# Virtual reconstruction; a new way of understanding?

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### Introduction

The 21st Century has lasted already for two decades. During that time world has experienced a rapid increase in development of digital technologies which brought significant changes in all fields of our lives inevitably affecting the ways we experience our environment. The great proliferation of information and communications technology is an unstoppable force, touching virtually every sphere of modern life. The way we treat our cultural heritage is not an exception

### Virtual reconstruction – issues and questions

Restoration practice is generally perceived as a practice aiming towards preservation of the past but on the other hand, as most of the fields of 21st Century it has to keep up with the technology which is rushing forward to enhance innovation. Nevertheless, they both find a common ground in digital reconstruction and restoration, which can virtually recreate the wholeness of an artwork even if materially we can perceive only its fragment. Virtual reconstruction is useful for the purpose of presenting a fragmentary object as a whole. Is this new integrity that we're creating, however, a mere illusion, due to the fact that actually the virtual reconstruction can exist as a separate entity without the material fragment? Although the digital recreation is in fact lesser intervention when it comes to the matter of an artwork, isn't it even more invasive when it comes to experiencing the artwork and the actual understanding of it? This is not just filling the gaps in understanding, this is creating an autonomous experience which can technically exist without a material compound. How does it affect the aura of the original artwork?



How the development of virtual technologies will affect the "aura" of an original artwork?

# Digital youth

Nowadays, digital techniques are probably one of the most powerful media when it comes to presenting artworks to the general public - especially the young. The question is, if and how does it affect their perception of an artwork? It should also be considered how does the existence of artworks in the virtual space affects those who don't have any access to them.

# **Being Offline**

It needs to be kept in mind that nearly one third of all youth worldwide – according to UNICEF around 346 million 15–24 year olds – are not online. And while those children might also have an impeded access to the cultural heritage in its material form, being offline in the era of digital understanding further widens the gap between the opportunities which are given to them and their peers. If those young people gained access to internet however, it would be a great step in making cultural heritage more inclusive. Digital fragments and reconstructions could be used then as teaching tools enabling to raise awareness on the subject of the local and worldwide cultural heritage.



How immersive virtual reality can shape childrens' view on cultural heritage?

### Virtual experience

Another question might be posed related to how the technologies like Virtual Reality (VR), which are being adapted to present cultural heritage, might influence the youngest spectators. Research done on this subject suggests that children may have strong reactions to VR because they are still developing the skill of experiencing fully immersive technologies. Children up to early school age can exhibit creation of false memories after being faced with VR technology. What would it mean for cultural heritage if children are presented with virtually recreated object which may not function in its whole form in the real life? Nowadays, with a broader access to VR breaching the horizon, it is expected that people of all ages may soon be acting with immersive virtual environment. Now, more than ever, it is time to understand what this new technological experience means for a child and how it can shape our perception of artworks.



In times when travelling and visiting museums is hindered, digital technologies may play an even more vital role when it comes to experiencing cultural heritage.

# **Education and context**

It is necessary not to allow digital reconstructions grow out of their context which is defined by the original, material object. If we introduce the young to the virtual images of the cultural heritage (CH), the safest way to do it will be ensuring that digital CH makes its way to education programs. Moreover, learning through digital means can potentially increase student's motivation by making studying more fun and relatable. The way technology shapes new generations' perspectives depends solely on our smart approach.

