MAS PDACH – A graduate program on Preservation of Digital Art & Cultural Heritage

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Abstract

The poster introduces the graduate program Master of Applied Sciences BFH in Preservation of Digital Art & Cultural Heritage (MAS PDACH) which started in 2013 at Bern University of the Arts. It presents the main objectives which basically result of the conservatory understanding of authenticity and sustainability. It is explained why this type of additional qualification seams meaningful and how a reliable qualification – with specific focus on conservation-scientific requests – is built by strategically combining different areas of knowledge.

Motivation

Digital technologies seem perfectly integrated in conservation scientific analyzing processes and documentation, archival routines such as mass and retro digitization of historic documents (including books, and photographs), the preservation of media such as film, audio- and video tapes ([7]). Nevertheless suitable approaches for complex, born digital objects are scarce. Digital objects are considered as complex if a) no straightforward description is available how to present or reproduce it and/or b) if the object is dynamic and contains embedded programming or components supporting interaction (cf. the definition of "active objects" by Giaretta [3]). In our context we are often confronted with such complex objects, since software based control panels for artworks (e.g. kinetic sculptures, lighting systems etc.), interactive or net-based artworks and additional cultural phenomena of the networked society seldom follow harmonized file-formats or technological requirements. Opposed to classical archives, where predefined formats and acquisition routines regulate the submission process, incoming control within the acquisition process of art or within monitoring routines in a museum based context are rather complex, seldom pre-defined or automatized. Not uncommonly objects are selected due to their outstanding diversity which means that particular variations easily become significant or work defining properties. Thus a general understanding of classical security regulations, as defined within monitoring and handling processes need to be applied regularly for preventing the risk of a loss of authenticity and integrity.

Objectives

Our aim in starting an extra occupational course program was to develop a progressive specification for the mentioned requirements. The MAS PDACH is conceptually led by the principles of the understanding of lifelong scientific learning and competence-based teaching as defined by E.C.C.O. (European Confederation of Conservator-Restorers' Organizations A.I.S.B.L., 2010 [2]). It follows historically grown conservatory and restoratory values such as the protection of originality, minimal intervention, reversibility of application ([1]; [4]; [5]; [6]; [8]).

Curriculum

In order to constitute a reliable, targeted qualification, which is capable of strategically closing gaps in the field of digital conservation, the MAS PDACH combines experiences of three professional fields:

Digital Conservation & Restoration: This subject is based on conservation ethics and restoration principles. It applies state of the art concepts such as protection of the original substance, examination before execution, and strict documentation of all applied procedures (including carefully conducted primary documentation, e.g. at the code level). It strengthens analyzing and explaining competences in regard to the adequacy of applied resources and preservation measures. Safeguarding, monitoring and consideration of potential threats are explained.

Cultural Informatics & Media Technology: The subject combines elements from different fields of information science. Starting with identification tools and methods for external observation, non-invasive analyzing and monitoring routines are explained. Basic understanding of file formats, data structures and semantics among digital/information-based terms are taught. Procedures in secure back up technologies, classical preservations strategies, and sustainable safeguarding techniques are explained.

Theory & Digital Media Culture: This subject raises awareness for different fields of history, theory, ethics and esthetics of media. Prospectively legal aspects shall be integrated.

During the course of studies, the three subjects are well balanced.

It becomes obvious that, the MAS PDACH-program does not only attract exclusively conservators and restorers. It addresses members with different professional backgrounds and benefits from its diversified audience. Core interests for applicants are the wish to improve their knowledge in safeguard principles and techniques with specific focus on complex digital objects.

- The goals of conservators and restorers, custodians and curators of cultural collections, museums galleries are our target categories.
- Furthermore the MAS PDACH wants to support people working creatively, artists, designers, netizens, bloggers, and media artists, who move freely in the digital world. They use their digital working environment as basic capital and need to document/secure it permanently.
- Last but not least the MAS PDACH intendeds to get into contact with people who need know-how about the conservational safeguarding of digital cultural goods, due to their professional function. One might mention management groups, consultants, persons responsible of the administration of cultural institutions etc., who all need to come to future-oriented (strategic) decisions.

Outcomes

The MAS PDACH provides support for questions concerning selection and appraisal processes of complex digital objects. It helps to develop digital collection policies, teaches planning preventive safeguarding measures, monitoring/supervision of digital stabilization and preservation processes, and the development of sustainable decision-making procedures typical for dedicated collection segments.

Degree- and certificate structure

The master's degree consists of five modules with the outcome of 60 ECTS. Fundamental knowledge about digital objects is taught in the first two modules: Identification and Documentation of Complex Digital Objects and Cultural Value (see below), which contain 12 ECTS each. Both comprise with a self-contained CAS Certificate. The advanced studies consist again of two MAS modules (each 12 ECTS) and a Master thesis (12 ECTS) with an increasing amount of self-instruction.

Modules and sequence of studies

The course structure follows the logical nature of conservation principles. Here objects are first phenomenological observed, identified/described, analyzed, and appraised according to their historical, artistic, and cultural value, before (physical) examination. Thus the MAS PDACH starts with the CAS module on "Identification of Complex Digital Objects and Cultural Value" (CAS I). This topic is especially important since appraising digital data/objects differs fundamentally from material-based facts, even though analogies can be shown. Part of this module are archiving-, life- and digital curation cycles.

The CAS "Identification" is followed by the basic needs for written documentation, as addressed by a CAS module on "Documentation of Complex Digital Objects" (CAS II). By documenting the observed objects in depth, a broader understanding is possible on both, a technical level as well as semantically. Concerning the structures and principles of documentation, there is a need for additions to the classical conservation-based requirements and common documentation structures as supported by classical Collection CMS-Systems. In the field of documentation, provenance of the digital objects and is of growing importance. Concerning information science database structures, formal description languages, and common documentation standards such as CIDOC CRM are taught.

Admission to the advanced MAS modules is only possible if both CAS modules have already been completed successfully. The MAS modules teach preventive safeguarding measures on a higher education level and give insights to the supervision of digital stabilization and preservation processes. Teachers conduct the development of sustainable decision-making procedures for the transmission of complex digital objects, such as digital artworks and cultural goods, with close support. The course is based on specific studies, which are related to the work practice and experience of the participants. Whereas the first of the MAS-modules focusses more on verification of sources and technical safeguarding of digital objects, the last module concentrates on concrete preservation procedures – based again on the case studies of the students.

CAS I and MAS I as well as the CAS II and MAS II are symmetrically related to each other. They can be attended in different order (starting with module I or II). Following the sequence of studies means to pass the same topic several times, but on a different level of training, skills and understanding. The recurring structure encourages competences and strengthens the learning processes. Specified workshops are related to the work practice and support the applied experience of the participants.

Fees

All CAS and MAS modules are subject to a tuition fee of CHF 5850.– each, plus a one-off application fee of CHF 150.–. The MAS thesis is subject to an additional fee of CHF 1250.–

Additional information: www.pdach.ch/en.

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Author Biography

Tabea Lurk is art historian and professor for digital conservation at Bern University of the Arts (BUA). Since 2008 she established the ArtLab of the Department of Conservation and Restoration at BUA. In 2011/12 she formed the graduate program Master of Applied Sciences BFH in Preservation of Digital Art & Cultural Heritage. In an honorary appointment, she is president of the special interest group on Digital Heritage of the Swiss Informatics Society.