Laura Carlevaris, Graziano Mario Valenti edited by

DIGITAL & DOCUMENTATION

Reading and Communicating Cultural Heritage

Volume 3

D&D_MAGGIO 2023.indb 1 30/07/23 18:19

Digital & Documentation. Reading and Communicating Cultural Heritage / Laura Carlevaris, Graziano Mario Valenti (edited by) -Pavia: Pavia University Press, 2023. - 298 p.: ill.; 21 cm.

(Prospettive multiple: studi di ingegneria, architettura e arte ; vol. 3)

ISBN 978-88-6952-174-4 (Open Access)

The present publication is part of the series "Prospettive multiple: studi di ingegneria, architettura e arte", which has an international referee panel. Digital & Documentation. Reading and Communicating Cultural Heritage is a scientific text evaluated and approved by the Editorial Scientific Committee of Edizioni Pavia University Press, University of Pavia.

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GRAPHIC PROJECT Elisabetta Caterina Giovannini, Noemi Mafrici, Cristian Farinella, Lorena Greco

COVER IMAGE Graphic photocollage by Atelier Crilo - Cristian Farinella, Lorena Greco

PRINTED BY Logo S.r.I. - Borgoricco (PD)

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The volume consists of a collection of contributions from the seminar Digital & Documentation. Reading and Communicating Cultural Heritage, realsed on online platform on December 4th, 2020. The event, organized by Department of History, Representation and Restoration of Architecture. Sepienza University of Rome, promotes the themes of digital modeling and virtual environments applied the documentation of the tangible, intangible and natural Cultural Heritage. The event has provided the contribution of external experts who are engaged in the management and conservation of the most important Italian cultural assets.

The scientific responsible for the organization of the event is Prof. Graziano Mario Valenti, Sapienza University of Rome.

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This publication is made with the contribution of DSDRA, Department of History, Representation and Restoration of Architecture of Sapienza University of Rome.



Department of History, Representation and Restoration of Architecture Sapienza Università di Roma

The event Digital & Documentation - 2020 has seen the participation of professors, researchers, scholars and private Institutions









Institute for Heritage Sciences of the National Research Council











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The event is promoted by UID (Unione Italiana per il Disegno)



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Digital & Documentation. Reading and Communicating Cultural Heritage





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Architecture and the landscape and their thechniques. She's currently teaching Architectural She's currently teaching Architectural and Urban Survey in the Master degree in Architecture of Sapienza University of Rome and Drawing and Representation in the Landscape and Environmental Planning and Design Bachelor's Degree of Tuscia University, in the DIBAF Department (Department for Innovation in (Department for Innovation in Biological, Agro-food and Forest

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Graziano M. Valenti, Associate Professor in the Dept. of History, Representation and Restoration of Architecture, Sapienza University of Rome, awarded the National Scientific Qualification as a Full Professor. His research activity focuses on the application of digital technologies to sunnort design. focuses on the application of digital technologies to support design, construction, knowledge and communication of industrial and architectural products, with regard to Cultural Heritage, with the objection of anticipating future operational scenarios and solving current application problems. An expert in computer science, he's designed and implemented procedures and applications for sharing, integrating and representing data distributed over a geographic network. A specific topic in his research is the definition and representation of integrated and topic in his research is the definition and representation of integrated and dynamic digital models that take on the role of both a container and a processing unit for heterogeneous information. Form 2000 to the present, he's promoted and participated in numerous university research projects funded by Sapienza and MUR.

Digital & Documentation 2020 focuses in its subtitle the verbs 'reading' and 'communicating' referred to Cultural Heritage. The choice of the two verbal lemmas, which seems natural, in fact, in relation to the objectives identified for the Study day, intends to highlight the centrality of Drawing interpreted in its broadest, modern, scientific and current meaning, within the complex process of Cultural Heritage valuing. A Drawing considered in the noblest and broadest meaning of the term, interpreted as a fundamental and main aid to the comprehension and communication of nature and artifacts belonging to real or imaginary space, which are expressed in the forms of tangible and imagible assets. A Drawing that is a privilege of humanity, through which humanity itself can express its Cultural Heritage and benefit from it. A Drawing that is embodied in a multiplicity of theories, tools and forms of expression, which are synergistically, seamlessly, integrated between analog and digital operations. Finally, a Drawing that stratifies over time, leaves its own traces and, as Franco Purini reminds us, is memory!: synchronic and diachronic documentation of the human existence and experience it makes manifest. existence and experience it makes manifest.

existence and experience it makes manifest. In this way, the terms 'digital' and 'documentation' also express their most notable meanings: the first, of memory; the second, of principal aid to the layering, integration, processing, representation and communication of documentation. Finally, with regard to the locution 'Cultural Heritage,' we would like to recall how vitally linked it is to the generalized dissemination of knowledge: it is evident, in fact, that communities are expected to preserve and protect the traces of their existence only in the case they know, understand and fully share the cultural value they represent. 'Valuing', then, means 'making accessible and 'transferring knowledge' to the widest and most diverse

Although this publication was born and developed in the area of Drawing, it doesn't operate in an isolated scientific area. This is demonstrated by the fact that the event from which it originated is promoted by the Department that integrates the disciplines of History, Representation and Restoration of Architecture: a context of full contamination, the same contamination which is present in different forms in the other universities that contribute their scientific input to support the initiative.

input to support the initiative. From this perspective, the contributions here presented, devoting special attention to the considerable communicative, pervasive and persuasive potential of digital documentation of the cultural asset, interpreted as an augmented information support of the asset itself and a privileged way to get to its comprehension, are intended to accelerate the adoption and refinement of the best methodologies and practices of study. Thus, activities such as: documentary analysis; quantitative and qualitative knowledge investigations; technologies for data acquisition, normalization, cataloguing and interrogation; and modes of communication and interaction with digital information, with particular

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regard for dissemination and popularization methodologies, considered vital communication processes for the enhancement of Cultural Heritage, fall within this context.

Taken together, these activities make it possible to operate on Cultural Heritage by organizing and integrating the processes of knowledge and communication which are characteristic of scientific research, orienting them toward a diverse audience in terms of nature and interests. Pathways of research, therefore, allowing both to disseminate results in different forms to a wide audience and to disseminate them in a scientific way to an audience composed with scholars. And it is precisely through these two priority communication channels, of raising awareness and attracting the interest of vast communities in the analyzed assets, that the main objective of the Study als achieved in terms of dissemination of scientific culture and the transfer of knowledge: the valuing of the cultural asset.

The contributions of the authors here gathered and presented range from theoretical reflections, experimental activities, reports of experiences carried out or being conducted, and test operations of the best practices established to date.

reports of experiences carried out or being conducted, and test operations of the best practices established to date. The meeting we are presenting in these pages becomes the scene of debates, comparisons and demos of innovations, refinements, tests, methodologies, methodological experiments on the process of acquisition, critical and semantic analysis, dissemination and communication of Cultural Heritage.

In the three years of experimentation and evolution of Digital & Documentation Study days, which was intended to be

titherant, the founding committee, supported by scientific committee, has gradually matured a characteristic format, which for 2020 is divided into introductory reports by Cultural Heritage management actors and in-depth studies concerning original scientific activities produced by selected researchers, specially chosen for offering particular space

concerning original scientific activities produced by selected researchers, specially chosen for offering particular space to younger forces.

In the first group you'll find the valuable contributions of Erminia Sciacchitano, who was working into the offices of direct collaboration of the Minister of Cultural Heritage and Activities and Tourism, Dario Franceschini; Alfonsina Russo, Director of the Parco Archeologico del Colosseo (Colosseo Machaedological Park), accompanied by executives such as Federica Rinaldi, Head of the Flavian Amphitheater, and Stefano Borghini, Curator of digital enhancement of the Archaeological Park; and, finally, Dario Aureli, head of the Technical Office of the Palazzo Barberini Museum. Alongside this first group, a number of young researchers whose work has been specially selected have been invited by the Digital & Documentation Technical Scientific Committee, in a context of constructive dialogue and comparison with the Inoperstanding scientific Community.

longer-standing scientific community.

All contributions are introduced by moderators who, with extreme expertise, have reconnected in an original and purposeful way the authors' researches.

Therefore, we hope, that this publication will represent a moment of knowledge sharing and updating, of significant importance for scientific progress. We hope as well that it may facilitate the development of new and young ideas, raising from the solid foundation of the established culture of more mature generations.

Indeed, we should not forget that the documentation of Cultural Heritage, today more than ever, has assumed a fun-damental role in the collective global cultural horizon: natural phenomena and the dramatic and incomprehensible heinousnesses enacted in different historical and geographical settings and contexts put the preservation of Cultural heritage at risk on a daily basis and make it indispensable to continuously update the heritage of humanity in the different forms it may assume.

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[Online], No. 71. http://journals.openedition.org/estetica/5452

(Jast accessed May 13, 2023). DOI: https://doi.org/10.4000/estetica.5452.

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