Opening Speech\_ Susanne Weissman EU Project CoVHer | Mulitplier Event\_ 03.03.2023

## Dear honored guests

- Dr. Frisch von Preußen; General Director of the GDKE (Generaldirektion Kulturelles Erbe)
- Prof. Dr. Peter Haslinger, Director of the Herder Institute for Historical Research on East Central Europe
- Prof. Dr. Wolfgang Dobras, Director Stadtarchiv Mainz,
- Dr Ulf Sölter, Director of the Gutenberg Museum Mainz),

dear colleagues,

Ladies and Gentlemen,

I am very pleased to welcome you all today when the CoVHer project will be presented to the public for the first time. The project's claim is both to create standards according to which 3D reconstructions of historic buildings are created and documented according to scientific criteria, and to additionally communicate these standards.

But why is it important to communicate and teach the ability to identify scientifically sound information?

While digitization progresses, it not only opens up many new possibilities, it also poses major challenges, both for society as a whole and for science itself.

When the Internet began its triumphal march in the 1990s, probably only few of us realized the power it would eventually wield.

The Internet not only influences our everyday lives – the way we work, entertain ourselves, communicate with each other and how and what we consume – it also influences politics. The possibility of reaching and mobilizing tens or hundreds of thousands of people within minutes has never existed in this form before. Uprisings can be organized via Twitter, eyewitness reports reach more people faster than journalistically edited articles. And possibly censored reports and fake news can either promote or overthrow leaders of democratic states and dictators.

The free access to the availability of knowledge and resources, from which new narratives are formed and in turn made freely available, thus also harbors dangers: Without a scientific approach – by this I explicitly mean documenting the genesis of knowledge, the citation of sources, the reference to and differentiation of facts and interpretations of these facts – without all of these aspects, information cannot be reproduced.

The Corona pandemic in the last couple of years has also made it all too clear to us once again that the availability of information on the Internet is both a curse and a blessing: It is possible to search for information about the pandemic course, possible consequences of a vaccination, and many more statistics online. In this search we can find relevant scientific findings. But we can just as easily fall into a "Rabbit Hole" and base our entire world view and understanding on scientifically unsound information.

The 3D reconstruction is a relatively new method, with which scientists of different disciplines draw a picture of the past. But as in other areas of science, it is now possible for almost anyone with a powerful computer to process and produce their own information – in this case, to create their own reconstructions. The Internet is full of tutorials, programs are made available free of charge as open source. This introduces many new possibilities and opportunities to involve society in scientific discourse and to further promote science citizenship. However, historically inaccurate reconstructions can also emerge along the way, which can then shape our perception of the past - even if this was not intended in the first place.

In our everyday life we are surrounded by visual reconstructions of the past: In movies, which have long been enriched by "artificial" images produced by computer technology, which the human eye is increasingly unable to recognize as such. But also in games such as Assassin's Creed we come across historic reconstructions.

But what relevance would the confusion of scientific knowledge with unscientific narratives have in the area of 3D reconstruction? After all, in this case no one is making a decision that may have serious consequences for society as a whole, but at most has a "false", possibly romantic idea of the past.

I would like to refer to Aleida and Jan Assmann, who have coined the concept of cultural memory: They refer to "cultural memory" as "the tradition within us, the texts, images and rites hardened over generations, in centuries, even millennia of repetition, that shape our consciousness of time and history, our view of ourselves and the world."

Memories are thus always embedded in and also shaped by a social and cultural context. Aleida and Jan Assmann further define cultural memory as a dynamic process of remembering in which people maintain and pass on a shared notion of the past through culture and language. Cultural memory is therefore an important component of a society's identity and culture. The stories we tell ourselves about our origins and our past, therefore also shape our present and future.

Memories, however, are easily manipulated and changed. Experiments in memory psychology have repeatedly shown that it is possible to falsify individual memories and people can be convinced to have experienced things themselves that they in fact never ever experienced.

Changing memories and our perception of the past is not a historically new circumstance: Even in the earliest days of historiography, it was common practice for usurpers to change history, e.g. to remove or rewrite inscriptions in order to present themselves as the heirs of long traditions and thus to legitimize themselves.

The rewriting of the past does not only happen in words – the distortion of reality can simply and easily be supported by images and visual (re)constructions in an extremely fruitful way.

These images have the power to (re-)shape our ideas of the past – our cultural memory – and thus our perception of the present. Therefore, the question also increasingly arises what is influencing what: Was the land of Westeros in Game of Thrones for example shaped according to our idea of the Middle Ages, or does the world depicted in the series now rather shape our idea of the Middle Ages?

The unreflected and uninformed use of non-scientific information can, in the worst case, lead to a distortion or mis-representation of the past, which in turn can have negative effects on society and our cultural memory.

Thus, the role of science must continue, as technological capabilities change, to write scientifically sound history and to provide a basis of scientific methods and practices in order to write as accurate and objective as possible a conception of the past, which will strengthen our cultural memory and help us understand and improve our society.

So how and when should we distinguish in the future between scientifically based reconstructions of the past – whether in image or word – and perhaps imaginative reconstructions made with artistic quality?

In addition to the support and training of digital competencies, the creation of standards and the communication of these standards are therefore also stated goals of the CoVHer-project we are all here for today. These standards will help to identify whether a 3D-reconstruction of our material heritage is based on scientifically sound knowledge or whether it is rather a "beautiful" model originating from fantasy.

The CoVHer project is a thus prime example of the scientific claim: Standards are created to make the sources of reconstructions objectively traceable and scientifically verifiable. These methods of objectification and scientific work are furthermore cast into teaching and learning formats in order to further disseminate these skills, which are important for the assessment of reality.

I hope you all enjoy a fruitful discourse today – thank you for your attention.