

Teaching „Digital Cultural Heritage“

Virtual training course in Digital Technologies in Heritage Conservation

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Heading

The project „Digital Cultural Heritage - Virtual training course in Digital Technologies in Heritage Conservation” aims to establish the knowledge of digital methods in the humanities and arts and the associated Digital Humanities. The spectrum of this young discipline has a wide range with projects of, for example, computer philology, text Modeling and Digital Edition or GIS-based archaeological projects in connection with applied computer sciences. The project Digital Cultural Heritage complements the ongoing projects of the research platform Digital Humanities at the University of Innsbruck in the field of digital (preservation of) cultural heritage and deals with issues of standardization of workflows (field documentation), the digitalization of cultural (heritage) assets and the processing and dissemination of heterogeneous data sets, such as text, images, videos and data by creating new VREs (Virtual Research Environments).

The first project in the field of Cultural Heritage was launched as part of the Aramus Field School Project in Armenia as e-Learning project “Digital Archaeological Documentation” in collaboration with Arc-Team Italy and Department of Near Eastern Archaeology from University of Innsbruck in 2006. The project aimed practicing the content taught during an excavation in the Field via blended Learning in the run-up to the upcoming excavation, during the work in the field and the follow-up phase of course, using the original data of the excavations for consolidating the learning content to achieve the best learning success. Since 2007, the project has been completed with updates and new teaching content, which allowed learning all steps from digital documentation, evaluation and publication via an open platform.

With the implementation of new projects in the countries Armenia, Georgia, Iran and Iraq, as well as the curricula changes at the University of Innsbruck, there has been a growing need to involve students in ongoing research and to create a connecting learning environment. The need to include also a course, which aims at a comprehensive examination of material cultural heritage, in the curriculum, is neither only based on recent developments in the field of heritage protection and preservation nor the innovations in the IT. The destruction of monuments, such as in Palmyra, Syria or Kalhu/Nimrud ruins, Iraq demonstrates the importance of cultural heritage protection and the importance of the area of heritage sciences, with a focus on digital representation and data access. The documentation of objects and inventories, technical analysis, knowledge archiving, and conservation strategies are now indispensable (research) methods in the digital age of research. It was all the more important and will be to offer the course in the context of a strong practical relevance.

As part of the Digital Humanities initiative at the University of Innsbruck, since 2014 the area of Digital Cultural Heritage could be established and the e-Learning Project Digital Technologies was initiated; since 2018 this e-Learning project has resulted in the development of a virtual e-training course Digital Cultural Heritage - Digital Technologies in Heritage Conservation. The e-training course is currently part of the apprenticeship in the training of a Near Eastern Archeologist and in the context of the Archaeological Field School Program in the Near East at the University of Innsbruck.

The virtual e-training course Digital Cultural Heritage covers a wide range of digital monument technologies with a basic education in the fields of Digital Object registration (small and large Objects), Digital Monitoring, Digital Archiving and Virtual Modeling. The second deepening-part includes courses, for example, in digital modeling, advanced monitoring and digital knowledge distribution. The third part of the training course is accompanied by a practical study, which is implemented in a self-designed project. All subjects are divided into modules, which in turn are subdivided into several e-tutorials. In addition to texts, pictures and videos for

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illustration of the course contents are available. The tutorials are application-oriented and prepared for the demands of archaeological/cultural heritage work in the field. For the recording, evaluation and distribution primarily open source products are used. The basis and at the same time novelty of the training course is that all data are from original contexts in the field. The research and teaching data are provided freely in the sense of Open Access.

The content of the training course, however, should not only convey the technical basics and application capabilities of digital heritage technologies, but also educate awareness of cultural significance as a store of knowledge and historical resource. Thus, the project is not only an extension of the competences conveyed by the studies, but also promotes the interdisciplinary work of the AWOSA, where monument preservation and cultural heritage play an important role. The freely accessible data processing enables students to gain insights into the work of a Near Eastern Archeologist. Furthermore, the open data provides the research methodology, which makes it possible to understand the applied methods from digital documentation to evaluation and publication with open access and makes the research process visible.

The course will switch from wikiconfluence to wikimedia of the University of Innsbruck in Summer 2019. The new platform wikimedia will enable an expansion in the open access of teaching and research data as well as co-design of the course as an open platform for the publication of contributions, including also the project works.

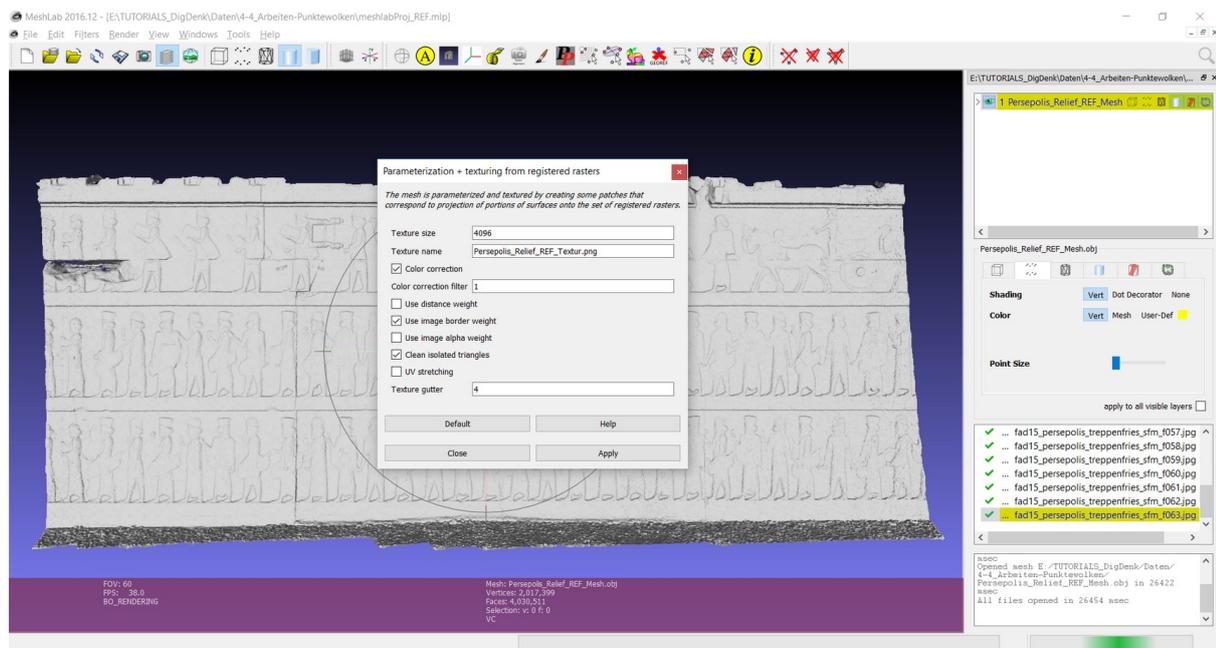


Fig. 1. Working process – tutorial (University of Innsbruck)

References