Contemporary architecture of the Baltic capitals: the global in the identical, the identical in the global

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Abstract. The article analyzes new architecture of the Baltic capitals – Tallinn, Riga and Vilnius. Interrelated processes are studied: manifestation of global approaches to its formation in the identical ones and identical approaches in global ones. Architecture in these European cities has always been developed according to their specific models. Especially in them, during fifty years from 1940 to 1990, the interaction (or a struggle?) of the Soviet and Western architecture was reflected in the most vivid way. And this was intertwined with deep historic traditions of architecture of the Middle Ages and baroque. What is happening with the historical-architectural environment of these metropolitan cities today? How are the layers of time understood now? Are the “splices and patches” in the city fabric noticeable or is it integral, indivisible and homogenous? And finally, what is preference given to – global or identical technique, to form new architecture? To answer these questions, architectural objects of various typologies having been built recently are analyzed. Special attention is paid to the fate of the Soviet architecture heritage, as well as to the issue of buildings’ renovation and adaptation of cultural heritage sites for modern use.

1. Introduction
The oppositions “globalization” and “identity” traditionally raise many discussions in various fields of knowledge. In recent years, with expansion of the informational space the trend of these discussions has shifted from the comparison analysis of the global as universal and identical as regional tied up to the location (space and time) to the plane of the access to information. At the same time, the meaning “identical” as the same with regard to the given location or cultural landscape addresses directly to architecture. It is not by accident that the concept of “related insulators” was suggested exactly by a group of architects in their search for the balance between separation, isolation (formation of an island) and connectedness (formation of a context) to describe a “post-settled” society. (Morphosis Architects, USA) [1]. This paper presents an investigation of the influence of different content of additives of the pre-treated aluminium oxide powder on the structure of lead-tin-base bronze under formation.

In an attempt not to overload this paper with examples, the authors will try to illustrate the key ideas by just a few individual architectural objects of the Baltic capitals. The following structure of presentation develops the theme in the most appropriate way:

- The global in the identical:
- today’s fate of the Soviet architecture heritage;
- contemporary architecture of public-business centres;
- contemporary architecture of centres of arts.
  The identical in the global:
- contemporary architecture of housing;
- renovation of historic areas and adaptation of sites for modern use;
- public spaces and historic-cultural areals.

2. The global in the identical
2.1. Today’s fate of the Soviet architecture heritage

Studying contemporary architecture, one cannot but speak about the modern fate of the key objects identifying the identical image of every city.

The most enigmatic object in Tallinn is the Linnahall built as a Palace of Culture and Sports in 1980 for the Summer Olympics on the shore of the Gulf of Finland (architects R. Karp, R. Altmyae). A.V. Ikonnikov wrote about the architects’ idea: “Connecting the city and the sea, they tried to make the building visually unobtrusive. According to their idea, it had to be not a barrier but a bridge opening the path to the sea… The idea of a “bridge” had determined the axial structure of the volume and its perimeter shape resembling pyramids-platforms of the Mayan culture in the Central America” [2, P. 433]. As if in this quotation the post-Soviet fate of the venue was predicted – the large, empty and quite explainable in its abundance Linnahall attracts people’s attention designating inappropriate “imperial” scale in a small-size European city.

From this position, it is an interesting fact that another object of that period and of the same author still exists and has numerous recipients. It is the building of the National Library of Estonia (architect R. Karp, 1984-1992). They call it the last monument of the Soviet architecture for it was completed already after the USSR collapse in a difficult for Estonia period of establishment of the independent state. A huge pyramid crowns an enclosed volume with corner towers, which is square in plan and is placed on a high podium. The outside staircases, terraces, cascades and viaducts, complementing the main volume, work for its ties with historic environment. “…By its giant forms the building resembles medieval castles and bastions neighboring the Old Town” [3]. The facades are reveted with limestone, which relates the building with neo-Roman constructions of the XIX century; limestone is also used in the interior. The large-scale multi-functional object beside the proper library premises includes exhibition spaces, theatre and conference halls.

In 2017, the National library of Estonia was granted the status of an object of cultural heritage just in 24 years after its commissioning, which is a unique precedent for a post-Soviet region. In the 1990s, the Department of cultural heritage of Estonia studied the Soviet lists of monuments of architecture, and almost all objects were included in a new State registry, at the same time division of monuments into federal and regional ones was abolished [3]. Since that time, regular work on identification of valuable objects has been carried out.

Tendentiously, that the project of the Latvian National Library (Figure 1) developed in the late 1980s – early 1990s, was implemented only in 2008-2014. The authors were American architect of Latvian origin Gunars Birkerts and Latvian architects Modris Gelzis, Mersi Mezuli, Sandru Laganovsky, Daini Smitu. The decision on construction of the National Library was taken by the Soviet of Ministers of the Latvian Republic in 1991, then again – in 2000, and in 2006 the preparatory stage of the project’s implementation was started.

The building is situated on the left bank of the Daugava River opposite the city’s historical centre. According to the architects’ idea, the outline of the structure should have been associated with waves and sand dunes, while the façade with sharp peaks – to address to the spires of the churches in the Old Town. The object was awarded the Prize of Riga 2015. The venue was given the name “The Castle of Light” (“Gaismas Pils”), which is quite disputable, because it looks like a large black mountain when viewed from the right bank of the Daugava River in the light of the postmeridian sun. The facade divided by narrow vertical embrasures ending behind its outline resembles bookshelves with uneven volumes.
2.2. Contemporary architecture of public-business centers

Of course, having touched the theme of the global, one cannot but refer to the structure which is a symbol or even a model of intervention of the global in the established fabric of the city – the City. The City in Vilnius is situated on the right bank of the Neris River opposite the Old town, confirming quite a traditional opposition of the riversides in historic cities: the old town vs. Donau-City in Vienna, a bank of museums vs. the City in Frankfurt-on-Main.

The high-rise buildings of the business centers are well-viewed both from distant points as well as close ones. Further, behind the Neris River there lie two neighboring locations, Zhirmunay and Lazdinay, attributed to the history of Soviet architecture. This area has always been the “city within the city”, global in its identity, where the high-rise buildings of the City constitutes its front façade with exits to the embankment which is being under reconstruction today, according to the All-European theme of public space formation.

Let us look at just one, the most recent object, which is still under construction, namely, the business centre Park Town, architect Remigiyus Bimba, company “Architektūros kūrybinė grupė”, 2017–2019 (Figure 2).

This is a large complex of total area 23,204 m² [4]. A two-part composition of the object is formed by a combination of volumes U-shaped and rectangular in plan. The façade arrangement includes very narrow window apertures along the entire height underlining integrity of the form. The smooth outline...
of the roof, which addresses the natural surroundings – the Sheshkine Hills - also works for the theme of integrity. The building of the business centre Park Town is constructed according to the BREEAM standards, the facades are equipped with solar collectors.

The cultural and recreational centre of this district and the main public space of the embankment of the Neris River is the National Art Gallery (architects Gediminas Baravikas and Vitautas Velyus, 1980, reconstructed by architects Audrius Bukas, Dzintaras Kuginus, Darius Kaplinskas, 1995-2009). The composition of protruding snow-white cubes on a common podium works on a contrast with tower buildings of the business centers and looks targeted from the point of view of object typology.

2.3. Contemporary architecture of centers of arts
The theme of arts as an integral and unifying one leads to the next object in Vilnius. This is the Centre of Modern Arts MO Museum, architect D. Libeskind in collaboration with Do Architects and Baltic Engineers, 2018. The building of the museum is a white plaster straight-line volume with a cut-off corner on Pilimo Street, not far away from its crossing with Yo. Basanavichyus Street near the Old Town – the historical centre included in the List of UNESCO World Heritage. The museum was built on the place of the former cinema theatre “Lietuva”, and by its lapidary form, it addresses the lost object (Figure 3). A wide outside staircase crosses the building diagonally leading to the courtyard space, while a spiral staircase inside the volume, being the centre of the composition, leads to an open step terrace of the roof where public events are held. The author of the project architect Daniel Libeskind believes that the city (Vilnius) has changed for the last five years much more than during the previous twenty years. He says: “As a person who sincerely values the history and beauty of Vilnius, I believe that this building will become a beautiful place for enjoying the art and spirit of the city” [5].

Figure 3. Centre of Modern Arts MO Museum in Vilnius, architect D. Libeskind in collaboration with Do Architects and Baltic Engineers, 2018

The Vabamu Museum of Occupations and Freedom in Tallinn, architectural bureau Head Architects, 2001-2003, continues the theme of museums. It is situated not far from the National Library of Estonia, on the opposite side from the church Kaarli. This is a small glass volume with a recessed entrance instead of a cut-off corner. Outside the entrance, there is a sad line of suitcases, the work by Taavi Tulev, reminding of the people of Estonia forced to leave their houses during the World War II. The architectural space transfers to the sound of farewell music. The small, chamber scale of the building underlines that that horrible period in the history affected every citizen.

Narva Street leads from the historical centre of Tallinn to the district Kadriorg, where quite a number of objects of new architecture of different architectural typology is concentrated between the park and the sea.
The business center Citadele – the office of the insurance company Compensa, 2015-2017, is a composition of several 4-story volumes having rounded corners with a slit of vertical window glass to the entire height of the building. The ventilated multi-layered facades are revetted with dark-grey tiles in an overlapping manner that creates direct association with a wooden ploughshare. Near the complex, closer to the sea, in a park zone there is a “microdistrict” of elite apartment houses [6]. Their architecture has no references to the historical city villas of Kadriorg of the early XX century, but rather to the architecture integrated into the natural surroundings.

3. The identical in the global

3.1. Contemporary architecture of housing

Kalamaya is a former fishermen’s village of Tallinn famous for its wooden historical buildings. Houses recently built here address the esthetics of traditional Estonian dwelling. Using elements of low-rise architecture in middle- and high-rise buildings is a rather complicated theme, both from the artistic and technological point of view. Among widely used features characterizing modern house architecture of Tallinn as identical, one should mention a middle number of stores, peaked pitched roofs, but more often their imitation, a wide use of wood and synthetic materials as stylized wood for building exterior finish.

Architecture of the new covered Baltic market (KOKO architects, 2017), which flanks the Kalamaya area from the side of the railway station and is accepted as a district public centre, continues the theme of identity. Traditional for the structures of given typology design of folded roofing, which may be considered as a pitched roof as well as a temporary wooden cover, creates the main artistic and structural motive of the construction. It covers the square in front of the main entrance and three-level indoor space of the market. Designed as a system of internal streets with multicolored pavilions-houses, it is tectonically divided by the bearing elements in the form of branchy trees (Figure 4).

Figure 4. Baltic market in Tallinn, KOKO architects, 2017.

3.2. Renovation of historic areas and adaptation of sites for modern use

The Tallinn Creative Hub, a centre of modern arts, completes the Kalamaya area from the sea. This is the historical building of the boiler house of the former Tallinn electric power station; two giant boilers in its hall remain intact. The cultural cluster comprises a whole number of structures; some of them are under protection as cultural heritage, namely, the boiler house, the gas storage, the trestle and the brick chimney.

From the chimney as a town-planning reference point, a series of other museum-exhibition objects spread along the gulf shore: the Patarei Sea Fortress Prison closed in 2003 and re-designed into a museum, the Seaplane Harbour Museum arranged in the hangars of the early XX century built in 1916-1917 (engineering company Christiani & Nielsen, Denmark). The constructive solution of the main building of the hangars includes three concrete vaults 8 to 12 cm thick and supporting columns.
This is the first known concrete-steel arch structure of such dimensions in the world: 36.4 m by 116 m. This unique structure was on the verge of failure, when the architectural firm KOKO architects won the tender for its reconstruction in 2009. Functionally, the hangars accommodated a new exhibition of the Estonian Maritime Museum. According to the conception of the reconstruction, spatial characteristics were preserved to the maximum, the structures were restored, and the “spirit of place” was maintained. The most substantial changes introduced into the object of cultural heritage during its adjustment for modern use was substitution of blind walls on two sides of the building for entirely glazed facades protected by massive sliding doors that follow the historic sample [7].

It is interesting to mention, that in the Baltic countries a historic fact of arrangement of hangars for public function has been already known: the central market in Riga is located in the hangars for Zeppelins storage. They were built before the World War I, and in the end of 1922 a tender was announced on their adjustment for a new city market. The winner was recognized the design by architect Paul Dreymanis, and five hangars were turned into five pavilions for market trade. The project was implemented in 1930.

Coming back to the seaside territory in Tallinn, one may state that complex revitalization of a rather vast area is taking place. Assigning the museum-exhibition and cultural-enlightening functions as dominating, as well as the whole spectrum of concomitant functions, to the preserved historic buildings has determined the objects’ viability, though communications between them, particularly, the embankment along the Gulf of Finland, requires improvement. Exactly improvement “sews together” the city fabric, turning it into the integrated public space. Renovation of quarter Rotermann in Tallinn serves an illustration of it. The pedestrian quarter Rotermann near the port has been turned into a new cultural centre in the XXI century. Reconstructed and modernized objects of historical industrial architecture of the XIX century are in harmony with the objects of modern architecture. A model of such a connection is one of the brightest objects of the quarter Rotermann – the Old and New flour storage, Hayashi – Grossschmidt Arhitektuur, 2006-2008, that faces the central square. The construction consists of three parts: the old flour storage, the new flour storage and the atrium connecting them (Figure 5). In spite of the fact that many former industrial buildings are still waiting for their reconstruction, the public space of the quarter has already been formed and is functioning. And, perhaps, the “permanent reconstruction” is part of the scenario of public space perception, too [8]?

![Figure 5. Old and New flour storage in quarter Rotermann in Tallinn, Hayashi – Grossschmidt Arhitektuur, 2006-2008.](image)

It should be noted that adjustment of industrial enterprises for modern use that lost their initial function has been an actual theme for a number of years. “This may be explained by several reasons. The main reason among them is the advanced development of industrial production technologies
compared to the possibilities of re-equipment of the existing buildings, on the one hand, and their unique valuable historical-cultural environment, on the other hand. Unlike local public buildings, industrial objects are situated, as a rule, on specially allocated territories, some parts of which are connected between each other according to the town-planning, as well as functionally and compositionally” [8]. Abundant industrial enterprises are often located on the periphery of the city centres, in the buffer zones, where a new life and new public spaces may and should be organized.

3.3. Heritage of Soviet architecture as a historical environment
At the beginning of the article we investigated key objects of the Soviet architecture, looking for manifestation of the global in the identical in them. Analyzing features of the identical in the global, we conclude it also with studying the architecture of buildings of the Soviet period.

“The first object designed initially as an integral part of a historic centre was the Palace of Art Exhibitions in Vilnius (1965-1967, architect V. Chekanauskas). Stylization was rejected; a “modern” form was brought to harmony with the surroundings, which was considered as a result of interaction of its functions with the environment. The building has filled up the corner of a row house quarter ruined during the World War II. The attempt to meet the spirit of place led to the developed plasticity of the volume and its rhythmic breaking-up” [2, P. 84].

The building of the Research Institute of Agricultural Economy designed by architect V. Chekanauskas and built in 1978 is located on a pronounced relief and has a complex configuration in plan [9]. Its linear composition extends along Kudirkos Street leading to the river is based on a combination of a flat façade with twinned vertical window niches and protruding rounded volumes of staircases. Following strictly the relief, the object directs the movement to the main street of the city – Gedimin Avenue that ends by the Government Quarters corresponding with the business centers of the City on the opposite bank of the river…

4. Conclusion
Based on the analysis of the objects of modern architecture of the Baltic capitals, the following conclusions may be made regarding its formation.

The global in the identical manifests in the following ways:
- occurrence of new objects on the border of historical centers of the cities;
- combination of scales in the attempt to place the construction in the environment;
- use of recycled materials;
- nature-like architectural forms.

The identical in the global manifests in the following ways:
- adaptation of cultural heritage for modern use;
- use of traditional motives of national architecture;
- use of technique of the low-rise buildings architecture in medium- and high-rise buildings;
- use of traditional finishing materials.

These conclusions refute each other reciprocally, as from considering an individual building we turn to the historical-cultural environment of cities as a whole. The plot of movement round the city defines formation of potential spatial frames, which ensures transformation of heterogeneous architectural objects into elements of integral city fabric uniting NATURE, HISTORY and SOCIUM [10]. And one comes to understanding that not the individual manifestations of the global or identical in this or that work determine features of modern architecture of the Baltic capitals, but care for the “spirit of place”, integrity of approaches, a system of improvement, and presence or formation of historical-cultural areas.

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