown organized exclusive development could be replaced by socially and economically more friendly and inclusive act of city making in the process of co-production.

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Kopsavilkums. No starptelpas uz saskarni: pārejas telpas metaforiskā daba. Divdesmitais gadsimts atnesa kvalitatīvas pārmaiņas attiecībās starp sociālo un fizisko telpu. Tā rezultātā notikusi un notiek vienlaicīga telpisko funkciju, formu un nozīmju maiņa, un tiek aktualizēts anomālu vietu - "zonu" - jēdziens. Brāļu Strugacku radītie tēli - Stalkers un Zona - uzpeld atmiņā, kad tiek runāts par slēgto kopienu neprognozējamību un slēptiem spēkiem, kļuvušiem par mājvietu miljoniem graustu rajoniem vai pamestām rūpniecības teritorijām ar piesārņoto augsni un enerģiju. Pārejas telpas sirreālā daba prasa no pētnieka meklēt atšķirīgus no mērāmiem – iracionālus - "instrumentus". Poētiskā tēla un tā "burvju nūjiņas" metaforas spēja absorbēt vairākas nozīmes padara tos par piemērotiem urbānās telpas izpētes rīkiem. Nenoteiktā, anomālā

telpa "bez jēgas" rada nosacījumus jaunās nozīmes izveidei. Metafora ieņem precīzu pozīciju tieši tur, kur jēga pāriet "bezjēgā" un viss neparastais, "nobīdītais" kļūst par metaforas klātbūtnes iezīmi. Telpas un laika dimensijā radusies pārbīde ietekmē cilvēka pamata - kaut kā vai kaut kam piederības - sajūtu.

Publiskās ārtelpas "sinkretizācija", proti, tīri "privāto" vai tīri "publisko" ārtelpu formu sarukšana, visu iespējamo publiskuma un privātuma hibrīdu (gan īpašumtiesību, gan izmantošanas ziņā) skaita pieaugums pārklājas ar šo jēdzienu semantisko daudzveidību mūsdienu cilvēka uztverē un robežojas ar jēdzieniem "individualitāte" un "nacionālā identitāte".

Jēdzieni "starptelpa" un "saskarne" paver aptverošākas izpratnes izspēju, runājot par mūsdienu publiskās ārtelpas sociālo un telpisko daudzveidību. Starptelpa tās plašākajā nozīmē ir saprotama kā fiziskās pilsētvides griezums tās publiskā izpausmē, ieskaitot pilsētvides sociālo aspektu. Saskarnes jēdziens, galvenokārt lietojams datorzinātņu jomā kā metafora "cieta" un "maiga" komponentu mijiedarbībai, ir piemērojams realitātei arī ārpus virtuālās dimensijas. Tur ar saskarni varētu apzīmēt telpiski artikulētas sociālās darbības "izstarojumu". Izmantojot Arendta metaforu, starptelpa ir galds, kuru cilvēki dala un pie kura tie dalās sociālā mijiedarbībā, bet saskarne ir "jūtu dzīve" un tās iemiesojums telpā vai, citiem vārdiem sakot, starptelpas starpnieciskā, vienojošā daba. Vēl viens "starptelpas / saskarnes" korelācijas slānis ir uztvere. No uztveres viedokļa starptelpa varētu tikt uzskatīta par "naivo" interpretāciju tam, kā cilvēki telpu koplieto, bet saskarne varētu attiekties uz mazāk naivu interpretāciju, kas sākas no pārliecības, ka publiskās ārtelpas koplietošanu ir jāapspriež un par to ir jāvienojas. Attiecināti uz urbāno praksi, starptelpas un saskarnes jēdzieni atspoguļo mūsdienu pasaules pieaugošo tendenci uz sinkretizāciju - "reālās" dzīves un rituālizētās simboliskās rīcības savienojumu. Poētisks tēls, kuru rituāls izmanto kā simbiotisku nozīmes "nesēju" un kurš ir "apbrunots" ar metaforu, no jauna rada "dziļu", "citu", ar jauno hronoloģisko vidi saskaņotu jēgu. Metaforas spēja "justies kā mājās" visā atšķirīgajā (hetero), pārnesta no ideju pasaules (noumenon) uz konkrētās vietas ( $\tau \delta \pi o \varsigma$ ) fenomenu, rada heterotopijas. Mišels Fuko ieviesa terminu "heterotopija" 1967. gadā, lasot lekciju arhitektu auditorijai, norādot uz dažādām iestādēm un vietām, kas pārtrauc šķietamo parastās ikdienas telpas nepārtrauktību un normalitāti. Pretēji Fuko izpratnei, Dekauters un Dehāne apgalvo, ka heterotopijas šodien nevis pārtrauc normalitāti, bet stimulē kopīgu vietas pieredzi un realizē - no atrakciju parka līdz festivālu tirgum - "vietu, kur būt" Kastelsa "ne-vietas" "plūsmu telpā". Heterotopija, citiem vārdiem, iemieso spriegumu starp vietu un ne-vietu, un šis spriegums šodien pārveido publiskās ārtelpas raksturu. Pilsētvides un tās publiskās ārtelpas pētniecības metodoloģijai ir jāseko to daudzdimensionālajai būtībai. Jēdziens "vielmaiņa" varētu tikt izmantots kā metafora pilsētvides pētījuma metodoloģijai, lai attīstītu visaptverošāko pieeju artefaktu, tostarp paša cilvēka, nozīmes izpratnei. Nozīmēs izpēte ir, saskaņā ar Gīrcu, vairāk interpretācijas māksla nekā mērījumu komplekts. Interpretācija kā metodoloģija – Gīrca izstrādātais "plānais" un "biežais" apraksts - ievada pilsētplānošanas un dizaina pētījumā trešo, cilvēku "jūtu dzīves" dimensiju. Fokusa pārnese no telpas uz cilvēku rada priekšnosacījumu visaptverošās pilsētvides analīzes metodoloģijas izstrādei.

Šis metodoloģijas pielietošana urbānās vides analīzē ļauj

- 1) "skenēt" dažādus "slāņus" (fizisko, sociālo un mentālo) konkrētā publiskās ārtelpas "direktorija" ietvaros, pārejot no "plānā" uz "biezo" aprakstu un neatdalot mākslīgi vienu aspektu no otra.
- 2) ieslēgt kultūras vēsturisko / laika dimensiju telpas analīzē
- attīstīt starpdisciplīnu pieeju pētījumam, kas veido daudz visaptverošāko cilvēku apdzīvoto vietu "ainu" profesionāļu un pētnieku prātos.

# Landscape Aesthetics of Watermills and Small-scale Hydroelectric Power Plants

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Abstract. In this research study, landscapes of watermills and small-scale hydroelectric power plants (HPP) have been researched. Research in these particular areas is part of a complex research of the watermills and small-scale HPP landscapes in Latvia. The aim of this research study is to examine the existing situation in landscapes of watermills and small-scale HPP in Latvia by the aspect of aesthetics resulting in the definition of common tendencies in transformations of landscape character. This paper reflects the data which was obtained as a result of interrelationship between landscape elements in the landscape inventory matrix. The Landscape Identification was made in the local planning level (open space structure planning level). The research included 42 territories from Latgale, Kurzeme and Vidzeme uplands' distribution ranges. These landscapes were selected from more than 400 territories. The concept of Morphological Matrix Method has been used in the development of landscape inventory matrix. A list of identifying features of landscape was compiled in morphological matrix, after the matrix was filled, followed by the appraisal, which contained creation of links between the characteristic markers and expressions. The results of the research reflected aesthetically the quality in the researched landscapes according to previously developed criteria.

Keywords: Local Planning Level, Morphological Matrix.

#### Introduction

The situation of landscapes in these hydropower territories until now has been unclear. Researched areas are required to have an in-depth research for the future-effective decision making. The need for landscape assessment is also important in territories with the potential for tourism or other territories that have potentials for public access. Some of the territories which were built for producing only power (e.g., watermills, small-scale hydroelectric power plants (HPP)), presently have been transformed into renovated territories with new functional uses (e.g., guest houses, restaurants, private apartments, tourism objects, etc.).

In the beginning of the 19<sup>th</sup> century Latvia, there existed more than 400 territories, where small-scale hydropower objects were built and used as watermills until the electricity modernisation period began. Electricity production with the help of hydropower in Latvia started at the end of the 19<sup>th</sup> century [15]. In Latvia, the use of hydroenergy at the start of the 20th century was developing very fast, while active construction process of small-scale HPP also started. By 2002, 149 small-scale HPP were producing hydroenergy in Latvia, but the result of the total cumulative produced energy was approximately only 1 % of the total amount of electricity usage in Latvia, 33.4 % of

#### **Aspect of Aesthetic**

The term 'aesthetic' is derived from the Greek word, 'aisthesis', meaning sensory perception, experience as well as feeling [32]. The definition of which was produced by the utilisation of renewable resources, and 33 % of energy was produced by HPP,

but of course, the largest amount of this hydroenergy was being produced by large-scale HPP [16].

The territories of watermills in Latvia were researched in recent years by different scholars with the aims to chronicle the historical review [28, 14, 23, 27], to document the ecological reviews and the impact of small-scale hydroelectric power plants onto fishery [30, 31], to explore the possibilities of using hydroelectric power from rivers in Latvia [19], or to illustrate important personal or emotional experiences in associations of watermills in literary manner [35]. Thus, the aim of this research was to conduct an examination of the existing situation in landscapes of watermills and small-scale hydroelectric power plants in Latvia in terms of aesthetics to define common tendencies in the transformations of landscape character.

The author of this paper has made several research studies in this field of study, with publication of a review on historical landscape structure development of these territories, publication of public the notions of these territories, and a conference report in terms of sensory perceptions.

the term 'aesthetic,' which could be used in the framework of this research is 'the study of the mind and emotions in relation to the sense of beauty' [5].

Aesthetic is defined as the study of sensory or sensory-emotional values (a pleasing appearance or effect), sometimes called judgments of sentiment and taste, and the condition of a judgment of taste is that it is essentially subjective [34, 20]. For better understanding of the aim of the senses by aspect of aesthetics, two definitions of the term 'sense' in the framework of this research could be used:

- any of the faculties, as sight, hearing, smell, taste, or touch, by which humans and animals perceive stimuli originating from outside or inside the body;
- 2) a faculty or function of the mind analogous to sensation the moral sense' [6].

The idea that a designed landscape ought to be visually beautiful is at least as old as the Renaissance [11]. Complexity and elusiveness contribute to the sense of the sublime [32, 1]. In the 18<sup>th</sup> century, the English landscape beauty objective was to make an ideal landscape, and the ideas for this aim were collected from many sources to build up the ideal, but this aim may have changed the criteria for landscape beauty in the 18th century, but not its central importance as a standard by which the designer's art should be judged' [11]. The German philosopher Imanuel Kant (1724-1804) drew a distinction between two kinds of beauty: The free and unhampered, and the conditional, which assumes the understanding of objects, and make various points of view possible; for example, the functionalist view that 'the form follows the function', or the moralist view that 'beauty lies in goodness' [32]. If landscape design could be seen only as a form of art-making, then the common wisdom held that any work of landscape architecture succeeded or failed according to how beautiful it was to look at' [20]. In our nature, there is a need to be a very radical and wide-spread tendency to observe beauty and to value it [25]. 'Today, man provokes Nature with overconfidence in his power and ability to control and alter the environment' [33]. One of the designer's roles as a professional is to ensure that all reasonable steps are taken during the design process of landscape elements to protect the health, safety, and welfare of the public users of any space [13].

# **Qualities of Method**

appropriate Among aesthetic assessment indication methods for the researched landscapes, one of characteristic markers is to find landscape indicators, which tend to have universality, and it is possible to search for these indicators; for example, landscape elements, which are connected with particular landscapes in the researched territories. These indicators are extremely sensitive to the value attributed to certain landscapes by the population [3]. In literature, the classification of landscape attributes is possible and could be divided in three groups:

The landscape planning process is developed in a more complex way, as the 'sense' of landscape can be found in the intersection of different dimensions, and for this reason, assessments, concerning the various aspects and their relations are required [3]. In various situations, aesthetics planning is a process that occurs at every stage of design, construction, and maintenance [20]. One of the goals of the landscape architect is to fit the functionally-built environment or other facility into the adjacent landscape in a way that is complementary to, and enhances, the existing landscape. Achieving this goal requires consideration of natural, ecological, aesthetic, economic, social, cultural, and historical influences related to that landscape [20]. Details in landscape take a significant role in the functions of aesthetic. 'Landscape should please the eye. Every truly great landscape has great details, details that contribute to the aesthetic themes of the site that complement one another, and create beauty out of the ordinary materials and necessities of construction.

A landscape with a splendid thematic idea can fail landscape architecture if it has poor details: Details that are badly matched to its primary aesthetic that do not relate strongly to one another, or that fail to lift their materials above the ordinary' [24]. Professor Kirkwood outlines landscape detail as a primary design activity. 'Aesthetic and environmental changes are alterations to the original design and artistic intentions of the project through its detail forms. Transformations to the larger design context are further instances of such change. These include detail forms that are associated with inappropriate or outdated design strategies or have been altered because of new insights into our understanding of environmental and natural systems' [13].

With respect to the hydropower buildings technical requirements, aesthetics in these territories may be defined as dealing with the visual integration of built environment into the fabric of a landscape in a way that blends with or complements that setting [20].

- 1) the existence of landscape elements, type and classification;
- 2) the properties of landscape elements;
- 3) the result of interrelationship between landscape elements [36].

'Experts or professionals rather than the general public often make decisions involving visual impacts' [12], and 'some also believe that the public lacks the experience and knowledge that is needed to be fully sensitive to aesthetic quality' [2].

Another important question, concerning the selection of aesthetic assessment method, is the

quantitative or qualitative nature of the measurement. In the method of a morphological matrix, a list of characteristic markers and expressions is chosen, which will show the results of qualitative and quantitative data. In such research, it is important to consider the issues of data reliability and validity [22]. A high degree of stability of a measurement over time indicates a high degree of reliability, which means the results are repeatable (the same can be determined through the test-retest method at two different times) [4, 7]. There are several types of validities that contribute to the overall validity of a study, but the two main dimensions are internal and external validity [29]. This research study could show data by internal validity. 'Internal validity is concerned with the degree

#### **Materials and Methods**

In the framework of this research study, the selected territories were visited during the period of time between May 2010 and August 2012. This study included 42 territories from Latgale, Kurzeme and Vidzeme uplands distribution ranges - 14 territories from each (Fig. 1). These landscapes were selected from more than 450 old watermills (marked in maps [8]) and 150 small-scale HPP territories (marked in the map of MHEA) [17]. Territories were chosen randomly by several criteria: The location of the researched territory in one of three densely build-up upland areas in Latvia, the existence of the architectural design in territory, the diversity by functions (private or public), by location (rural, suburb or urban), by landscape construction (only those territories were chosen where the hydropower producing was only by water accumulation in reservoirs). Two territory groups, divided by definition of small-scale HPP or

of certainty that observed effects in an experiment are actually the result of the experimental treatment or condition, rather than intervening, extraneous or confounding variables' [29].

According to the landscape scale – the aesthetic view – in which the landscape is something that can be comprehended and organised into a meaningful whole by the human eye, much of understanding and use of landscapes is based on an intuitive visual grasp of their nature and extent [26]. The scale may be absolute, or relative, and often denoted as a ratio [4]. For better understanding of the local situation in particular landscapes, this research has to be based on local landscape scale (open space structure planning level) [9].

watermill cannot be used because the functions of small-scale HPP mainly are situated in old buildings of watermills or in territories where the old watermills were located, and the dam constructions are reused. The total number of newly constructed small-scale HPP (developed at the end of the 19<sup>th</sup> century) for electricity production only in new section of river, for now by resources of public data, is impossible to account [18].

For landscapes in these culturally-historic territories where these hydropower objects were built, and for territories which have similarities in construction based on water resources, more suitable options to choose and use in this research, are individually constructed landscape indicators based on the criterion of interaction between landscape elements (Fig. 2). It was necessary to consider the landscape both as a visible part of a territory and as



Fig. 1. Researched territories location in map of Latvia [Source: construction by the author, used maps by Google Earth]



Fig. 2. Conceptual model of researched landscape areal [Source: construction by the author]

an interpretation of perception signals through a memory process [21], which leads to the building up of the morphological matrix on perception-based method by emphasising the human view aspect. This assessment was done by the expert (the author) according to her professional practice and knowledge. The elements used to evaluate landscapes in this research were the scale, contrast, variety, convergence, codominance, axis, enframement, motion, season, etc., perceived by these senses: **Visual, auditory, kinetic,** and **olfactory**.

In the practical development of the method for this research, after several random visits to territories without selection by any criterion, the matrix with identifying features (prepared before

# **Results and Discussion**

The landscapes in the researched territories have been visited, and the results from the landscape inventory matrix are shown in Table 1. The results show that the landscapes in the researched territories, in general, are mainly harmonious (45 % (A.03) and 24 % (A.0.4) respectively), have far away (Fig. 3) and close distance views, most in pleasant designs (50 % (A.8.3) and 26 % (A.8.4) respectively), most territories have harmonious shape of plants and composition in nature environment (67 % (A.4.4)). For those territories, which were constructed with the aim of industrial function, the results of this research for visual harmony values are positive. However, the impact of theoretically by literature reviews) of landscape was developed by a set definition of markers and expressions. The matrix was then updated with each new visit, and after having been used in this research, 20 identifying features were expressed (Table 1). The existence of each expression by defined criteria was marked in the matrix, and according to the results, values could be calculated. After the inventory matrix was fully filled for each territory by the expert, the common data was calculated, as shown in this paper. The percentage display for all 42 territories was 100%, and the places where the percentages are recorded have had defined expressions of identifying features. After the total amount of data was collected and collated, the conclusions could then be made.

landscape changes over a period of time has to be taken into account because, due to landscape management, the views from and to the respective territory may exist over a period of two or five years, and they will have a pleasant design, or at least visible. However, without any management, the landscapes could lose the scenic value.

In the researched landscapes by dominance of a negative aspect, the following results can be highlighted: The lack of qualitative recreational equipment design (65 % (A.6.1) and 7 % (A.6.2) respectively), in only 31 % (A.5.4), the constructions are designed according to an architectural design, and in only 29 % (A.2.4), the character of all built


Fig. 3. Landscape of watermill, Jaunmokas [Source: construction by the author, 2012]

environments is in unity. The lack of qualitative recreational equipment not always impacts the visual landscape value in general, but results in showing the weak positions by public access management possibilities. The landscapes, which are in use by people, need to contain the principle of unity in architectural and constructional designs, and, of course, this criterion is not easy to observe because of specific constructional needs of these territories and the economic considerations.

The historical architecture does not exist in only 14 % of the researched territories. In territories, where the historical architecture or part of it still exists, the 31 % (A.15.2) are unsuccessfully organised with newly built architecture, and in only 19 % (A.15.3), the historical architecture is successfully integrated in the newly built architecture. By this criterion – the newly built

architecture - we mean the architectural elements, which have apparently changed the old structure of all visible landscape, after the construction of the first built-up watermill complex, in this matrix are called as historical architecture. In the criterion, where the historical architecture remains mainly unchanged by the newly built architecture (36 % (A.15.4)), the main buildings without the present-day functional use (abandoned or ruined) was taken in account, but by dominance, only in 9 % (A.7.2), the degraded landscape elements dominate in the landscape, the nature in 43 % (A.7.4), and architectural elements in 36 % (A.7.3) mainly dominate in the researched landscapes. These results show that in the territories, where the landscapes are abandoned or ruined, natural processes come into force which take an effect in landscape aesthetics as changes in the predominance of landscape elements.

TABLE 1

Identifying features	Expressions				
Visual harmony of landscape in territory	All territory is disharmonious	Most parts of territory are disharmonious	Most parts of territory are harmonious	Landscapes in all parts of territory are harmonious	
A.0	A.0.1 / 7 %	A.0.2 / 24 %	A.0.3 / 45 %	A.0.4 / 24 %	
Visual harmony of surrounded environment (natural and man- made) with idea of landscape design in territory	Surrounding environment is not as well designed as landscape in territory	Surrounding environment has own design, but the landscape in territory is not designed	Landscape in territory is designed, but the idea by some design solutions is disharmonious with environment	Most of the surrounding environment is in harmony with idea of design in territory	
A.1	A.1.1 / 38 %	A.1.2 / 17 %	A.1.3 / 26 %	A.1.4 / 19 %	
Landscape built environment character by unity	The character of built environment is lacking in uniformity	The character of some built environment is lacking in uniformity	The character of built environment is mainly in unity	The character of all built environment is in unity	
A.2	A.2.1 / 21 %	A.2.2 / 17 %	A.2.3 / 33 %	A.2.4 / 29 %	
Visual harmony between building materials in architecture and surrounding environment	Building materials are disharmonious with architecture and environment	Building materials are disharmonious with architecture, but compatible with environment	Building materials are harmonious with architecture, but incompatible with environment	Mainly building materials in architecture and environment are harmonious	
A.3	A.3.1 / 7 %	A.3.2 / 7 %	A.3.3 / 12 %	A.3.4 / 74 %	

Landscape inventory matrix by aspect of aesthetic [Source: construction by author]

## CONTINUATION OF TABLE 1

Identifying features		Expre	essions	JATION OF TABLE 1
Visual harmony between shape and composition of plants and nature of environment	Shape and composition of plants in nature environment are disharmonious	Shape of plants species in nature environment are disharmonious	Composition of plants in nature environment are disharmonious	Shape of plants and composition in nature environment are harmonious
A.4	A.4.1 / 0 %	A.4.2 / 0 %	A.4.3 / 33 %	A.4.4 / 67 %
Visual harmony between architecture design and technologically required constructions	Construction and architecture are not designed and is disharmonious	Construction is not designed according architecture design and is disharmonious	Some elements of constructions are designed according architectural design and is harmonious	Constructions is designed according to architectural design and is harmonious
A.5	A.5.1 / 10 %	A.5.2 / 38 %	A.5.3 / 21 %	A.5.4 / 31 %
Visual harmony between recreational equipment design and landscape design	Mainly, recreational equipment is not designed	Recreational equipment is designed, but the result is disharmonious with landscape design	Recreational equipment is designed in most territory, and the result is in visual harmony with landscape design	Recreational equipment is designed and is in visual harmony with landscape design
A.6	A.6.1 / 65 %	A.6.2 / 7 %	A.6.3 / 14 %	A.6.4 / 14 %
Dominance of landscape elements	In landscape, there is no dominance	Degraded landscape elements are dominated in landscape	Architectural elements are dominated in landscape	Elements of nature are dominated in landscape
A.7	A.7.1 / 12 %	A.7.2 / 9 %	A.7.3 / 36 %	A.7.4 / 43 %
Distance and design of views form territory	Are only close distance views, not in pleasant design	Are far away and close distance views, not in pleasant design	Are far away and close distance views, some are in pleasant design	Are far away and close distance views, all views are in pleasant design
A.8	A.8.1 / 7 %	A.8.2 / 17 %	A.8.3 / 50 %	A.8.4 / 26 %
Visual dynamic in seasonal color by plants (trees and shrubs)	In territory there are mainly evergreen trees or shrubs	In territory there are mainly deciduous trees or shrubs	In territory there are up to 14 species of trees or shrubs - evergreen, deciduous and decorative plants	In territory there are more than 15 species of trees or shrubs - evergreen, deciduous and decorative plants
A.9	A.9.1 / 0 %	A.9.2 / 48 %	A.9.3 / 38 %	A.9.4 14 %
Visual dynamic by relief	Landscape is gently sloping, not dynamic	Landscape is gently sloping with some wavy relief elements, not dynamic	Landscape is wavy with some hilly elements, in some parts landscape is dynamic	Landscape is hilly with some slopes or bluffs, landscape is dynamic
A.10	A.10.1 / 26 %	A.10.2 / 41 %	A.10.3 / 26 %	A.10.4 / 7 %
Visual dynamic in water movement in river	Dynamic in water movement is almost invisible for slow movement	Water movement is medium fast, water movement is not dynamic	Water movement in some parts is very fast and full of rapids, water movement is dynamic	Water movement in all visible parts is very fast and full of rapids, water movement is dynamic
A.11	A.11.1 / 43 %	A.11.2 / 55 %	A.11.3 / 2 %	A.11.4 0 %
Intimacy and landscape scale in territory	There is no intimacy	Landscape is creating intimacy, in large scale	Landscape is creating intimacy, in small scale	Landscape is creating intimacy, in small and large scale
A.12	A.12.1 / 29 %	A.12.2 / 19 %	A.12.3 / 26 %	A.12.4 / 26 %

#### CONTINUATION OF TABLE 1

Identifying features		Expre	ssions	
Symmetry in landscape composition structure	Landscape is not symmetrical	Some elements are designed by principles of symmetric composition	Some elements and some parts of landscape are designed by principles of symmetric composition	Landscape is designed in symmetrical composition
A.13	A.13.1 / 88 %	A.13.2 / 10 %	A.13.3 / 2 %	A.13.4 / 0 %
Visually perceived compositional axis in landscape	In landscape, there is no compositional axis	In landscape, there is one compositional axis	In landscape, there is one main, and several subordinated compositional axis	In landscape, there are several, main compositional axis
A.14	A.14.1 / 90 %	A.14.2 / 10 %	A.14.3 / 0 %	A.14.4 / 0 %
Convergence of historical and newly build architecture (buildings or elements) in landscape	There is no historical architecture	Historical architecture is unsuccessfully organised with newly built architecture	Historical architecture is successfully integrated in newly built architecture	Historical architecture mainly has not changed with newly built architecture
A.15	A.15.1 / 14 %	A.15.2 / 31 %	A.15.3 / 19 %	A.15.4 / 36 %
Landscape enframement from access roads	Landscape doesn't have enframement from main access roads	Landscape is invisible from access roads	Landscape has enframement only from one access road	Landscape has enframement from all access roads
A.16	A.16.1 / 29 %	A.16.2 / 5 %	A.16.3 / 21 %	A.16.4 / 45 %
Emotional experience in landscape territory	Landscape is homogeneous, tedious by access and in the landscape territory	Emotional experience by access to landscape territory is possible	Emotional experience only in several parts of landscape territory is possible	Emotional experience by access to landscape and in the territory are possible
A.17	A.17.1 / 33 %	A.17.2 / 33 %	A.17.3 / 17 %	A.17.4 / 17 %
Audibility harmony in landscape	Landscape territory is in noise, territory is disharmonious	Close to landscape territory is noise, territory is disharmonious	In landscape territory, there are few noises and sounds, landscape is in harmony	In landscape territory, there are sounds, which are in harmony with landscape
A.18	A.18.1 / 12 %	A.18.2 / 12 %	A.18.3 / 31 %	A.18.4 / 45 %
Pleasant smell harmony in landscape	All territory is smelly; it is disharmonious	Some part of territory is smelly, or too much aromatised; it is disharmonious	In territory, there are no special smells which to mark out; it is in harmony with landscape	In some parts of territory, there is individual, pleasant smell; it is in harmony with landscape
A.19	A.19.1 / 0 %	A.19.2 / 7 %	A.19.3 / 88 %	A.19.4 / 5 %

In 12 % of the territories, the landscape territory suffers from noise, and the territory is disharmonious (A.18.1). Under all circumstances, any unwanted, unpleasant, loud, or harsh sound is referred to as noise. Although the acceptability of the type and level of noise is highly subjective,

## Conclusion

In the assessment of interrelationship between landscape elements, the aesthetic value can be valued on the basis of landscape inventory matrix by the aspect of aesthetic according to the subjective observer's opinions. The landscapes in the researched territories show diversity in their aesthetical constructions. The percentage data show noise can also cause physical discomfort and, if intense enough, can cause damage to hearing. Any frequent or continuous exposure to noise can lead to a deterioration of human efficiency by a deterioration of physical and emotional well-being [10].

the main tendencies in particular landscapes, which have to be taken into account for future landscape development planning and research studies in these landscapes. From the experience of unsuccessfully organised newly-built architecture in the researched territories, we need to learn and should not permit that kind of landscape expressions in future development. The main conclusions of this research is that landscapes in the researched territories are mainly harmonious, but are not well designed, and are with dominance of such natural landscape elements as deciduous trees or shrubs and slow movement water surfaces that lead to landscape homogeneity and tediousness in some parts of the researched landscapes. The potentials for future development are also discovered in most territories: The historical architectural design, its historical heritage by building materials and visual compositions of architectural elements, components of views from and to territories, landscape intimacy in different scales, and harmony in audible and aromatic surroundings.

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Kopsavilkums. Pētījums tika veikts Latvijas ūdensdzirnavu un mazo hidroelektrostaciju (HES) teritorijās. Rakstā ir atspoguļota pētījuma gaita, autores izstrādātā un pielietotā ainavas vērtējuma matrica, iegūtie rezultāti un secinājumi. Rakstā atspoguļotā informācija ir daļa no kopējā pētījumu kompleksa par ainavu kvalitātes tendencēm šajās teritorijās. Pētījuma mērķis bija, analizējot ainavas ūdensdzirnavu un mazo HES teritorijās, vadoties pēc estētiskā aspekta, noteikt kopējās tendences ainavu pārveides procesos. Šis pētījums tika veikts 42 ūdensdzirnavu un mazo HES teritorijās Latvijā, trijos visblīvāk apbūvētajos areālos - Latgales, Kurzemes un Vidzemes augstienes areālā. Dati iegūti izvirzot ainavas vērtējuma kritērijus (balstoties uz literatūras studijām un iepriekšējām vairāku teritoriju vizītēm) sastādot ainavas inventarizācijas matricu, vērtētājam (autorei) apmeklējot teritorijas klātienē un izvērtējot katru no kritērijiem, atzīmējot katra kritērija izpausmes raksturojumu. Pēc visu teritoriju izvērtēšanas, rezultāti par katru kritērija izpausmes raksturojumu atspoguļoti procentuālā sadalījumā. Rezultāti liecina, ka pētītajās teritorijās ne vienmēr ir veidots vai kvalitatīvi izstrādāts ainavas un rekreācijas aprīkojuma dizains, bet ainavās pārsvarā dominē dabas un arhitektūras elementi, tikai retās ainavās dominē ainavu degradējoši elementi vai nav novērojama dominance. Lielākajā daļā teritoriju ainavas ir vizuāli harmoniskas visā vai kādā no pētītās teritorijas daļām, bet mazāk kā pusē pētīto teritoriju, ainavas kļuvušas vienveidīgas gan pētītajās teritorijās, gan piekļuves ceļu ainavā. Esošajā situācijā, plānojot turpmāko attīstību, jāņem vērā, ka lielākajā daļā no pētāmajām teritorijām, atrodas vēsturiskā apbūve vai vēsturiskās apbūves elementi, kuri visticamāk ietekmē arī ainavas un arhitektoniskās vides harmonijas izpausmes vērtējumu lielākajā daļā teritoriju, un varētu būt par vērtīgu pamatu turpmākai ainavu attīstīšanai. Galvenie rezultāti liecina, ka pētītās ainavas, estētikas aspekta vērtējumā, ir daudzveidīgas un dabas un cilvēka mijiedarbības rezultātā var tikt neapdomīgi izpostītas, neizvērtējot katra ainavas elementa nozīmi un līdzsvara lomu konkrētā teritorijā.

# Green Architecture: theoretical interpretation and experimental design

Yuliya Yankovskaya, Alexey Merenkov, Ural State Academy of Architecture and Arts, Russia

Abstract. The evolution of architectural practice is only possible through an essential understanding of the basic trends of development for architecture in the contemporary world. One of the most important trends is «green architecture». Our view concerning the green architecture will be presented in two sections: theoretical interpretation, and experimental design. Theoretical interpretations include three groups: architecture of barriers & stimulus; poetry of boundariness; and variable multilayered environment. Experimental projects will be demonstrated in three groups: nature-friendly, nature-dissolving, nature-similar, and nature-including.

Keywords: «green architecture»; sustainable development; theoretical interpretation; architectural structure; experimental projects.

## Introduction

The evolution of Russian architectural practice in its own right, its relevance and competitiveness on the international market are only possible through an essential understanding of the basic trends that set the direction of development for architecture in today's rapidly changing world.

One of the most important trends that modern architecture is facing today is sustainable methods of

#### Theoretical interpretation

Theoretical concepts used in this paper are detailed in the article "Architectural Theory in Russia: Holding on the Past or Looking to the Future?", presented in the same issue of this journal. So we will not describe them in detail. We will just show their use in the "green architecture". We do not set ourselves the task to summarize and systematize the interpretation of "green architecture" existing in literature [2-6, etc.]. Our aim is to show our own opinion on this trend.

In this article, we would like to give our own interpretation of the theoretical concepts of green architecture. Theoretical interpretations include three units: architecture of barriers and stimulus; poetry of boundariness; and variable multilayered environment.

Architecture of Barriers and Stimulus. This position is fundamental and it is based on two theses. Thesis one - the phenomenological direction is oriented to establishing the fundamentals of spatial form organization from the standpoint of an individual with his corporeity. Thesis two - the system «barrier – stimulus» introducing the standpoint of a subject with biological stereotypes underlying it. «Barrier» limits movement and defines space for possible action; «stimulus» coordinates and stimulates possible movements of the individual [7] (Fig. 1).

construction that use green architecture [2-6]. Of course, green architecture is the most important step on the way towards sustainable development of city. We restrict ourselves to architecture and architectural environment problems.

Our viewpoint on green architecture will be presented in two sections: general scientific concepts and design experience.





Fig. 2. Poetry of Boundariness: barriers and structures [Source: from author private archive]



Fig. 4. Multilayered structures and enclosed systems [Source: from author private archive]

Poetry of Boundariness. Architectural form generation is revealed through the poetics of the barrier's contours, the art of creation of boundariness by means of which the individual enters into relations with Another: environment, culture, society. The character of the barrier (Fig. 2) may vary over a broad range: from a multilayered barrier to a nested system of spatial volumes (both principal and buffer ones) and relationships between them; in the degree of penetrability and optical characteristics of the material barrier; in the visual permeability and stability / instability of the optical barrier; the degree of inclusion of natural components as barriers (plants, water, etc.) [7]. The poetics of boundariness reveals the artistic aspects of contemporary architecture. The fundamental difference of the contemporary architecture is its processuality and dynamism of an architectural object. Processuality and dynamism of an architectural object manifest themselves through changeability of the structure of an architectural

# **Experimental design**

The creative potential that is available in Russian architecture can be fully discovered in the conceptual projects experience such as: students' degree projects; competitive projects; experimental projects. We want to show some interesting projects of our students who have accepted and developed our ideas of green architecture. All of these projects were carried out with our participation as leaders [1]. The projects will be demonstrated under three headings: nature-friendly; nature-dissolving; nature-similar; and nature-inclusive.

The first group of «nature-friendly» projects presents urban villas. The urban villas are a naturefriendly type of the residential building and basic trends that set the direction of development for harmonious and comfortable newest ecoobject and its adaptation to various needs of individual. Means of the processual architecture: changeability of the planning structure, changeability of the plastic structure and use of systems with multilayered barriers of a different degree of penetrability.

Variable Multilayered Environment. The classical concepts of architectural objects as the architecture of buildings are becoming the past. The evolution of the contemporary architecture demonstrated the crossing from traditional concepts of static volumes to variable multilayered structures and enclosed systems (Fig. 4) as a basis for the concept of sustainable development of city [7]. The newest architectural objects are becoming multienvironment objects including: interior spaces, buffer spaces separating to a varying degree from exterior effects, open exterior environments with natural components.

community. Environment-friendly planning of the flats provided maximum contact with nature. Every flat has a green family room or green atrium space and green terraces (Fig. 5). The emphasis in this project is made on disclosure of the idea of "poetry of boundariness".

Great opportunities to create multilayered barriers and adaptive and multi-environmental objects are offered by the treatment of public infrastructure in the form of Nature-Friendly Social and Welfare Complexes.

The main idea of this Educational and Welfare Complex is the creation of a nature-friendly environment for meeting various needs of contemporary children and residents of nearby territories (Fig. 6).



Fig. 5. The project «Urban Villas». by A. Shumakov [supervisor - prof. A. Merenkov]



Fig. 6. The project «Educational and Welfare Complex» by E. Abasheva [supervisors - prof. A. Merenkov, arch. V. Gromada]



Fig. 7. The project «Art School - Center of Creative Education» by E. Grigoreva [supervisors - prof. A. Merenkov, M. Besirganov]

This complex can respond to the environment by:

- transformed multilayered facade construction of the atriums and recreation spaces;
- 2) isolation from the street noise by vertical planning of the complex territory;
- 3) maximum orientation of playgrounds to the river;
- 4) environment-friendly planning of this complex provides maximum contact with nature by roof gardens with playgrounds, all season atriumgardens and using green low-pitchedroofs/ramps. Variable multilayered environment. Further development of this idea can be seen in the project Art School – Center of Creative

Education (Fig. 7). These projects combine the motto «nature around, nature inside, nature on». The emphasis in these projects (Fig. 6, 7)

is made on disclosure of the idea of "variable multilayered environment".

The second group of projects are «naturedissolving». The idea of dissolving in nature demonstrates The Residential Complex «Biosphere» for the town Miass (South Ural). This naturefriendly Residential complex has south-oriented terraces and environment-friendly apartments that include natural elements as private mini courtyards and natural barriers. The main project purpose is to decide the contemporary human problem of separation from nature and there it includes nature in the residential environment (Fig. 8).



Fig. 8. The project «Residential Complex «Biosphere» by E.Kropaneva [supervisors - prof. Y. Yankovskaya, N. Akchurina]



Fig. 9. The project «Museum complex» by S. Sitko [supervisors - prof. A. Merenkov, N.Doronina]



Fig. 10. The project «Water Park» by P.Korepin [supervisors - prof. A. Merenkov, N. Doronina]

aspect of nature-dissolving Another is demonstrated by civic building in reclaimed and restored natural territories. The museum complex is located in a reclaimed quarry zone near a lake (Fig. 9). The concept of this complex is directed at including surrounding natural elements and forming an eco-oriented nature-friendly humanistic and harmonious environment. Further development of this idea can be seen see in the project Water Park (Fig. 10). The emphasis in these projects (Fig. 8-10) is made on disclosure of the ideas of "poetry of boundariness" and "architecture of natural barriers".

The third group of projects, «nature-similar», are devoted mainly to Social and Cultural Complexes. Two projects (Museum/Gallery of Contemporary Art and Theatre of Emotion) are developing artistic vision «gesture» and «trace» of the living creatures, abandoned them when converting dead matte.

Museum / Gallery of Contemporary Art and Architecture. Architectural form generation is revealed through the poetics of the nature and bionic forms. This project is developing the phenomenological direction in Form Generation in Architecture and it is oriented to form organization from the standpoint of an individual with his corporeity. It demonstrates the fundamental phenomenological ideas of «thing as gesture», «trace», «shell-bound». The metaphor of the drop of water that can be carrier and keeper of information, it is becoming the basis of the creative environment that is encouraging creative development of the individual (Fig. 11, left).

Theatre of Emotion. The plastic image and form creation of the Theatre of Emotion is demonstrating the experience of the history of human relationships from origin to extinction (Fig. 11). The interior space is constructed by the principle of Enclosed Systems with multilayered atrium spaces pierced with vertical circulation structures (Fig. 11, right).

The project «Museum of Nature» gives a different interpretation of nature-similar. The nature-similar is revealed through the metaphor of a tree. Tree as a symbol of evolution, beauty and power of nature was the basis of architectural form generation and structure of this project (Fig. 12). The emphasis in these projects (Fig. 11, 12) is made on disclosure of the phenomenological direction and ideas of "the poetry of boundariness" and "variable multilayered environment".



Fig. 11. Projects: «Museum/Gallery of Contemporary Art and Architecture» (left) and «Theatre of Emotion» (right) by V. Mehontcheva, A. Chebikina [supervisors – prof. Y. Yankovskaya, N. Akchurina]



Fig. 12. The project «Museum of Nature» by Y.Davletbaeva [supervisors - prof. A. Merenkov, N.Doronina]



Fig. 13. The project «Club-Type Residential Building» by A.Chirkov [supervisors - prof. A. Merenkov]



Fig. 14. The project «High-rise apartment buildings» by A. Grigoreva [supervisors - prof. A. Merenkov, N. Doronina]

The fourth group of projects, «natureinclusive», is devoted to Residential and Multifunctional City Complexes. The main ideas of nature-inclusive complexes are compensation of the adverse effects of the industrial urban environment and introduction of nature components into architectural objects. The roof gardens and green walls are located on the architectural volumes; green atriums and winter gardens are integrated into the buildings.

Club-Type Residential Building is located in the civil urban complex «Yekaterinburg-City» (Fig. 13). The green atrium space is integrated into the building's structure and connects all apartments of this club-house into a social community with welfare facilities. The structure of the ground floor includes small apartment gardens and flats' own entrances. Nature is included in other flats by two-level green family rooms.

High-rise apartment buildings with welldeveloped public services. High-rise apartment buildings in a large industrial city become an

# Conclusion

The theoretical interpretation of "green architecture" as stated in the first part is disclosed in our students' projects in various ways, becoming a way to attaining the design objectives as well as a metaphor for defining the artistic appearance of the architectural object. Eco multilayered vertical garden that compensates adverse effects of urban environment and responds to seasonal and climatic changes (Fig. 14).

The emphasis in these projects (Fig. 13, 14) is made on disclosure of the ideas of "architecture of barriers and stimulus" and "variable multilayered environment".

Theoretical concepts have many interpretations in project work, but they are meant to stimulate design experimentation and discovery of new approaches to architectural form generation and implementation of the ideas of «green architecture».

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Kopsavilkums. Arhitektūras prakses attīstība ir iespējama tikai caur būtisku izpratni par galvenajām arhitektūras attīstības tendencēm mūsdienu pasaulē. Viena no svarīgākajām tendencēm ir "zaļā arhitektūra". Šajā rakstā viedoklis par "zaļo arhitektūru" tiek prezentēts divas daļās: teorētiskā interpretācija un eksperimentālais dizains. Teorētiskās interpretācijas iekļauj trīs grupas: arhitektūras šķēršli un stimuli; robežu poēzija; daudzslāņaini mainīgā vide. Rakstā vizuāli tiek demonstrēti dažādi eksperimentālie projekti, kas ir izdalīti dažādās grupās.

# Tendencies of the elements of modern art and architecture in the historical centers of towns in Zemgale

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Abstract. Today, it is impossible to view architecture, art and landscape space in isolation. Together they create a definite town planning environment with its inherent scale and proportion.

Historically changing as the attitude and requirements of the society towards architecture are changing, architecture also changes on the whole.New technologies and 3D-designing at present opens up unprecedented opportunities, which are vividly marked in the works by the 21 century architects-architecture evolves as an art, in its expressions using various ways of form creation [1]. Experiments in the field of synthesis of arts have become the main driving force due to the growing desire of the society for a new, qualitative, artistic and also sustainable architecture. Also, synthesis of arts is a novel instrument for promotion of competition among architects, since qualitative design proposals, which strive to tear down borders between different kinds of art, can be competitive as the demand in the general public grows for a particularly qualitative urban environment [1]. Today, it is impossible to view architecture, art and landscape space in isolation. Together they create a definite town planning environment with its inherent scale and proportion. The city is a seampless and complex form, which, at the same time, is changing and chaotic. Ready system, structured in levels, is not characteristic to it. Urban environment becomes a noticeable and recognizable place if it is designed clear and understandable for the users, so that they can give their own meaning and connection to hte surrounding to it [2].

Key words: Urban landscape space, cultural historical landscape, synthesis, aesthetic quality, historic centre of town.

#### Introduction

The development of the cultural landscape and the planning environment of the Lielupe river basin of Zemgale region is brightly described by the structure, scale and form of the natural base of the historical building of Bauska, Dobele and Jelgava. The growth of the region's three towns has been facilitated by the strong agricultural farming which is more attributable to the period of time from 80s of the 19<sup>th</sup> century when the economic boom wave from Western Europe contributed to the rapid growth of towns and manors in Zemgale. By contrast, the devastating years of the war and the post-socialist period in the second half of 20<sup>th</sup> century hit this region in the hardest way by changing the building structure of the towns' historic centers.

The review of the *research problem* is associated with the transformation processes of the 60s-80s of the  $20^{th}$  century which brought rapid changes in the cultural historical part of the town. During this

## Methodology of the research

The modern design technologies allow to look at the development of the urban environment and forecast its architectural spatial scale, proportion and form. Nevertheless, visual representation in urban planning is predominantly a modelling tool, which shows the mode of structuring information and allows the tracking of the development of architectural thinking. Therefore, the inquiry of period of time, a very small part of the old building was renewed in the part of the historical center which during the war years had gone to rack and ruin. In place of the burnt construction volume there were introduced new tree plantations or courtyards with a large garden zone where the length of tree with increased branches years and hid expressiveness of the old building. The trends of town planning over the last decade creates a new direction, affecting both the historical building recovery and a sound preservation of some green zones. Consequently, in the design of the historical center of the town, great attention is paid to the searches of synthesis of the art elements and green structure. The purpose of the article is to study the historical centers of separate towns in Zemgale region and evaluate the results, describing the collaboration of town planners and landscape architects through the principles of visual modeling.

visual aspects in urban planning is based on the cross-disciplinary research, as well as on the theoretical assamptions and on the examination of practical examples of urban planning itself [3]. The tendencies that set the trends of research design methodologies in art disciplines, architecture and urban planning indicate that the prevailing course is integration of artistic and scientifically analytic approaches. This integrated research design mode is known as research by design methodology [4].

In particular, it is important in evaluating the language and scale of architectural forms of the green plantations or new construction volumes next to the old building. After completion of reconstruction works in the historical centers of Dobele and Bauska, it is evident that in the projects there are evaluated not only the searches of elements of the architectural artistic composition of the historical elements of the urban space but there are

# Results

The historical center of Bauska has evolved along the left bank of the Mēmele river and in the composition of its building there dominates an approximately three kilometers long network of parallel streets (Rīga, Plūdoņa and Kalēju) which within 200 m in width along the river forms the socalled backbone with street connections. In the southern part, the building space is concluded by a relief rise with castle ruins. Each of the streets creates its own architectural spatial expression which, in the context with the natural base peculiarities (nature of the riverside, street width and its rise or fall in the relief, tree planting sites) characterizes trends of the end of the 19<sup>th</sup> century town planning style. Comparing the current situation with historical research materials of the town, in the part of the old town, a new tree and shrub cover network has been formed. It is favored by the disappearance of the old building and without starting its restoration, instead of the building, it is replaced by tree seedling zones, allotment sites or extensive lawns with flower beds in courtyards. It brings a new structure in the part of the historical center and gaps of the old one-piece building in the streets that interchange with random trees, shrubs or orchards. A visual pollution is created in the room where individual trees hide the architectural nature of buildings and interferes with the overall expression. The value of each object individually is not highlighted but the value is the building in its entirety and mood. In the overall character of the environment, the sheds and patios are also valuable. If they are pulled down, repainted or rebuilt, their value is lost [5]. Closest to the river there is spaced Riga street with one-storey and twostorey building. For the building of the north side of the street, the green courtyard space is the most impressive as it is complemented by the picturesqueness of the river's dolomite bluff and water bed.

One of the town's greenest areas is the Memele bank upstream the castle ruins where Riga and Dambja streets meet. In this place, around 1870, a watermill was built on the side-branch of the left also highlighted view lines with elements of the base of nature--individual trees, the church park, opening the landscape of the river bank in the view points, wedge-type sectors of paving, so intensifying the presence of the river's landscape space. Extensive glazing, tints of the facade paint, design of the architectural details, roof pitches and lining tints, street paving materials, colors, flower boxes, window shutters, small sculptures, etc. -that together creates semantics of the urban space which enriches perception of the historical center.



Fig 1. Bauska. Green holiday recreation space in Brīvības bulvāris /Liberty Boulevard/ [landscape architect I. Karpiča, project, 2011]



Fig 2. Bauska. The reconstruction proposal of the old mill construction volume and the canal [landscape architect I. Karpiča, 2011]



Fig. 3. Bauska. The reconstruction of the historic wooden building and the street cover [Source: photo by the author, 2012]

bank of the Mēmele which served the needs of the townspeople. In the post-war years, the building lost its functional significance and it was adapted to the needs of the production. After rebuilding, it got another scale and proportion that visually sharply competed with the adjacent castle ruins. Today, the ruins of the abandoned production zone remind about the reconstruction periods of the historical heritage. A narrow stretched area of approximately 400 m along the river with its side-branch is a picturesque natural base where in springs there may be observed the force of the river bed but in the summer its refreshment is enjoyable. The watercourse with flood-land meadow and slope of the old castle ruins creates recreationally rich landscape space which closes the western part of the town's historical center. The research of the cultural-historical heritage has contributed to a new project proposal, by adapting the old mill site for a wide recreational space with the mill lock and building reconstruction, rebuilding it into a hotel. In the project there is offered (landscape architect I. Karpiča, 2011) the left bank improvement zone with viewing platforms on which you may get from the side of Brivibas street, so using the difference in the existing levels with the flood-land meadow. Below the platform covering there is designed a glazed construction volume with exhibition and music halls that visually is linked to the both coasts of the river landscape and the sight lines to see the castle ruins. Along the river there is expected a walking path that connects the castle ruins with the historical center of the town. By synthesizing together ruins of the old building, glazed facades, viewing platforms, difference in the existing relief and street tree plantings' line, there is recovered the landscape space where the synthesis of expressiveness of the geo-morphological structure, historical heritage and architectural artistic elements gives a compositional completeness to the historical urban space.

Modernism trends of the 21st century in the historical building center of Bauska are sought in close context with the conditions of the detailed plan of the town. As one of the most important areas of the old town is the Town Hall square where there has begun reconstruction of the square and the Town Hall. In the 60's of the 20th century around the square along Kalna, Riga, Pasta and Plūdoņa streets, there were formed regular linden tree plantations which not only reduced the size of the old Town Hall square but also hid and spatially separated the perimetral building of the historic center, so creating a new scale of the urban space with a separate pedestrian zone. In order to recover the historical face of the urban environment, trees around the square were sawed away which caused a sharp public debate as a half century with the green plantings in the town's center had created to the town's residents a habit and myth of truthfulness of their location.



Fig. 4. Pasta street in Bauska has preserved the scale and expressiveness of the historical building [Source: photo by the author, 2012]



Fig. 5. The perimeter building of the Town Hall Square of Bauska is reflected in the glazing of the gate opening, so synthesizing a visually unified historical part of the town [Source: photo by the author, 2012]



Fig. 6. Reconstruction of the Town Hall Square and the character of its perimeter building [Source: photo by the author, 2012]

In the southern and eastern parts of the Town Hall square along Pasta and Plūdoņa streets, the remaining rows of linden trees have been saved for the time being as they partially hide the low-value not yet dismantled two-storey building at the back of the Town Hall. Unfortunately, the temporary nature of the linden tree line and thujas also hide expressiveness of the reconstructed historical wooden building in Plūdoņa street adjacent to the Town Hall. With restoration of the Town Hall, the town has regained the old tower spike in its silhouette. After the reconstruction, the individual parts of the Town Hall are restored-the tints of walls and openings, wooden veneer of the gate, the entrance portal, the view tower. Inside the gate opening, there are embedded glass cases which provide not only energy efficiency of the building but serves as a giant mirror that reflects the historical building in the opposite side of the square. The same gate with glass leaves is intended for the opposite building's facade in the next construction phase. The Town Hall facade is intended to be supplemented with artistic decorative elements, emphasizing the entrance portal with a small water bowl and a lion's mask cast in copper.

In the northern part of the square there has survived one of the trees, the canopy coloring of which adds to the color of the facades of the perimeter building. In the eastern side of the square, there is intended a space for a fountain and flower plantings. The position of the fountain symbolically marks the place where the old market water well was located and the direction in which from the adjacent Mēmele river rapids boats stopped and the goods were unloaded to take them to the marketplace or the Town Hall Square.

The town's historic center has regained not only its own architecturally spatial dominant but also functionally there are brought new activities into the urban environment which is particularly important for the infrastructure of tourism attraction as the adjacent Kalna street to the Town Hall square is VIA Baltic Road that takes tourists to Rundale as well. The investments attracted for implementation of the project have enabled the municipality to organize folklore performances, artisans' festivities, etc., in the center of the town. Adjacent to the Town Hall square, the wooden building in Plūdoņa and Pasta streets has regained its old facade form where there is carefully thought out tonality of facades, apertures and shutters. The street cover is also renewed, constructing different zones in color, texture and cover material for pedestrians, traffic and street rainwater storage facility. The variety of color and shape of the streets brings specificity and distinctiveness in the old city centre which is characteristic of the late pre-war years.

Like in Bauska, in the historic center of Dobele, there is illustrated the form creation synthesis of architecture and art elements which is enriched by the green structure of the urban space. As the compositional dominant of the historical center must be mentioned the Dobele Evangelical Lutheran Church with a park. Both in the north and the southern part of the park, open or free town planning spaces adjoin the park. In the southern part-the Old Market Square with an ashlar cover but in the northern part-an extensive lawn zone which was formed when the old building was burnt down in the



Fig. 7. Reconstruction of the Church Square in Dobele. The synthesis of the historical building and modernism elements of the square connection point with Krasta street [Source: photo by the author, 2012]



Fig. 8. The Dobele Crafts House. The searches of the historical building scale and form creation, in evaluating the present green plantation zones [Source: photo by the author, 2012]

war years. Like the Bauska Town Hall Square, the Old Town Square of Dobele has also regained its proportion of the historical building after reconstruction (bureau of architect Ivars Šļivka, 2011) as the row of the linden trees planted in the post-war years has been removed which not only reduced the size of the square but also hid the building character of its southern side (90s of the 19<sup>th</sup>century). In the eastern part of the square there has been designed a plastic footstep line that continues picturesqueness of the church park and transfers it to the opposite side of the square building where in the summer there is met color brightness of street cafes, you hear people talking, music and church bell tolls. Success in the composition is the idea of the architectural artistic solution with a small level difference which not only concludes the eastern part of the square but also creates a harmoniously unified transition to the historical building of Baznīcas street. A small visual dissonance after reconstruction of the square brings in the heavily-formed water well. Its scale also makes dissonance with the fragility of the adjacent fountain line which is built in parallel to the longitudinal axis of the church, so symbolically intensifying the importance of this site for the historical center. The western part of the square is concluded by Viestura street which continues the character of the old building. One of the buildings next to the square is reconstructed, it is built as a public character 3-storey construction volume (architect J. Kazlovskis). A successful architectural solution is the constructive part of the roof of the building which is concluded by a wooden element of a flat semi-circle shape, so providing a good dominant point which emphasizes the axis of symmetry of Skolas street and creates a compositional link of the street building with the Market Square. The building character of the intersection of Skolas street and Viestura street serves as a turning point for the street network that successfully connects the historical town center with landscape space of the Bērze the river. Its expressiveness is supplemented by the bank line of the river, the tree cover and the silhouette of the castle ruins. Like the Old Town Hall Square of Market the Dobele Square Bauska, has a characteristic common link of the historical building and the wedge-type "blue-green" base of nature. It is possible to intensify the visual expression of this site by a large glazed building at the level of the 1<sup>st</sup> floor of the building at 5 Viestura street (70s of the 20<sup>th</sup> century), so providing unity in the view lines for the landscape of the river bank with the Market Square.

reconstruction the Church After square. reconstruction of courtyards of the adjacent historical building is begun. One of the implemented projects is the reconstructed Crafts House (architect J. Kukša, 2011) which is located opposite the altar part of the Evangelical Lutheran Church and the entrance to the garden- the entrance to the church-in the patio on the opposite side of The longitudinal axis of its Baznīcas street. composition is designed as a continuation of the longitudinal axis of the church and it connects the Market Square with the adjacent Catholic Church. The author of the project of the building has given a philosophically strong continuation for the development historical center of the town which symbolizes the mythical in the Latvian style-God, Nature, Work. The wooden building form and material synthesis is illustrated not only in facades but it is also continued indoors where the compositional unity of the open and indoor space is achieved with an extensive showcases glazing. It allows to capture a continuation of the exposition from the open space to the indoor one (looms, spools, woven colorful canvas, spinning-wheels, stove with an inglenook, onion strings, а wooden benches, etc.). Today's modern technology in construction (in particular, provision of thermal efficiency) brightly highlights the fact that the building's historically functional importance is visually well linked with application of its architecturally historical elements.

The house of Crafts is located adjacent to the park part with a walking promenade that connects the Lutheran Church (the Church square) with the new Catholic Church. On the approximately 100 m long walk path in the historic part of the town there obtained architecturally landscaped is and philosophically rich space that maintains information about development of the urban environment over centuries. Dobele, as the center of fertile Zemgale center, where there are the Tērvete, Pokaiņi, Īle, Annenieki and connected Glūda areas, forms a place where the countryside values of Latvia focus from the Lilac Garden of Upītis to fruit and berry varieties from breeders gardens. Consequently, the Crafts center with the market zone has functionally convincingly found its place in the historical part of the town.

The Pārlielupe area in Jelgava - in approximately 1.5 km long strip of land along the right bank of the Lielupe river from Cukurfabrika /Sugar Refinery/ (1937-2011) to the Zorgenfrey Garden (80s of the 19<sup>th</sup> century--1945) has repeatedly changed both functionally and in composition. The manufacturing buildings of the sugar refinery with the huge chimney alongside with the old locomotive depot construction volumes and the metal constructions of the railway bridge-even a couple of years ago-in the city's silhouette marked a clear industrial landscape space. At present, after the factory's dismantling (2011), the meadows are restored. The former location of the sugar-beet piles is just indicated by the preserved row of linden trees that impersonally end in the meadow and create emotionally powerful feelings of the passing of time. The idea of the cultural historical heritage and creation of the industrial park was categorically denied by the international investment fund. By disappearing of the production zone and the shrub cover areas around it, the embankment has gained a new promenade place and a beach with view lines to the palace of Jelgava and the bridge. Next to the promenade, a new silhouette of Pārlielupe starts to highlight a public building (business and innovation center, a place for sporting activities -2008).

300 m away from the river, in 1937 the Zemgale National Economy Exhibition was opened, the area of which occupied 12 ha of land. From the seven exhibition pavilions there has stayed only one-the Bank of Latvia Pavilion (architect P. Kundziņš). After reconstruction its facade has regained its historical glass showcase with height of 5.0 m. During the war years, the pavilions were used as the location for the repressed, deporting them later to Siberia. In the 50's-60's of the 20<sup>th</sup> century, the exhibition's building is dismantled and in the area there is built a hospital, residential buildings and a prison. In the distance of 200 m between the hospital and prison, in the 70's planted linden alley marks a longitudinal axis to the former exhibition pavilion for the Bank, so creating a successful divisional green area between the functionally and psychologically very different building spaces. Thanks to the linden tree plantations, it is possible to perceive the small philosophical historical space in which there is also placed a commemorative sign to the repressed, compositionally not disturbing the sight line to the former exhibition pavilion for the Bank. In the relatively small part of the urban space, there focuses an informatively dense historical "presentation" in the architectural, artistic form and green planting harmony.

In the urban space part, occupying only 2 ha of land, for approximately 40 years the out-of-town pasture area has been transformed several times, concentrating a dense informative historical layer in the architecture compositional and green plantation termsthe Bank of Latvia Pavilion (1937), the prison area (50s of the 20th century and the Cultural Center (2011) -as a bright example of the change of three different political powers. In 2011, the prison was closed and in its place there is being created a detailed plan for a new development of this area.

The transformation of the culturally historical landscape space 1.5 km in length for the right bank of the Lielupe river is concluded by the green recreational zone-the Zorgenfrey Park (90s of the 20<sup>th</sup> century) which was created by Count von Medem 250 m away from his summer residence-Valdeka Palace. In the post-war years, the park has lost the monument to Kurzeme Governor, General V. Driessen (1797), tea houses, walking paths and fountains, retaining only individual trees. After the park's reconstruction in the 90s of the 20th century, it is created as a memorial site for the repressed inhabitants of the city. The location of the area of the park at the intersection of the streets made it possible to create a diagonal axis of symmetry of the composition as a central promenade that connects the historic entrance to the park with the memorial stone to the repressed people.

Behind it, there is maintained an oak which was planted by K. Ulmanis in the 30's of the 20<sup>th</sup> century, so symbolically telling about the fate of the nation. For the compositional emphasis of the park's axis, there is introduced a new sculptural work that imitates a railway track and eternity where are taken the town's residents. A polished granite, metal and concrete (sculptor G. Svikulis) in an inclined plane emotionally powerfully work as an accent at the beginning of the promenade and it is a message to the town about the 20<sup>th</sup> century tragedy there. Double line tree plantations of Kalnciems street and Vecais road as a green frame protects the cultural-historic space of the park on a daily basis. The emotional increase walking or driving along these streets every day is not noticeable but



Fig. 9. The Bank of Latvia Pavilion (1937), buffer plantations of the row of linden trees (1965) and a monument to the repressed people (1999) in Jelgava, vivid example of layering of the architecturally scenic expression forms of three different political powers in the urban space [Source: photo by the author, 2012]



Fig. 10. The memorial sign in Svētbirze/Holy Grove/ in Jelgava [sculptor G. Svikulis, photo by the author, 2012]



Fig. 11. Oak alley between the street and the Memorial area [Source: photo by the author, 2012]



Fig. 12. The searches of synthesis of elements of architecture and art and the green plantations for reconstruction of the historical center of Jelgava [architects A. Belikovs, M. Geidāne-Ozoliņa, A. Ziemeļniece, 2007]



Fig. 13. The searches of synthesis of elements of architecture and art and the green plantations for reconstruction of the historical center of Jelgava [architects A. Belikovs, M. Geidāne-Ozoliņa, A. Ziemeļniece, 2007]



Fig. 14. The searches of visual modeling for the historic center of Jelgava [landscape architect A. Belikovs, 2007]

when entering the area of the park which is surrounded by dense tree lines, there is a feeling of coming into the "green" monumental art space that philosophically powerfully affects the viewer. An important role plays the current height of the trees which should not be lowered. There is possible only side branch sawing away in order not to reduce the traffic safety in the autumn leaves' fall or during heavy snowfalls.

The diagonal of the compositional structure of the park, crossing Kalnciema street, visually gives

connection with the landscape space of the Lielupe river and the silhouette of the palace. The given urban space over more than a century has changed from a picturesque recreation spot to a monumental memorial zone with strong linear positioning elements of composition and character of the tree plantations. The historical green zone between Valdeka Palace and the given park has disappeared, there is created a place for large-scale commercial construction volumes and a hotel with a place for sporting activities.

# Conclusions

The intensive changes of the culturally historical landscape space of the towns in the Zemgale region over the last century have been influenced by a number of factors-the presence of a highly developed agricultural production, a good road infrastructure, the geographical location of the towns around Riga and fluctuations of the post-socialism economic policy. Conversely, a rapid attraction of investments by local governments of the Zemgale region over the last decade has contributed to the tendencies to renew and preserve the historical building parts of towns. It has enabled architects to seek new architectural artistic values and a functional balance in the culturally historical part of the urban space.

Looking at the implemented projects and development proposals, as well transformation processes of the historical part of the city, in the detailed plans there are developed criteria that determine the necessary to retain or not to retain the present green structure by analyzing its context in the building zone. The evaluation of the dendrological peculiarities of plantations in designs (width of tree branches, the root system, the nature of the canopy) is just as important as building height of the building, the tint of the facade paint, the compositional compatibility of the roof landscape in the street building.

In the current volatile conditions of the economic and social processes, there is quite often simplified an important urban knowledge, giving priority to short-term businesses and tax attraction by the local government rather than the inputs of values in the perspective.

The cultural and historical heritage is attributable not only to the preservation of individual objects but also to the totality of several elements-space, landscape, view lines, intellectual fulfillment, etc. It is also a greater responsibility of architects and landscape architects.

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Kopsavilkums. Zemgales reģiona Lielupes baseinam piederošās kultūrainavas un pilsētbūvnieciskās telpas attīstību spilgti raksturo Bauskas, Dobeles un Jelgavas vēsturiskās apbūves struktūra, mērogs un dabas pamatnes veidols. Reģiona minēto trīs pilsētu izaugsmi ir sekmējusi līdzās esošā spēcīgā lauksaimnieciskā saimniekošana, kas visspilgtāk ir attiecināms uz laika posmu no 19. gs. 80. g., kad ekonomikas uzplaukuma vilnis no Rietumeiropas deva pienesumu arī Zemgales pilsētu un muižu straujai izaugsmei. Savukārt, postošie kara gadi un postsociālisma laiks 20. gs. otrajā pusē šo reģionu skāra vissmagāk, izmainot pilsētu vēsturisko centru apbūves struktūru. Pētījuma problēmas apskats ir saistīts ar 20. gs. 60.-80. g. transformācijas procesiem, kas ienesa straujas pilsētas kultūrvēsturiskās daļas izmaiņas. Šajā laika posmā rūpīga vēsturiskā centra atjaunošanai uzmanība tika pievērsta mazāk. Pēdējo desmit gadu pilsētplānošanas tendences veido jaunu ievirzi, kas skar gan vēsturiskās apbūves atgūšanu, gan pārdomātu atsevišķu esošo zaļo zonu saglabāšanu, kas sekmē arhitektūras, mākslas elementu un zaļās struktūras sintēzi vecās apbūves teritorijā.Tas ir devis iespēju arhitektiem meklēt jaunas arhitektoniski mākslinieciskās vērtības un funkcionālo sabalansētību kultūrvēsturiskajā pilsēttelpas daļā.

Aplūkojot realizētos projektus un attīstības priekšlikumus, kā arī vēsturiskās pilsētas daļas transformācijas procesus, detālplānojumos tiek iestrādāti kritēriji, kas nosaka nepieciešamu saglabāt vai nesaglabāt esošo zaļo struktūru, analizējot tās kontekstu apbūves zonā. Patreizējos svārstīgās ekonomikas un sabiedrisko procesu apstākļos nereti tiek vienkāršotas pilsētplānošanas atziņas, priekšroku dodot īstermiņa uzņēmējdarbības apgriezieniem un nodokļu piesaistei pašvaldībā, nevis perspektīvē ieguldāmajām vērtībām. Kultūrvēsturiskais mantojums ir attiecināms ne tikai uz atsevišķu objektu saglabāšanu, bet uz vairāku kompozicionālo elementu kopumu - telpa, ainava, skatu līnijas, intelektuālais piepildījums utt. Tas uzliek arī lielāku atbildību arhitektu, ainavu arhitektu un mākslinieku kopsadarbībai.