GILÁNYI ATTILA, BÓLYA ANNA MÁRIA, CHMIELEWSKA KATARZYNA: TESTING A BALLET HISTORICAL THREE-DIMENSIONAL CLASSROOM AS AN EDUCATIONAL, COLLABORATIVE AND PROMOTIONAL SPACE

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3D balett történeti tanterem oktatási, együttműködési és promóciós térként való tesztelése. A cikk művészethez kapcsolódó VR tereket mutat be, amelyek nagyrészt a Debreceni Egyetemen készültek el. Ezek a terek a MaxWhere balett történeti előadóterem előzményeként szolgálnak. A cikkben összefoglalunk néhány, a háromdimenziós virtuális balett tanterem teszteléséhez kapcsolódó eredményt.

#oktatas #maxwhere #virtualisvalosag #3dvizualizacio #maxwhere #virtualisrekonstrukcio #magyarnemzetiszinhaz

The article introduces VR spaces related to art, which were largely created at the University of Debrecen. These spaces serve as a prequel to the MaxWhere ballet history auditorium. We summarise some results connected to testing of the three-dimensional virtual ballet classroom.

#education #maxwhere #virtualreality #3dvisualisation #maxwhere #virtualreconstruction #nationaltheaterofhungary

Introduction

In the following, we summarize some results connected to testing of a three-dimensional virtual ballet classroom in groups of dancer and non-dancer students. In our investigations, we used the virtual model of the first National Theater of Hungary implemented in the system Maxwhere.

The classroom we used in our project is part of a three-dimensional virtual model of the first National Theater of Hungary. The original theater building was built in 1837 in Kerepesi (now Rákóczi) street in Pest (currently, Budapest), Hungary. In the beginning, it was called Pest Hungarian Theater (in Hungarian, Pesti Magyar Színház), but, in 1840, it became the (first) National Theater of the country and was renamed accordingly. Until 1884, it was the venue for ballet and opera performances as well. It can be considered as the cradle of Hungarian ballet.

Figure 1 (also accessible in the Digital Archive of Pictures of the Hungarian National Széchényi Library) shows a pictorial representation of the building.

Figure 1.

Das Neue ungarische Theater in Pesth

A lithography of Lajos Landerer.

In Figure 2, a picture of the interior of the theater is shown, published in the Hungarian newspaper Vasárnapi Újság" on June 24, 1855.

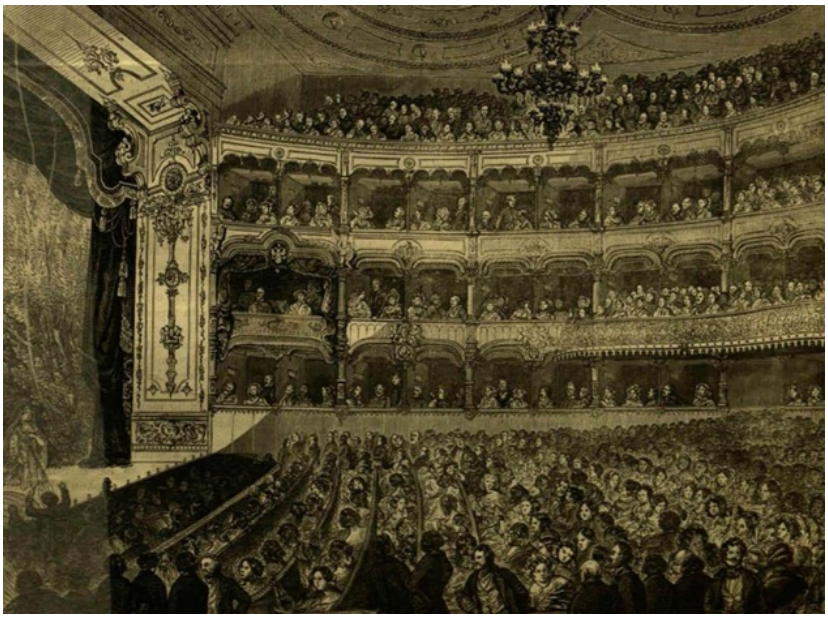

Figure 2.

Interior decoration of the National Theater.

The building of the theater does not exist today. Its virtual reconstruction was performed in a cooperation between the Research Institute of Art Theory and Methodology of the Hungarian Academy of Arts and the Virtual Reality Laboratory of the Faculty of Informatics of the University of Debrecen. The reconstruction was strongly connected to previous visualisations presented in previous articles.[1] The three-dimensional model of the Theater was described also in some previous articles.[2]

[1] Gilányi, Attila, Bálint, Marianna, Hajdu, Róbert, Tarsoly, Sándor, Erdős, Imre. 2015. "Presentation of the Church of Zelemér in the Virtual Collaboration Arena (VirCA)". In 6th IEEE Conference on Cognitive Infocommunications (CogInfoCom): 581–2. IEEE Publications.
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[2] Gilányi, Attila, Rácz, Anna, Bólya Anna Maria, and Chmielewska, Katarzyna. 2019. "Early History of Hungarian Ballet in Virtual Reality." In 10th IEEE International Conference on Cognitive Infocommunications (CogInfoCom): 193–8. IEEE Publications. https://doi.org/10.1109/CogInfoCom47531.2019.9089943.
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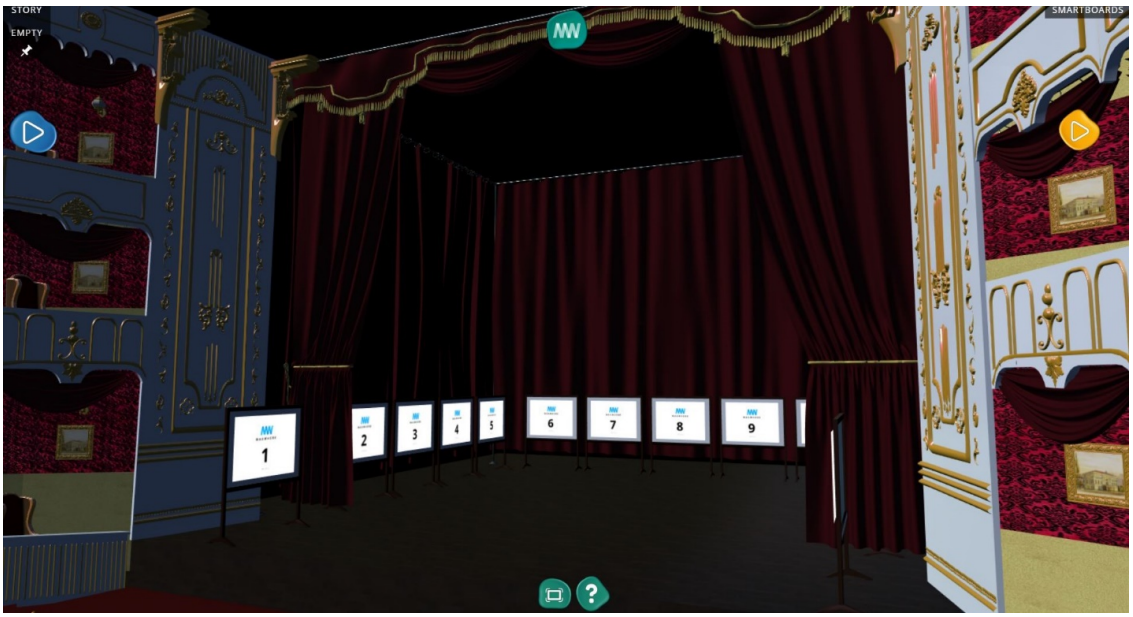

Figure 3.

The presentation space on the stage in MaxWhere.

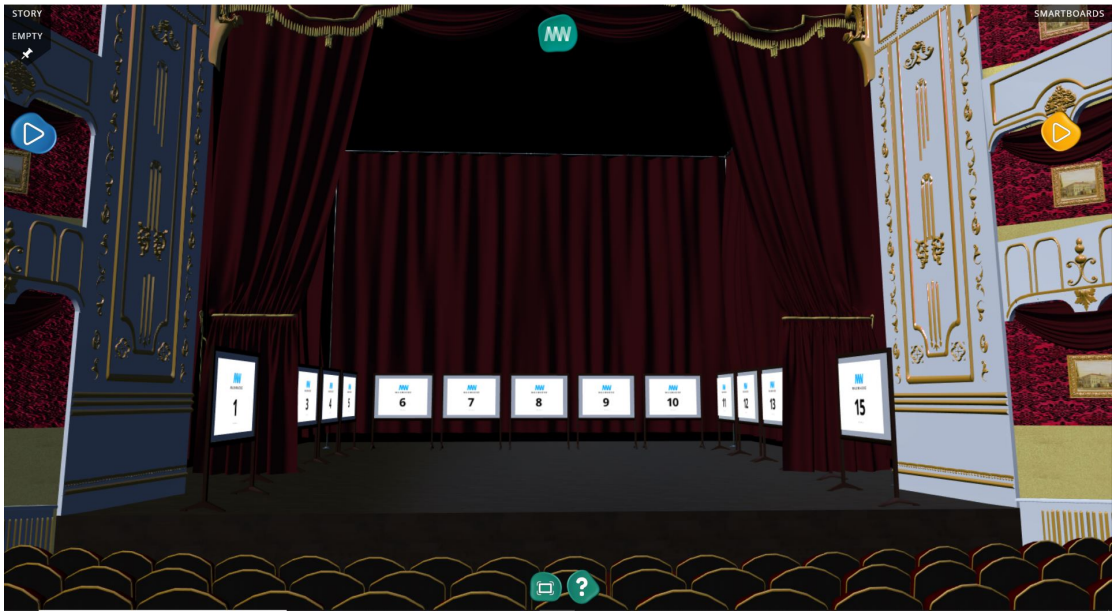

Figure 4.

The auditorium surrounding our presentation room in the virtual model.

Experiences with the applications of the classroom

In the framework of our present project, applications of the classroom described in the previous section were investigated in the teaching process at several institutions in the Czech Republic, Hungary, North Macedonia, Slovakia and Poland.

One of the aims of the project was to con_rm a signi_cant e_ectiveness of teaching with MaxWhere by example of ballet history lessons. During our investigations, at each institution, students of two groups – experimental and testing – were studying their topics. After the lesson they completed the test of knowledge. The experimental group followed the topic presented with MaxWhere, while the testing group learned the material with usual presentation. The aim of the experiment was to investigate the question, whether MaxWhere positively inuences educational process. Our studies gave a positive answer to this question. The publication of details of the results is in progress.

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