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Digital Heritage

Progress in Cultural Heritage:
Documentation, Preservation,
and Protection

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Preface

Welcome to the proceedings of the 5th EuroMed Conference, the traditional biennial scientific event, which was held in the ancient city of Amathus, located in Limassol, Cyprus. The island has always been a bridge to three continents in the world going back to the origins of civilization. It is a place where the fingerprints of several ancient cultures and civilizations on earth can be found, with a wealth of historical sites recognized and protected by UNESCO.

Several organizations and current EU projects (such as the Marie-Curie Fellowship project on Digital Heritage ITN-DCH, the IAPP 4D-CH-WORLD, the LoCloud, the EuropeanaSpace, the DARIAH-EU ERIC and DARIAH-CY projects) decided to join EuroMed2014 and continue their cooperation together in order to create an optimal environment for the discussion and explanation of new technologies, exchange of modern innovative ideas, and in general to allow the transfer of knowledge between a large number of professionals and academics during one common event and time period.

The main goal of the event is to illustrate the programs underway, whether organized by public bodies (e.g., UNESCO, European Union, National States, etc.) or by private foundations (e.g., Getty Foundation, World Heritage Foundation, etc.) in order to promote a common approach to the tasks of recording, documenting, protecting, and managing World Cultural Heritage. The 5th EuroMed Conference was definitely a forum for sharing views and experiences and discussing proposals for the optimum attitude as well as the best practice and the ideal technical tools to preserve, document, manage, present/visualizes, and disseminate the rich and diverse cultural heritage of mankind.

This conference was held during the first year of the new Framework Programme, Horizon 2020, which is the largest in the world in terms of financial support for research, innovation, technological development, and demonstration activities. The awareness of the value and importance of heritage assets has been reflected in the financing of projects since the first Framework Programme for Research & Technological Development (FP1, 1984-87) and continues into the current HORIZON 2020 that follows FP7 (2007-13). In the past 30 years, a large community of researchers, experts, and specialists have had a chance to learn and develop the transferable knowledge and skills needed to inform stakeholders, scholars, and students. Europe has become a leader in heritage documentation, preservation, and protection science, with COST Actions adding value to projects financed within the FP and EUREKA program and transferring knowledge to practice and supporting the development of SMEs.

The EuroMed2014 agenda focused on the enhancement and strengthening of international and regional cooperation and promoting awareness and tools for future innovative research, development, and applications to protect, preserve, and document the European and World Cultural Heritage. Our ambition was

to host an exceptional conference by also mobilizing policy makers from different EU countries, institutions (European Commission, European Parliament, Council of Europe, UNESCO, International Committee for Monuments and Sites ICOMOS, the International Committee for Documentation of Cultural Heritage CIPA, the International Society for Photogrammetry and Remote Sensing ISPRS, the International Centre for the study of the Preservation and Restoration of Cultural Property ICCROM, and the International Committee for Museums ICOM), professionals, as well as participants from all over the world and from different scientific areas of cultural heritage.

Protecting, preserving, and presenting our cultural heritage are actions that are frequently interpreted as change management and/or change of the behavior of society. Joint European and international research projects provide the scientific background and support for such a change. We are living in a period characterized by rapid and remarkable changes in the environment, in society, and in technology. Natural changes, war conflicts, and man-made changes, including climate, as well as technological and societal changes, form an ever-moving and colorful stage and pose a challenge for society. Close cooperation between professionals, policy makers, and authorities internationally is necessary for research, development, and technology in the field of cultural heritage.

Scientific projects in the area of cultural heritage have received national, European Union, or UNESCO funding for more than 30 years. Through financial support and cooperation, major results have been achieved and published in peer-reviewed journals and conference proceedings with the support of professionals from many countries. The European Conferences on Cultural Heritage research and development and in particular the biennial EuroMed conference have become regular milestones in the never-ending journey in search for new knowledge of our common history and its protection and preservation for the generations to come. EuroMed also provides a unique opportunity to present and review results as well as to draw new inspiration.

To reach this ambitious goal, the topics covered include experiences in the use of innovative technologies and methods and how to take best advantage to integrate the results obtained to build up new tools and/or experiences as well as to improve methodologies for documenting, managing, preserving, and communicating cultural heritage.

Here, we present 84 papers, selected from 438 submissions that focus on interdisciplinary and multidisciplinary research concerning cutting-edge cultural heritage informatics, physics, chemistry, and engineering and the use of technology for the representation, documentation, archiving, protection, preservation, and communication of cultural heritage knowledge.

Our keynote speakers, Mr. Gustavo Araoz (ICOMOS President), Mr. Roberto Scopigno (Director at ISTI, CNR), Mr. Timothy Whalen (Getty Director), Mr. France Desmarais (ICOM), Mrs. Maria P. Kouroupas, US Department of State, Mr. Fabrizio Panone (INTERPOL) and Mr. Laurent Pinot (WCO) are not only experts in their fields but also visionaries for the future of cultural heritage

protection and preservation. They promote the e-documentation and protection of the past in such a way for its preservation for the generations to come.

We extend our thanks to all authors, speakers, and those persons whose labor, financial support, and encouragement made EuroMed2014 event possible. The international Program Committee, whose members represent a cross-section of archaeology, physics, chemistry, civil engineering, computer science, graphics and design, library, archive, and information science, architecture, surveying, history, and museology, worked tenaciously and finished their work on time. The staff of the IT Department at the Cyprus University of Technology helped with their local ICT and audio-visual support, especially Mr. Filippou Filippou, Mr. Costas Christodoulou, and Mr. Stephanos Mallouris. We would also like to express our gratitude to all the organizations supporting this event and our co-organizers, the European Commission scientific and policy officers of the H2020 Marie Skłodowska-Curie Programme, the director general of Europeana Mrs. Jill Cousins, the Getty Conservation Institute and World Monuments Fund, the Cyprus University of Technology, the Ministry of Energy, Commerce, Industry, and Tourism, especially the permanent secretary, and Digital Champion Dr. Stelios Himonas and Mr. Nikos Argyris, the Ministry of Education and Culture and particularly Minister Dr. Costas Kadis, the director of the Cultural Services Mr. Pavlos Paraskevas, the Department of Antiquities in Cyprus, all the members of the Cypriot National Committee for e-documentation and e-preservation in cultural heritage, and finally our corporate sponsors, CableNet Ltd., the Cyprus Tourism Organization, the Cyprus Postal Services, the Cyprus Handicraft Center, and Dr. Kyriakos Themistokleous from the Cyprus Remote Sensing Society, who provided services and ‘gifts of kind’ that made the conference possible.

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October 2014

Marinos Ioannides
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Table of Contents

Digital Data Acquisition Technologies and Data Processing in Cultural Heritage

Automatic Registration of Non-overlapping Laser Scans Based on a Combination of Generated Images from Laser Data and Digital Images in One Bundle	1
<i>Wassim Moussa and Dieter Fritsch</i>	
Colour and Space in Cultural Heritage: Key Questions in 3D Optical Documentation of Material Culture for Conservation, Study and Preservation	11
<i>Frank Boochs, Anna Bentkowska-Kafel, Christian Degrigny, Maciej Karaszewski, Ashish Karmacharya, Zoltan Kato, Marcello Picollo, Robert Sitnik, Alain Trémeau, Despoina Tsiafaki, and Levente Tamas</i>	
In the Pursuit of Perfect 3D Digitization of Surfaces of Paintings: Geometry and Color Optimization	25
<i>Maciej Karaszewski, Krzysztof Lech, Eryk Bunsch, and Robert Sitnik</i>	
Architectural Historical 4D Documentation of the Old-Segeberg Town House by Photogrammetry, Terrestrial Laser Scanning and Historical Analysis	35
<i>Thomas P. Kersten, Nils Hinrichsen, Maren Lindstaedt, Christoph Weber, Kristin Schreyer, and Felix Tschirschwitz</i>	
Capturing the Sporting Heroes of Our Past by Extracting 3D Movements from Legacy Video Content	48
<i>Jon Goenetxea, Luis Unzueta, Maria Teresa Linaza, Mikel Rodriguez, Noel O'Connor, and Kieran Moran</i>	
A High Speed Dynamic System for Scanning Reflective Surface with Rotating Polarized Filters	59
<i>Ryo Ogino, Jay Arre Toque, Pengchang Zhang, and Ari Ide-Ektessabi</i>	
Orthoimage of Asclepieion at the Ancient Messene from UAV Images Applying Dense Image Matching	70
<i>Evangelos Maltezos and Charalabos Ioannidis</i>	
Innovation Technologies and Applications for Coastal Archaeological Sites”	80
<i>Alessio Di Iorio, Dimitrios Biliouris, Lars Boye Hansen, and Antonella Canestro</i>	

Content-Based Filtering for Fast 3D Reconstruction from Unstructured Web-Based Image Data	91
<i>Konstantinos Makantasis, Anastasios Doulamis, Nikolaos Doulamis, Marinos Ioannides, and Nikolaos Matsatsinis</i>	
Semi-supervised Image Meta-filtering in Cultural Heritage Applications	102
<i>Eftychios Protopapadakis, Anastasios Doulamis, and Nikolaos Matsatsinis</i>	
Semi-automatic Segmentation and Modelling from Point Clouds towards Historical Building Information Modelling	111
<i>Hélène Macher, Tania Landes, Pierre Grussenmeyer, and Emmanuel Alby</i>	
From a Model of a City to an Urban Information System: The SIUR 3D of the Castle of Pietrabuona	121
<i>Duccio Troiano, Andrés García Morro, Alessandro Merlo, and Eduardo Vendrell Vidal</i>	
Beyond Software. Design Implications for Virtual Libraries and Platforms for Cultural Heritage from Practical Findings	131
<i>Sander Münster and Nikolas Prechtel</i>	
Cultural Heritage Information Systems State of the Art and Perspectives	146
<i>Barbara Vodopivec, Rand Eppich, and Roko Žarnić</i>	
Distribution of Cultural Content through Exploitation of Cryptographic Algorithms and Hardware Identification	156
<i>Harris E. Michail, Constantinos Louca, Dimitris Gavrilis, Andreas Gregoriades, Lazaros Anastasiou, and Marinos Ioannides</i>	
Beyond Crude 3D Models: From Point Clouds to Historical Building Information Modeling via NURBS	166
<i>Daniela Oreni, Raffaella Brumana, Fabrizio Banfi, Luca Bertola, Luigi Barazzetti, Branka Cuca, Mattia Previtali, and Fabio Roncoroni</i>	
M3art: A Database of Models of Canvas Paintings	176
<i>Jan Blažek, Jindřich Soukup, Barbara Zitová, Jan Flusser, Janka Hradilová, David Hradil, and Tomáš Tichý</i>	
Bridging Archaeology and GIS: Influencing Factors for a 4D Archaeological GIS	186
<i>Berdien De Roo, Kristien Ooms, Jean Bourgeois, and Philippe De Maeyer</i>	

The e-Documentation of Intangible Cultural Heritage

Analyzing Taiwanese Indigenous Folk Dances via Labanotation and Comparing Results from Interdisciplinary Studies	196
<i>Huaichin Hu, Rayuan Tseng, Chyicheng Lin, Likuo Ming, and Katsushi Ikeuchi</i>	
LMA-Based Motion Retrieval for Folk Dance Cultural Heritage	207
<i>Andreas Aristidou, Efsthios Stavrakis, and Yiorgos Chrysanthou</i>	

Standards, Metadata, Ontologies and Semantic Processing in Cultural Heritage

Ontology-Driven Processing and Management of Digital Rock Art Objects in IndianaMAS	217
<i>Daniela Briola, Vincenzo Deufemia, Viviana Mascardi, Luca Paolino, and Nicoletta Bianchi</i>	
How Linked Open Data Can Help in Locating Stolen or Looted Cultural Property	228
<i>Eleanor E. Fink, Pedro Szekely, and Craig A. Knoblock</i>	
Automatic Enrichments with Controlled Vocabularies in Europeana: Challenges and Consequences	238
<i>Juliane Stiller, Vivien Petras, Maria Gäde, and Antoine Isaac</i>	

Data Management and Visualisation/Presentation of Cultural Heritage content

Along the Appian Way. Storytelling and Memory across Time and Space in Mobile Augmented Reality	248
<i>Gunnar Liestøl</i>	
A Geometric Algebra Animation Method for Mobile Augmented Reality Simulations in Digital Heritage Sites	258
<i>George Papagiannakis, Greasidou Elissavet, Panos Trahanias, and Michalis Tsioumas</i>	
Interactive 3D Visualisation of Architectural Models and Point Clouds Using Low-Cost-Systems	268
<i>Felix Tschirschwitz, Thomas P. Kersten, and Kay Zobel</i>	
3D Visualization via Augmented Reality: The Case of the Middle Stoa in the Ancient Agora of Athens	279
<i>Styliani Verykokou, Charalabos Ioannidis, and Georgia Kontogianni</i>	

Between the Fragment and the Atlas: A Device for the Visualization and Documentation of the <i>Cité de l'Architecture et du Patrimoine</i> in Paris	290
<i>Fabrizio Gay and Matteo Ballarin</i>	

Innovative Technologies to Assess, Monitor, Restore and Preserve Cultural Heritage

Using Heritage Risk Maps as an Approach for Estimating the Climate Impact to Cultural Heritage Materials in the Island of Taiwan	300
<i>Ping-Sheng Wu, Chun-Ming Hsieh, and Min-Fu Hsu</i>	

Documentation and Evaluation of the Positive Contribution of Natural Ventilation in the Rural Vernacular Architecture of Cyprus	310
<i>Aimilios Michael, Maria Philokyprou, and Chrystalla Argyrou</i>	

Shared Solutions to Tackle Restoration Restrictions and Requirements for Cultural Landscape and the Sustainable Conservation of Cultural Heritage	321
<i>Elena Gigliarelli and Giuliana Quattrone</i>	

Preservative Approach to Study Encased Archaeological Artefacts	332
<i>Théophane Nicolas, Ronan Gaugne, Cédric Tavernier, Valérie Gouranton, and Bruno Arnaldi</i>	

Microwave Assisted Preparation of Calcium Hydroxide and Barium Hydroxide Nanoparticles and Their Application for Conservation of Cultural Heritage	342
<i>Khaled M. Saoud, Imen Ibala, Dana El Ladki, Omar Ezzeldeen, and Shaukat Saeed</i>	

Quality of Rural Life and Culture: Managing Change through the Identification of Good Practice, Pilot Implementation Projects and Evaluation	353
<i>Rand Eppich, Alexandra Kulmer, Juan Carlos Espada, Barbara Vodopivec, and Roko Žarnić</i>	

Accessing the Impact of EU Research, Development and Technology in the Digital Heritage Domain

MAXICULTURE: Assessing the Impact of EU Projects in the Digital Cultural Heritage Domain	364
<i>Francesco Bellini, Antonella Passani, Francesca Spagnoli, David Crombie, and George Ioannidis</i>	

Digital Data Acquisition Technologies and Data Processing in Cultural Heritage

Characterisation of Spatial Techniques for Optimised Use in Cultural Heritage Documentation	374
<i>Ann-Kathrin Wiemann, Frank Boochs, Ashish Karmacharya, and Stefanie Wefers</i>	
Integration of Innovative Surveying Technologies for Purposes of 3D Documentation and Valorisation of St. Herakleidios Monastery in Cyprus	387
<i>Branka Cuca, Athos Agapiou, Andreas Kkolos, and Diofantos Hadjimitsis</i>	
More Than a Flight: The Extensive Contributions of UAV Flights to Archaeological Research – The Case Study of Curium Site in Cyprus ...	396
<i>Kyriacos Themistocleous, Athos Agapiou, Helen M. King, Nigel King, and D.G. Hadjimitsis</i>	
Accurate and Cost-Efficient 3D Modelling Using Motorized Hexacopter, Helium Balloons and Photo Modelling: A Case Study	410
<i>Britt Lonneville, Berdien De Roo, Cornelis Stal, Bart De Wit, Alain De Wulf, and Philippe De Maeyer</i>	
Combination of 3D Scanning, Modeling and Analyzing Methods around the Castle of Coatfrec Reconstitution	418
<i>Jean-Baptiste Barreau, Yann Bernard, Quentin Petit, Laurent Beuchet, Emilien Petit, Volker Platen, Ronan Gaugne, Julien Le Rumeur, and Valérie Gouranton</i>	
Design for Knowledge and Restoration: Instrumental Survey at Santa Maria in San Celso	427
<i>Angela Baila, Lorenzo Mazza, and Anna Anzani</i>	
Historic Center 3D Metric Documentation Updating by Low Cost Solution: The Lençóis Project	438
<i>Arivaldo Leão de Amorim, Gabriele Fangi, and Eva Savina Malinverni</i>	
Digital Survey and Material Analysis Strategies for Documenting, Monitoring and Study the Romanesque Churches in Sardinia, Italy	446
<i>Stefano Columbu and Giorgio Verdiani</i>	
3D Reconstruction of Saltanat Gate in Dolmabahce Palace	454
<i>Ovgu Ozturk Ergun, Bo Zheng, Bahtiyar Kaba, Huseyin Inan, Masataka Kagesawa, and Katsushi Ikeuchi</i>	
Architectural Perspectives Survey	463
<i>Riccardo Migliari, Marco Fasolo, Leonardo Baglioni, Marta Salvatore, Jessica Romor, and Matteo Flavio Mancini</i>	

3D Technologies for the Integrated Analysis of World Heritage: The Case of UNESCO's Škocjan Caves, Slovenia	473
<i>Gregor Novakovič, Dimitrij Mlekuž, Luka Rozman, Aleš Lazar, Borut Peric, Rosana Cerkenik, Karmen Peterneš, and Miran Erič</i>	

Integrated Application of Digital Technologies for Transmitting Values of Cultural Heritage in Remote Mountains	482
<i>Yi-Jen Tseng, Tsung-Chiang Wu, and Sheng-Fa Hsu</i>	

Innovative Graphic Applications and Techniques

Experimental BIM Applications in Archeology: A Work-Flow	490
<i>Andrea Scianna, Susanne Gristina, and Silvia Paliaga</i>	

Bologna Porticoes Project: 3D Reality-Based Models for the Management of a Wide-Spread Architectural Heritage Site	499
<i>Fabrizio Ivan Apollonio, Marco Gaiani, Federico Fallavollita, Massimo Ballabeni, and Sun Zheng</i>	

GAs and Evolutionary Design in Architectural Heritage-The Case of Islamic Architecture	507
<i>Osama Mohammad Alrawi</i>	

Keeping the Equilibrium: The Static Aspects of the Restoration Project. The Case Study of the Mother Church of San Cataldo (Sicily)	517
<i>Antonella Versaci, Alessio Cardaci, Davide Indelicato, and Luca Renato Fauzia</i>	

Giving Life to John Calvin the Reformer	526
<i>Marlène Arévalo, Nedjma Cadi-Yazli, and Nadia Magnenat Thalmann</i>	

meSch – Material Encounters with Digital Cultural Heritage	536
<i>Daniela Petrelli, Elena Not, Areti Damala, Dick van Dijk, and Monika Lechner</i>	

Playhist: Play and Learn History. Learning with a Historical Game vs An Interactive Film	546
<i>Ainhoa Perez-Valle, Pablo Aguirrezabal, and Sara Sillaurren</i>	

Intelligent Interactive Applications for Museum Visits	555
<i>Kemal Egemen Ozden, Devrim Unay, Huseyin Inan, Bahtiyar Kaba, and Ovgu Ozturk Ergun</i>	

Digital Archive System with 3D Web Portal Interface	564
<i>Ryosuke Matsushita, Hiroshi Suita, and Yoshihiro Yasumuro</i>	

Presenting Cypriot Cultural Heritage in Virtual Reality: A User Evaluation	572
<i>F. Loizides, A. El Kater, C. Terlikas, A. Lanitis, and D. Michael</i>	

2D and 3D GIS in Cultural Heritage

Research on the GIS as a Communication Platform in the Risk Management of Traditional Settlement.....	580
<i>Alex Ya-Ning Yen and Chin-fang Cheng</i>	

An Application of G.I.S on Integrative Management for Cultural Heritage- An Example for Digital Management on Taiwan Kinmen Cultural Heritage	590
<i>Wun-Bin Yang, Hung-Ming Cheng, and Ya-Ning Yen</i>	

Geospatial Technologies for the Built Heritage Management: Experiences in Sardinia, Italy.....	598
<i>Michele Campagna, Maddalena Achenza, Yuri Iannuzzi, and Chiara Cocco</i>	

Worthy Outcomes from a System Advancing the Sharing of CH Data and Stakeholders' Relations	606
<i>Antonia Spanò, Elena Cerutti, Carla Bartolozzi, and Francesco Novelli</i>	

Innovative Technologies to Assess, Monitor, Restore and Preserve Cultural Heritage

Digital Morphometric Survey for Documentation, Conservation and Restoration Works: The MUDI Project	617
<i>Roberto Di Giulio, Marcello Balzani, Federica Maietti, and Federico Ferrari</i>	

Recovery of Fragile Objects from Underwater Archaeological Excavations: New Materials and Techniques by SASMAP Project	625
<i>Barbara Davidde Petriaggi, David John Gregory, and Jørgen Dencker</i>	

The VernArch Digital Database Project: Documentation and Protection of the Vernacular Architecture of Cyprus.....	635
<i>Maria Philokyprou</i>	

Preservation of a Computer-Based Art Installation	643
<i>Franc Solina, Gregor Majcen, Narvika Bovcon, and Borut Batagelj</i>	

A Study on Spatial Changes within Rukai Indigenous Settlements during the Japanese Colonial Era	651
<i>Sheng-Fa Hsu, Yi-Jen Tseng, and Min-Fu Hsu</i>	

Informing Historical Preservation with the Use of Non-destructive Diagnostic Techniques: A Case Study at Ecab, Quintana Roo, Mexico	659
<i>Michael Hess, Dominique Meyer, Aliya Hoff, Dominique Rissolo, Luis Leira Guillermo, and Falko Kuester</i>	
Assessment of Structural Natural Frequencies and Application in the Calibration of FEM Models and Structural Health Monitoring	669
<i>Davor Uglešić and Ante Uglešić</i>	
Restoration of the Dome of St. James's Cathedral in Šibenik	678
<i>Davor Uglešić and Miljenko Domijan</i>	
Heritage Landscape Conservation and Development	687
<i>Jia Guo</i>	
Non-invasive Materials Analysis Using Portable X-ray Fluorescence (XRF) in the Examination of Two Mural Paintings in the Catacombs of San Giovanni, Syracuse	697
<i>Samantha Stout, Antonino Cosentino, and Carmelo Scandurra</i>	
The Madonna of the Goldfinch by Raphael: Chamera of Perception	706
<i>Perla Gianni Falvo</i>	

Standards, Metadata, Ontologies and Semantic Processing in Cultural Heritage

Ontology-Driven Visual Browsing of Historical Industrial Archives	716
<i>Monica De Martino, Marina Monti, Simone Pastorino, and Chiara Rosati</i>	
Graph Based Keyword Spotting in Medieval Slavic Documents – A Project Outline	724
<i>Kaspar Riesen, Darko Brodić, Zoran N. Milivojević, and Čedomir A. Maluckov</i>	

Data Management and Visualisation/Presentation of Cultural Heritage Content

Design Considerations for Implementing an Interactive DigiLog Book ...	732
<i>Taejin Ha and Woontack Woo</i>	
Modeling the Past Online: Interactive Visualisation of Uncertainty and Phasing	740
<i>Joanna S. Smith, Szymon M. Rusinkiewicz, Silvana Alberti, Junjun Chen, Maricela Coronado, Garrett Disco, Anastasia Georgiou, Tamara Pico, George Touloumes, and Gina Triolo</i>	

Logboats: A Global Symbolic Content for New Reflections on the Protection of World Heritage in the Future with the Help of Cutting Edge Technology	749
<i>Miran Erč</i>	

QRCODE and RFID Integrated Technologies for the Enhancement of Museum Collections	759
<i>Mincolelli Giuseppe, Biancardi Michela, Fabbri Matteo, Feriotto Chiara, Massarente Alessandro, Munerato Stefano, and Raco Fabiana</i>	

The e-Documentation of Intangible Cultural Heritage

Multilingual Specialist Glossaries in a Framework for Intangible Cultural Heritage	767
<i>Maria Teresa Artese and Isabella Gagliardi</i>	

Fuzzy Archives. What Kind of an Object Is the Documental Unit of Oral Archives?	777
<i>Calamai Silvia, Biliotti Francesca, and Bertinetto Pier Marco</i>	

Accessing the Impact of EU Research, Development and Technology in the Digital Heritage Domain

The Digitization Age: Mass Culture Is Quality Culture. Challenges for Cultural Heritage and Society	786
<i>Valentina Bachi, Antonella Fresa, Claudia Pierotti, and Claudio Prandoni</i>	

From Europeana Cloud to Europeana Research: The Challenges of a Community-Driven Platform Exploiting Europeana Content	802
<i>Agiatis Benardou, Costis Dallas, and Alastair Dunning</i>	

Using ICT in Cultural Heritage, Bless or Mess? Stakeholders' and Practitioners' View through the eCultValue Project	811
<i>Yannis Ioannidis, Eleni Toli, Katerina El Raheb, and Maria Boile</i>	

Tangible versus Intangible in e-Learning on Cultural Heritage: From Online Learning to On-site Study of Historic Sites	819
<i>Anna Lobovikov-Katz, Antonia Moropoulou, Agoritsa Konstanti, Pilar Ortiz Calderón, Rene Van Grieken, Susannah Worth, JoAnn Cassar, Roberta De Angelis, Guido Biscontin, and Francesca Caterina Izzo</i>	

Author Index	829
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