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Conference The Development of a Digital Cultural Heritage Eco-system / Congresso Lo sviluppo di un eco-sistema digitale del patrimonio culturale

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Events

Conference *The development of a digital cultural heritage eco-system*

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Following a twenty-year tradition, March in Ferrara is dedicated to the themes of Restoration and Cultural Heritage: three days of conferences, exhibitions, debates and working tables in an event that precedes the contents of the *XXVI Salone del Restauro, dei Musei e delle Imprese Culturali*, this year scheduled on September, 18th, 19th and 20th. In the framework of palazzo Tassoni Estense, numerous moments of discussion were proposed on the themes of restoration, architectural heritage, design, research and governance of the territories, with particular attention to the Emilia territory affected by the seismic events of 2012. The Department of Architecture of the University of Ferrara [1] organized at its headquarters three intense days of discussion and debate, confirming a territorial vocation for innovation and research on cultural heritage. In the full calendar of events a conference by invitation was organized entitled The development of a digital eco-system of cultural heritage. *Methodologies and technologies for the creation of enabling platforms for knowledge, documentation, management and enhancement of cultural heritage*, with the support of UID – Unione Italiana per il Disegno. The event has brought experiences and testimo-nies on the new role of the disciplines and representation in relation

Fig. 1. Conference cover.

to digital cultural resources, increasingly widespread and accessible (fig. 2).

The complexity of the title contrasts with the lucid and linear reflections with which Marcello Balzani opened the conference, thinking about digital ecosystems, in which the value is represented by the structure of an integrated platform of finalized contents and by different browsing and relationships with users and multiple needs, we imagine a universe of coherent and compatible objects. Objects that connect, communicate and react, knowing where they are and what they do, and even learn the behaviour that make them more interesting and useful. However, reality is different. If we identify as a galaxy of this ecosystem the one of heritage assets, we can immediately understand a non-trivial antagonistic feature [Balzani 2019, p. 6].

Another topic of reflection concerned the analysis of the procedures for the creation of high quality 3D models, which are still particularly onerous activities in the field of Cultural Heritage. Today, often the products of digital reconstructions are provided in non-interoperable formats, therefore not shareable and difficult to access, where it is necessary an intense work of standardization on acquisition protocols, the critical se-

Fig. 2. Exhibition space with panels and explanatory videos of the interventions.

lection of information and structured processes to set up information models that can be used in different contexts.

This is the scenario of Carlo Bianchini's intervention, according to which Digital Cultural Resources can play a fundamental role both in terms of the preservation of the identity of places and, above all, as a tool oriented towards the management of built heritage [Bianchini et al. 2019, p. 40].

The case studies presented by Antonella di Luggo and Ornella Zerlenga can be traced back to the same needs. The first, a research project for palazzo Penne, concerned the development of a methodology of knowledge aimed at the conservation and enhancement of a building of great representativeness, implemented according to a multidisciplinary approach, prefiguring new uses and new devices to improve accessibility and use [Campi, di Luggo 2019, p. 66]. The second concerns specifically the research project for the scale of palazzo Cassano Ayerbo d'Aragona in Naples, but it is part of an even broader project that consists in the development of a methodology of knowledge aimed at the conservation and enhancement of buildings of great representativeness, both architectural and urban, also implemented according to a multi-scalar and interdisciplinary approach [Zerlenga, Cirillo 2019, p. 76].

The following interventions summarized below refer mainly to museum assets: the intervention presented by Giuseppe Amoruso examines the museum of Amatrice – razed to the ground by the earthquake of 2016- which collected works from the territory of Amatrice and materials on the history of the building and the city of Amatrice. The project aims to represent and disseminate part of the lost heritage through an immersive and interactive system aimed at involving the experience and dissemination of the contents of the Museum in a mode of visual storytelling [Amoruso et al. 2019, p. 90].

The projects presented by Massimiliano Lo Turco and Roberta Spallone define methodologies to create digital models of some museum collections, creating workflows able of virtually reproducing spaces (container-museum) and objects (content-collections). The theme of communication, sharing and dissemination of cultural heritage is addressed through experiments by Artificial Intelligence, Augmented Reality and the use of Web platforms, in the areas of Cultural Tourism (Digital Interactive Baroque Atria) and the enhancement of documentary and archival heritage (Archivio Mollino and Theatrum Sabaudiae) [Lo Turco, Spallone 2019, p. 52].

The implementation of structured processes to improve the documentation, management, enhancement and accessibility of cultural heritage are the main themes of the INCEPTION European Project – Inclusive Cultural Heritage in Europe through 3D semantic modelling, presented by Roberto di Giulio. The project has developed a platform designed to organize and use in an inclusive way three-dimensional models enriched with semantic information. In addition to the innovative methodologies for the realization of 3D models with an inclusive and interdisciplinary approach to cultural heritage, the popular event was an opportunity to present the open standard platform developed as part of the research project in an exhibition space, which can be visited during the Giornate del Restauro e del Patrimonio Culturale; in a unified framework, through panels and multimedia resources, digital ecosystems were also presented: the works were developed by the Department of History, Design and Restoration of Architecture of the Sapienza Università di Roma; the results obtained by the School of Architecture of the Politecnico di Torino n with regard to integrated digital platforms for Cultural Heritage; the participatory application for the Museo Cola Filotesio of Amatrice realized by the Department of Design of the Politecnico di Milano as an experiential design for the knowledge of Cultural Heritage; the palaces Penne and Cassano Ayerbo d'Aragona in Naples and the royal parks of Caserta, Versailles, Worlitz as case studies for knowledge and enhancement developed by the Department of Architecture of the Università di Napoli Federico II and the Department of Architecture and Industrial Design of the Università degli Studi della Campania Luigi Vanvitelli.

The results of the interventions have been published in the number 1/2019 of the scientific magazine Paesaggio Urbano, in a digital version that can be freely downloaded [2].

Notes

[1] The organizers of the event are the Center for the Development of Integrated Automatic Procedures for Restoration of Monuments (DI-APreM) and the Laboratory of Architectural Restoration – LaboRA of the University of Ferrara.

[2] At the link <https://www.architetti.com/paesaggio-urbano-1-2019.html> it is possible to access the digital copy of the magazine, after registration.

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