CREATING AN ELEMENT OF THE INTERACTIVE MAP OF THE LOST BAROQUE ARCHITECTURAL MONUMENT (ST. STANISLAV'S CHURCH IN PINSK) USING THE EXAMPLE OF THE EXTANT BAROQUE ARCHITECTURAL MONUMENT (ST. PAUL'S CATHEDRAL IN LONDON)

А.А. Савченко, 11 класс
Научный руководитель – М.В. Будик, учитель английского языка
ГУО «Средняя школа №3» г. Пинска

The original artistic culture of Belarus has been formed for centuries. The monuments of architecture are of particular admiration. But some of the buildings had been lost forever. Unfortunately, these monuments can only be seen in a few photographs and drawings.

Pinsk is not an exception. Some of the monuments did not change their architectural design and were preserved in their original form (the Franciscan Church of the Assumption of the Blessed Virgin Mary and the Franciscan Monastery), some were reconstructed (Bernardine Church (now it is Barbarian Church), Karl Baromey Church, Butrimovich Palace, the Casino Theater (now it is the Polessky Drama Theater), some were completely destroyed and then restored (Dominican Church (now St. Feodore's Cathedral), the Holy Assumption Leshchinsky Monastery (now the Church of the Nativity of the Blessed Virgin Mary), and some unique masterpieces were lost forever (Pinsk Town Hall, a castle in Carolina, the Great Pinsk Synagogue and the Church of St. Stanislav. These lost architectural monuments can now be seen only on a few postcards.

I discovered that in those days, St.Stanislav's Church was the largest Catholic church in the Grand Duchy of Lithuania, as well as one of the largest buildings in the Polish-Lithuanian Commonwealth. According to experts, the loss of this architectural monument for Polesie was the same as the demolition of the Cathedral of Christ the Savior in Moscow [1]. The Church of St. Stanislav was built in the late Baroque style. At the same time, St. Paul's Cathedral was built in London.

Coronavirus restrictions forced tourism to change rapidly, and as a result, a new sphere of tourism appeared - virtual tourism. Now virtualization can become reality, and reality can become virtualization, you can combine the past with the present, and the present with the past. Thus, I had an idea: what if I make an element of a virtual interactive map (a 3D model of St. Stanislav's Church) of the city of Pinsk, which will realistically display in three-dimensional space lost architectural monuments restored with the help of three-dimensional graphics.

It is known that architectural monuments built at the same time in one architectural style have similarities in layout and outer and inner design. So I decided to make a 3D model of St. Stanislav's Church based on old photos as well as the similarity of the architectural features of two masterpieces built in the same architectural style.

So, at first, I define the common features in the Baroque Style in different countries and analyse peculiar features of the development of the Baroque style in England and Belarus. Then I study and analyse

the history of St. Paul's Cathedral in London and St. Stanislav's Church in Pinsk as prominent representatives of the architecture of Baroque. And finally I create an element of the interactive map (a 3D model of St. Stanislav's Church) using the capabilities of SketchUp graphic editor based on the comparison of design features of St. Stanislav's Church in Pinsk and St. Paul's Cathedral in London and describe the process of its modelling.

Since there are only some images of the church these days, I tried to restore the design of St. Stanislav's Church and build its 3D model with the help of computer graphics. Of course, it turned out to be an approximate option, since there are no reliable photos of the interior of the lost church.

Since I had not previously worked on creating 3D models, at the first stage I had to choose a program to create a 3D model. Currently, there is a great variety of 3D modelling software. In choosing SketchUp, I have relied on their capabilities and the suitability of the aim and objectives of my research work. At the second stage of my work, I learned the basic techniques and tools of the program, learned to create simple images, draw, create, rotate, scale, move geometric figures, use tools, apply prepared textures such as bricks, wood, tiles, glass to models. At the third stage, I started building a model. As an object, I chose the Church of St. Stanislav in Pinsk. Based on the fact that we can find a lot of common characteristics in architectural monuments built in the same architectural style I used St. Paul's Cathedral in London as a model. The choice of this cathedral as a model is also due to the fact that it was created by Christopher Wren, one of the classics of Baroque architecture, and not a single architect doing his work in the late Baroque style with a dome could do it without the samples of the creator of St. Paul's Cathedral.

Then I found the internal plans of the church and cathedral. The remaining components were then analysed and similarities and differences determined. Then I carefully studied the preserved photos of the church, taken from different sources in the late 19th – early 20th centuries and determined the location of columns, windows, walls and towers. Then, using the graphic editor SketchUp, the external and internal interior of the church was restored. In order to view the interior in the 3D model, I decided not to draw the roof of the temple. Thus, having depicted all the above elements, I made a 3D model of the church. Of course, there were attempts to restore the external design of the church before, but no one previously tried to recreate it using the program for creating 3D models SketchUp. Furthermore nobody has ever tried to partially restore the interior of St. Stanislav's Church because of the difficulty of this task, but I've done it and succeeded. This model is unique, since I intended to recreate the partial interior of the church for the first time.

Summarizing the results of the study, I can draw the following conclusion that the architectural monuments of St. Paul's Cathedral in London and St. Stanislav's Church in Pinsk have much in common.

1. Both architectural monuments were built in the late Baroque period (the second half of the 17th century).

2. They were created, designed and decorated by the most outstanding architects of their time (St. Paul's Cathedral – Sir Christopher Wren, St. Stanislav's Church was decorated by Jakub Bretzer and Ignatius Doretti, it was reconstructed by Jan Tupalt).

3. Both St. Paul's Cathedral and St. Stanislav's Church have the same shape of a cross and have nearly the same width of the façade.

4. They were unique for their time according to the material used in its walls – brick and Portland limestone instead of wood.

5. They both had two towers and a dome.

6. They were both the most majestic in their volumes in the United Kingdom and in the Grand Duchy of Lithuania accordingly.

Thus, having studied the features of the development of the Baroque style in England and Belarus, as well as having studied the history of St. Paul's Cathedral in London and St. Stanislav's Church in Pinsk, having analysed their architectural features, having highlighted the commonalities in their inner and outer design, I created an element for the interactive map of the lost monuments of Baroque architecture using 3D modelling technology and capabilities of the graphic editor SketchUp.

Moreover, I come up with the idea that on the example of St. Stanislav's Church it will be possible to recreate other architectural masterpieces of baroque style. A great number of monuments can be restored and recreated as 3D models using this idea in order to show how rich and beautiful Belarusian land is, how majestic our monuments are. The architectural heritage of the Republic of Belarus is immense, as well as the architectural heritage of the United Kingdom and other European countries. It can promote the

development of domestic tourism in Pinsk region too as well as a completely new branch in Belarusian tourism – virtual tourism of the lost monuments.

Not many people are familiar with the history of the lost architectural monument – the Church of St. Stanislav in the city of Pinsk, and if they are, then mostly superficially. In order to recall the past, we do not allow oblivion to defeat historical memory. The appearance of the lost temple as an element of an interactive map is the path to the return to cultural heritage, the revival of the history of the region, awareness of mistakes, and the strengthening of moral and cultural values. And carefully preserved historical memory lays the foundations for the formation of the image of the future.

This work can attract the attention of both young people and adults, both Catholics and Orthodox, which will contribute to the development of mutual understanding of representatives of different generations, cultures, religions, their unification, which is especially important in the year of national unity. And like Benjamin Disraeli said "Travel teaches tolerance" [2, c.288]. And I completely agree with him.

Список использованных источников

1. История Пинска. Костел Святого Станислава [Electronic resource]. – Mode of access: https://planetabelarus.by/publications/65-let-nazad-v-pinske-vzorvali-kostel-svyatogo-stanislava/– Date of access: 05/06/2020.

2. Энцыклапедыя літаратуры і мастацтва Беларусі. – Мн., Беларуская савецкая энцыклапедыя, 1987. – Т. 4. – С. 288.