

## **Urban Transformation Processes of Driksas River**

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### **Abstract**

Jelgava is the largest city in the centre of Latvia, which is able to raise interest with its continuous transformations in the city landscape. The territory analysed in the research – the waterfront of the Driksa river, which is located in the centre of Jelgava, and its beautiful landscape enriches the visual image of the city. The changes and transformation of the natural substrate are continuing all the time; it is one of the most significant places in the city of Jelgava. From the historical point of view, the analysed section of the Driksa river waterfront has experienced multiple significant transformations. Based on the historical data research and analysis of the modern cases, the aim of the research is – to analyse positive and negative aspects of the Driksa river waterfront in the city of Jelgava.

**Keywords:** natural substrate, waterfront, transformation processes

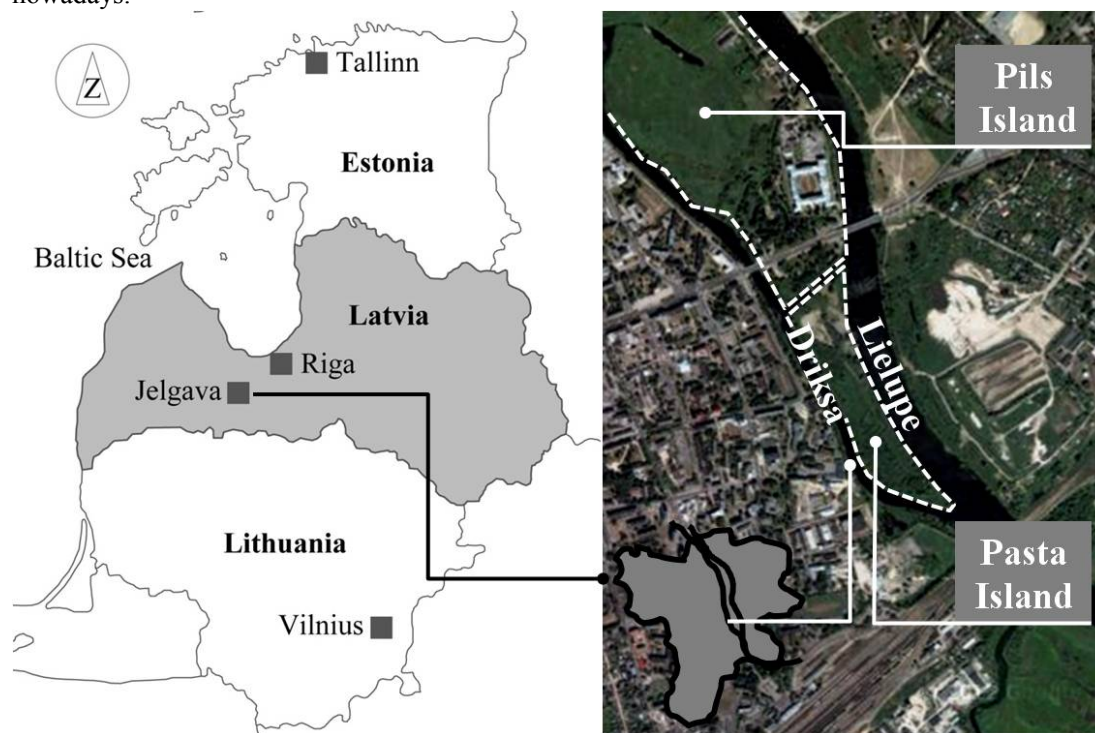
### **Introduction**

The city of Jelgava is located in Zemgale Plain. The plain was formed at the end of the Ice Age in the former Baltic freshwater lake area. It is difficult to imagine how around 6-7 thousand years ago, the place, where Jelgava is now located, was under the water. The oldest known settlement area of inhabitants – nomads, hunters and fishermen - was found around 8 km to the South from Jelgava, Jaunvirslauka near the river Lielupe, were at the time there used to be seashore. When the glaciers began receding to the North, the sea receded along with them. Thus, the Zemgale Plain and the river of Lielupe with its multiple tributaries and the river of Driksa were formed (Ieskats vēsturē). Jelgava has long been a settlement near the banks of the rivers Lielupe and Driksa and it had been an important city for the military and economic space of the medieval Livonia (Spārītis 2011). The city environment is transforming and changing with the times. It has been both in the recent and more distant past, but there are positions that remain unchanged. One of them is the interaction between society and architecture (Rukmane-Poča, Krastiņš 2011). Architecture creates the artistic image of the built-up area and it has a profound effect on human perception. Each stage of urban development has characteristic structures of spatial volume forming the overall urban composition of the city (Liepa-Zemeša, Treija 2009). Consequently, the article analyses the visual spatial transformations from the urban construction composition perspective which presently indicates the positive and negative aspects of the analysed territory, where a significant factor is also the present society's perception and opinions towards the analysed territory.

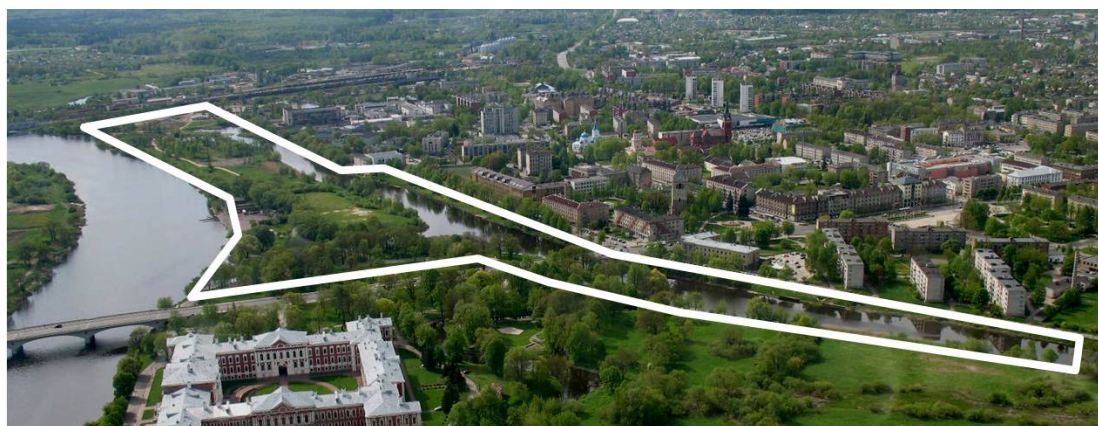
### **Study area**

The location of the analysed territory in Latvia, embankment of Driksa river in Jelgava city, illustrated in Fig. 1. The scale of the analysed territory is illustrated in Fig. 2. The schematically marked borders clearly indicate the extent of the analysed territory where significant visual transformations of the landscape space has taken place. The territory defined in this research has

been analysed based on the historical photo-materials (beginning of the 20th century) until nowadays.



*Fig. 1. The location of Driksa river in the city of Jelgava  
(Source: construction by the author, 2013)*



*Fig. 2. The scale of the analysed territory  
(Source: photo from A.Tomašūna private archive, 2008)*

## Material and Methods

The research was carried out during the period from the beginning of the year 2013 until March. The material obtained in the process of research was divided into two parts. The first part: Transformation processes of Driksa river. The second part: Transformations of Jelgava city silhouette in the 21st century. Both parts of the research concern the

territory of Driksa river in the city of Jelgava. The research material from the second part is available from: Ile U. (2013). Transformations of urban silhouette in the 21st century, Landscape Architecture and Art, Volume 3, ISSN 2255-8640 (online). To establish the current situation, in the process of research, the comparative method was applied. The method was used in order to obtain clear visual examples that would establish the positive and the negative aspects of the discussed section of the Driksa river embankment. The method was based on the comparison of the historical and present day photo-materials. The amount of the historical photo-materials used in the research comprises 30 images, out of which the 5 most relevant to the embankment of the Driksa river photos were selected in order to compare them to the present day situation. All the historical material used in the research was obtained from the National Digital Library of Latvia from the collection of the "Letonica" project "Zudusi Latvija". In order to obtain the most qualitative information for the research, the statistical data analysis, a survey of 133 respondents, was carried out. A part of the obtained results was used to establish the opinion of the society as regards the visual transformations that has experienced the embankment of the Driksa river. Whereas; the second part of the obtained results was used in the previously mentioned second part of the research on the transformations of the Jelgava city silhouette in the 21st century. The group of respondents for this research comprised citizens of the Jelgava city. The questions of the survey consisted of four questions concerning the visual transformations of the Driksa river embankment. For compilation of the results, the monographic or descriptive method was applied, which was based on the research findings and results from surveys.

### Results and Discussion

The embankment of the Driksa river has overcome several great transformations, which already today clearly denote what this area is becoming into in the next twenty years or more. The visual transformations are illustrated in the Figures 3, 4 and 5.



*Fig. 3. The view at the J. Cakste boulevard from the Pasta Island (Source: the collection of the Project "Zudusi Latvija" form the National Digital Library of Latvia, <http://www.zudusilatvija.lv/objects/object/9746/>, original keeper: National Library of Latvia)*

Broad street building works have began along the Driksa left bank in 2011. The Driksa bank (parallel to Akademijas street) has been the walk promenade with lime tree lane along a dense



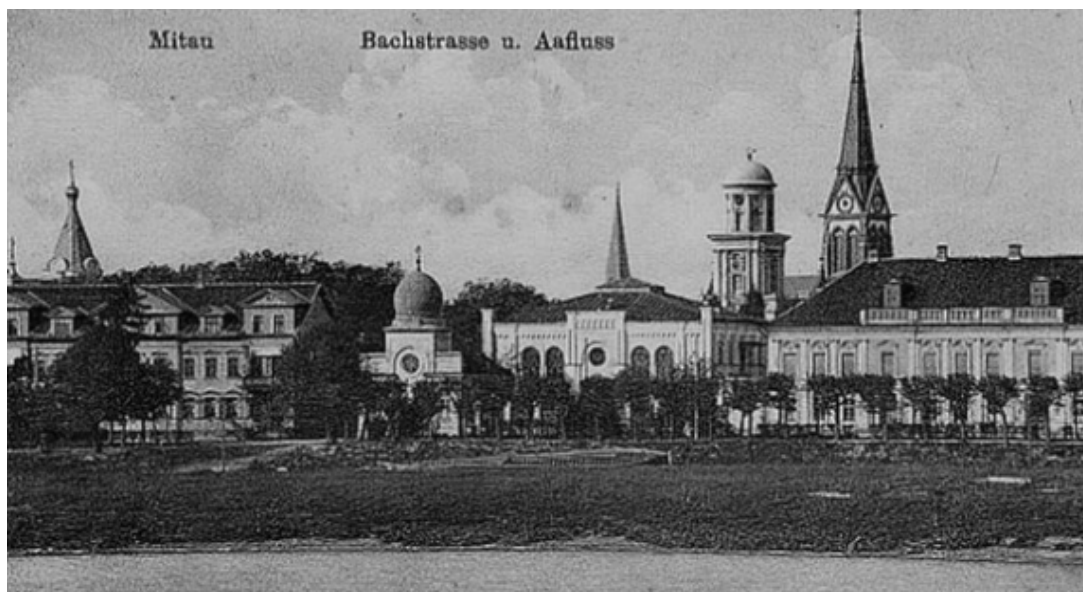
zone of bank building, where the synagogue and rich dwelling houses belonging to German nobility and well-situated clerks of town authorities were located. The location of buildings opposite the castle played not only a symbolic but also direct influence of the town power, Fig. 6. Historically the castle park territory was to the canal of Pasta Island along the side of which the road to the town from Riga was located. Therefore the prestige dwelling building mentioned above was located opposite the castle park plantings. The inner courtyard zone of the building was at the German church-Saint Trinity church (Ziemeļniece, 2012).



*Fig. 4. Driksa river embankment  
before reconstruction  
(Source: photo by the author, 2005)*



*Fig. 5. Driksa river embankment  
after reconstruction  
(Source: photo by the author, 2013)*



*Fig. 6. The view at the J. Cakste boulevard from the Driksa river (Source: The collection of the Project "Zudusi Latvija" form the National Digital Library of Latvia,  
<http://www.zudusilatvija.lv/objects/object/11440/>, original keeper: National Library of Latvia)*

During the war years when the street building burnt down, board square part of the Forest faculty has been formed having a sport zone which disarrange the structural character of the old

building. It refers to the exaggerated long (106 m) technical faculty building too, as well as to the hostel building. Particularly well it may be seen in the sight point coming from the Riga side where the brittleness of the town silhouette is depressed by the scale and proportion of the building structure. This year the new tree plantings of the reconstructed J. Cakste boulevard will gain the foliage of their crowns only after 30 years. At present not only the street reconstruction project, but also the building of a new pedestrian bridge is realized. The bridge connects the town space with the green landscape space of the Pasta Island and the new plantations with J. Cakste boulevard. The bridge is the continuation of the pedestrian zones of Driksa street (sorb lane plantations) to the Lielupe left bank. The walk and trade zone mentioned (250 m) in the span from Katolu to Akademijas street is to create a new architectonically expressive image of the town space. It is also referred to taking off the transport load in this space. From Akademijas street to J. Cakstes boulevard (150 m) or the connection at the bridge, reconstruction of the inner courtyard zone of hostels is to be realized. There a small square is necessary which would be compositionally as a green point at which the axis of urban space –the axis of the Driksas street pedestrian zone to which the side axis of Saint Trinity church would be connected (Ziemeļniece, 2012). Almost seven decades have passed since in the present Jelgava, formerly known as the capital Mitava (german: Mitau, latvian aka Mintava, Mintauja – name of the city, as reconstructed by linguists) in the Kurzeme (Courland) duchy – in the centre of the city, as seen in the panorama over the Lielupe and Driksa river, rises a blunt silhouette of a tower, which only a few years ago got not much less heavy – lowered tetrahedron pyramid-shaped roof. Being made out of glass, it still remains only a symbolical reminding of the last days of July in the 1944, when, with the retreat of the German army, along burnt down in flames the city of Jelgava and all its heritage. Today, the city rises again (Spārītis, 2011). The transformations of the Church of Holy Trinity is illustrated in the Figures 7, 8, and 9.



*Fig. 7. Driksa river embankment in the first half of the 20th century, Peak of the Church of Holy Trinity in the background (Source: The collection of the Project “Zudusi Latvija” from the National Digital Library of Latvia, <http://www.zudusilatvija.lv/objects/object/11105/>, original keeper: National Library of Latvia)*

The part of the boulevard promenade will continue also down the existing Driksa bridge creating under the bridge the pedestrian zone with separate stairs. The bank slope will be made with a concrete support wall with railing. The basis of the architectonical constructive solution of



the pedestrian bridge is the system of hanging shrouds at two support pilaster. It makes the bridges look visually light. At the opposite side of the bridge Pasta Island is projected as the green recreative zone for public activities and peaceful walks. It is planned to create the sculpture garden, locations for children plays and activities by additionally propping the bank line of the island. At the bridge in the island a coffee house with small boat station and roof terrace above it where the sight lines to the river and the boulevard promenade will be seen (Ziemeļniece, 2012), illustrated in the Figures 10 and 11.



*Fig. 8. The tower of the Church of Holy Trinity was left in this condition for many years after the World War II (Source: <http://blog.aigsia.lv/2011/12/jelgavas-sv-trisvienibas-baznicas-tornis/>)*



*Fig. 9. The tower of the Church of Holy Trinity today (Source: photo by the author, 2013)*



*Fig. 10. View from the promenade at the Pasta Island (Source: photo by the author, 2013)*



*Fig. 11. View at the cafe and terrace (Source: photo by the author, 2013)*

*Table 1: The obtained research results from the group of respondents*

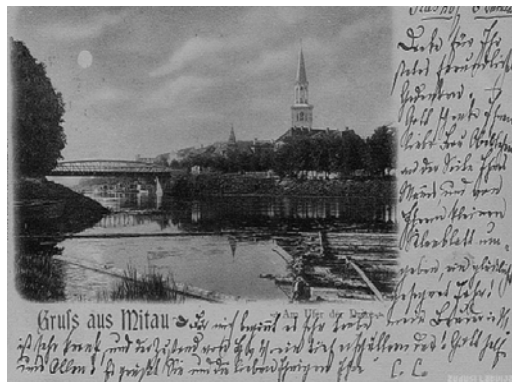
No	The research question	Obtained results
1	How do you evaluate the visual transformations of the Driksa river embankment?	%
	Positive;	93.2
	Negative.	6.8
2	Are you satisfied with the transformations carried out in the Driksa river territory?	%
	Yes, I am satisfied;	88.7
	No, I am not satisfied.	11.3
3	Do you often visit or take walks in these reconstructed territories?	%
	Yes, often, almost every day;	4.5
	Average, a couple of times during the week;	52.6
	No, I do not visit this territory at all;	17.3
	I have never been in this territory before, but I intend to do so in the future.	25.6
4	Would you suggest to visit this territory to other people?	%
	Yes, definitely, because I am proud that Jelgava has such a place.	75.9
	No, it is not necessary, because I find this territory to not be suitable for spending free time;	1.5
	It is hard to say, I have not considered it.	22.6

*(Source: construction by the author, 2013)*



*Fig. 12. The view at the J. Čakste boulevard from the Pasta Island*

*(Source: The collection of the Project “Zudusi Latvija” from the National Digital Library of Latvia, <http://www.zudusilatvija.lv/objects/object/11083/>, original keeper: National Library of Latvia)*



*Fig. 13. The view at the Driksa bridge and Holy Trinity church from the Pils Island*

*(Source: The collection of the Project “Zudusi Latvija” from the National Digital Library of Latvia, <http://www.zudusilatvija.lv/objects/object/11107/>, original keeper: National Library of Latvia)*

The information obtained in the research from the respondents proves that the reconstruction of this territory was necessary, and almost every respondent gives this territory a positive evaluation. The survey comprised 133 respondents, out of them 103 were women, and 30 were men, and the average age of the respondent group was 29.5 years. The results obtained in the research and the opinions as regards the Driksa river embankment are illustrated in Table 1.

Consequently, no matter how beautiful and noble the historical sites were in the territory of Driksa river, illustrated in Figures 12 and 13, these images will forever remain in these photo-materials as unforgettable historical evidences of this territory. The present image of the areas, as established from the research, proves that the embankment of the Driksa river is an important object also for the interviewed respondents. The territory of Driksa river has lost the alley of lime-trees, and its natural shorelines, see Figures 14 and 15, nevertheless; the society gives positive evaluation to this greatly reconstructed area and are motivated to visit this area to spend their free time, see Figures 16, 17, and 18. The amount of the negative aspects in this research comprises the evaluation of this part by the respondents who do not find this territory to be suitable for recreational purposes, and who do not visit this territory and evaluate the transformations of the area negatively.



*Fig. 14. Driksa river right  
and left banks in 2005  
(Source: photo by the author, 2005)*



*Fig. 15. The view and the Pasta Island  
in the autumn of 2005  
(Source: photo by the author, 2005)*



*Fig. 16. The view and the Pasta Island in the spring on 2013  
(Source: photo by the author, 2013)*





*Fig. 17. Driksa river right and left banks in 2013 (Source: photo by the author, 2013)*



*Fig. 18. The new Mitava bridge over Driksa river  
(Source: photo by the author, 2013)*

## **Conclusion**

The territory analysed in the research – the Driksa river embankment needed visual transformations, because previously the territory was not formed as a recreational area for the inhabitants of Jelgava and other guests. In general, in the beginning of the 21st century, this territory was still not fully utilized, in turn, it was left as a natural landscape space in the urban environment territory, where frequently occurred multiple destructive processes, such as pollution, which diminished the willingness to spend any time in this territory.

The majority of the citizens of Jelgava used to avoid this territory. As a result, because of the project initiated in 2011, this territory has now gained new sights, recreational areas, territories for family walks. In any case, the positive qualities in the analysed territory prevail, as opposed to the few negative aspects established in the research process, which mostly concerned the opinions of the residents. The transformation processes of the Driksa river embankment in the urban environment can be evaluated as successful, and they distinguish new tendencies in the development of the city of Jelgava.

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