

INDEX

INTRODUCTION

Marco Fioravanti A NEW VISION OF CULTURAL HERITAGE Reflections after the workshop	19
--	----

THE SAFEGUARD OF CULTURAL HERITAGE: A CHALLENGE FROM THE PAST FOR THE EUROPE OF TOMORROW Extended Summary	23
---	----

Keynotes

Carsten Paludan-Müller <i>Cultural heritage - and the politics of conflict, poverty, peace and prosperity</i>	32
Marc Caball <i>Individuals, societies, cultures and health</i>	33
Piero Baglioni <i>Science for the conservation of the cultural heritage</i>	35
Mario Santana-Quintero <i>Centering the role of documentation in conserving our built heritage</i>	36
Philip Cooke <i>Innovation, creativity, green economy</i>	37

Session 1 THE HUMAN DIMENSION IN CULTURAL HERITAGE 41

<i>Rapporteur</i> Agostino Paravicini Bagliani <i>The Human dimension in Cultural Heritage</i>	43
---	----

1.1 Cultural identity, landscape and intangible heritage 47

Agostino Paravicini Bagliani <i>Medioevo europeo. Medieval studies and technological resources</i>	47
Graham Fairclough <i>21st century lifestyles: landscape, heritage and urban identity</i>	50
Pavlina Misikova <i>Potential of co-operation of the pan-european platform on cultural heritage and landscape</i>	54
Jean-Paul Métaillé <i>"Facing the landscape": how cultural heritage is took in account in natural parks of the french pyrenees</i>	57
Bas Pedroli <i>Landscape - mirror of our culture. An interdisciplinary challenge safeguarding landscape values</i>	59
Amedeo Amedei, Rosa Valanzano, Mario Milco D'elios, Gianfranco Gensini, Donatella Lippi <i>Florence and medical humanities: intangible heritage of mankind</i>	62
LaGeS <i>Public space as cultural heritage</i>	64
Margherita Azzari, Camillo Berti, Paola Zamperlin <i>Wettus-wetlands atlas of tuscan</i>	65
Magdalena Bielenia-Grajewska <i>The role of cultural heritage in shaping symbolic corporate linguistic identity</i>	66
Tommaso Martino <i>The history of emotions and the safeguard of cultural heritage</i>	67
Carolina Capitanio <i>The historic urban landscape of Florence. Critical survey and redevelopment of the urban landscape</i>	68
Fabio Lucchesi, Martina Angeletti, Francesco Monacci, Giovanni Ruffini, Nunziella Toscano <i>Persistence and metamorphosis in the settlements in Tuscany</i>	70
Luigi Zangheri <i>Remarks on landscape</i>	71

1.2 Arts, architecture & archaeology on material heritage 72

Alasdair Ross <i>Tourism and recreation versus protecting cultural landscapes and heritage in the scottish highlands</i>	72
Claire McIlroy <i>The history of emotions: preserving europe's cultural heritage through interdisciplinary research collaboration</i>	74
Gert Melville <i>Medieval monasteries and religious orders as laboratories of innovation for modern times</i>	76
Camilla Mileto, Fernando Vegas <i>The role of restoration of heritage in the future europe: recovering the cultural landscape as an identity sign</i>	78
Ray Bondin <i>Heritage is a financial asset</i>	80
Paul Mironneau <i>History at museum, museum faced with history: a debate upon emotions</i>	81
Guido Vannini, Michele Nucciotti <i>Light and public!</i>	83

1.3 Written heritage, libraries, archives and other collection of social documents 86

Cristina Blanco Sio-López <i>Preservation and valorisation strategies through digital humanities: the case of the CVCE's enhancement of research and education in european integration studies</i>	86
Simon Tanner <i>Preserving the past, imaging the future: how democratising access and generating measurable changes to people's lives is affecting preservation strategies for cultural heritage</i>	89
Worthy N. Martin <i>Thematic repositories of cultural heritage - case studies to inform future research and development</i>	92
Toby Burrows <i>Organizing digital resources for cultural heritage research</i>	95
Wendy Scase <i>Medieval manuscript heritage: digital research challenges and opportunities</i>	97
Cristina Dondi <i>The integration of provenance data for the reconstruction of the dispersed european book heritage</i>	100

Nicoletta Maraschio <i>Languages: our present and our future</i>	103
Margherita Azzari, Irene Calloud, Paola Zamperlin <i>ARCES project - digital archive of italian scientific expeditions and colonial cartography</i>	106
<i>CLIEO centro di linguistica storica e teorica: italiano, lingue europee, lingue orientali</i>	107
Marco Biffi <i>The center for theoretical and historical linguistics: italian, european and oriental languages (CLIED)</i>	108
Angela Frati, Stefania Iannizzotto, Vera Gheno <i>Accademia della Crusca</i>	110
Patricia Engel <i>Common strategic framework for future eu research and innovation funding consultation</i>	112
Worthy N. Martin <i>Safeguard of cultural heritage: a challenge from the past for the Europe of tomorrow</i>	117
Massimo Moneglia <i>Spoken language archives at the lablita lab of the university of Florence. Projects and resources</i>	120
Gabriele Rossi Rognoni, Donatella Mitolo <i>Recovery and conservation of musical heritage: the music of grand prince Ferdinando de' Medici</i>	122
Mirella Loda, Silvia Aru, Diego Cariani, Cristina Lo Presti <i>Public space as Cultural Heritage</i>	123
Simone Magherini <i>AD900: writers' papers online</i>	125
Session 2 SCIENCE FOR CONSERVATION OF CULTURAL HERITAGE	127
<i>Rapporteur</i> Lars I. Elding <i>Science for conservation of Cultural Heritage</i>	129
2.1 CONSERVATION METHODS AND MATERIALS SCIENCE	135
Lars Ivar Elding <i>Preservation of the Vasa warship</i>	135
Matija Strlic <i>NIR spectroscopy for visualisation and modelling of damage</i>	138
Luca Uzielli <i>The material sciences applied to conservation of wooden cultural heritage: future perspectives</i>	140
Philippe Colomban Ladir <i>The on-site Raman analysis of cultural heritage artefacts, paintings, rock art, pottery, glasses,...: drawbacks and success!</i>	143
Federica Acciai, Francesca Donnarumma, Antonio Frandi, Lucia Liccioli, Massimiliano Marvasi, Giorgio Mastromei, Irene Padovani, and Brunella Perito <i>Characterization of black fungi isolated from deteriorated areas of two famous marble statues</i>	146
Linda Cocchi, Paola Mazzanti, Luca Uzielli <i>The trittico di San Pietro Martire by Beato Angelico: a panel painting deformation behaviour</i>	149
Michela Grimaldi <i>Selection and characterization of biosurfactants for the bio-cleaning application to surface deposits on stone artwork</i>	150
Irene Natali, Martina Naldini, Emiliano Carretti, Piero Baglioni, Luigi Dei <i>Nanocomposite systems composed by teos and CA(OH)2 nanoparticles for the conservation of architechtonic surfaces</i>	151
Irene Natali, Federica Marinelli, Emiliano Carretti, Piero Baglioni, Luigi Dei, Lora Angelova, Richard G. Weiss <i>Low impact polymeric aqueous systems for the cleaning of painted surfaces</i>	152
Mariangela Potenza, Giuseppina Sabatino, Francesca Giambi, Luca Rosi, Luigi Dei and Anna Maria Papini <i>Diagnostics of egg-based paintings in cultural heritage: an innovative combined dot-elisa and uplc-based amino acid analysis approach</i>	153
David Bourgarit <i>On the utility of experimental simulation towards the understanding of ancient technological processes: the example of brass cementation</i>	154
2.2 ARCHAEOOMETRY: METHODS AND GEOMATERIALS	158
Vincent Serneels <i>The archaeology of iron production</i>	158
Aurelio Climent-Font <i>Lustre ceramics. A sophisticated decoration process unravelled with the contribution of IBA techniques</i>	160
Vivi Tornari <i>The outcome of two EC projects (FP5 LASERACT and FP6 MULTIENCODE) in new instrumentation of laser coherent metrology for on-field implementation, documentation and originality applications. New applications and perspectives for cultural heritage research, education and training, market exploitation and everyday practices</i>	162
John Havermans, Rob van Hees, Annemie Adriaens <i>The future for safeguarding the past: 'networks for conservation science'</i>	163
Cristiana Lofrumento, Marilena Ricci, Luca Bachechi, Emilio Mario Castellucci <i>Spectroscopic analyses on rock art paintings from east central Ethiopia</i>	167
Elena Pecchioni, Emma Cantisani, Fabio Fratini, Raimondo Quaresima <i>Ancient and modern mortars: knowing the past to plan the future</i>	170
Elena Platania, Cristiana Lofrumento, Marilena Ricci, Maurizio Becucci, Emilio Mario Castellucci <i>Micro-invasive textile sample treatment for sers analysis</i>	173
Antonella Salvini, Giacomo Cipriani, Marino Malavolti, Rosangela Oliva, Piero Baglioni, Marco Fioravanti, Giuseppina Di Giulio <i>Design and synthesis of new consolidants for their use in wood conservation</i>	174
Uzielli Luca, Cocchi Linda, Dionisi Vici Paolo, Goli Giacomo, Mazzanti Paola, Gril Joseph, Colmars Julien, Jullien Delphine, Marcon Bertrand, Dureisseix David, Rémond Romain <i>Experimental studies on the wooden support of the "Mona Lisa"</i>	177
Carlota M. Grossi <i>Future climate and pollution pressures on stone heritage</i>	178
Koen Janssens <i>Optimizing conservation and valorization of cultural heritage by means of MAXRF: an x-ray based method for sub-surface analysis of painted cultural heritage artefacts</i>	181
Giovanni Pratesi, Fabio Sciarpi <i>Microclimatic monitoring for artefact conservation in natural history museum of Florence</i>	184

2.3. NOVEL NON-DESTRUCTIVE TECHNIQUES FOR DIAGNOSTICS (PLENARY WITH SESSION 3)	185
Rinaldo Cubeddu, Daniela Comelli, Austin Nevin, Alex Brambilla, Gianluca Valentini, Lucia Toniolo <i>Spectral and time resolved laser induced fluorescence imaging as a diagnostic tool in cultural heritage</i>	185
Motoyuki Sato <i>New challenges of ground penetrating radar for archaeological survey</i>	189
Luciano Alparone, Marco Benvenuti, Pilario Costagliola, Francesca Garfagnoli, Sandro Moretti, Elena Pecchioni, Silvia Vettori, Mara Camaiti, Leandro Chiarantini <i>Hyperspectral instruments as potential tools for monitoring decay processes of historical building surfaces</i>	192
Jacopo La Nasa, Sibilla Orsini, Francesca Di Girolamo, Francesca Modugno, Iliaria Bonaduce, Maria Perla Colombini <i>Characterisation of synthetic varnishes and paint materials by analytical methods based on pyrolysis and mass spectrometry</i>	195
Iliaria Bonaduce, Maria Perla Colombini, Marianne Odlyha, Mikkel Scharff, Rene Larsen, Dorte Vestergaard Poulsen Sommer, Elin Dalin, Terje Grøntoft, Susana Lopez-Aparicio, David Thickett, Guillermo Andrade López, Ana Tabuenca García, Antonio Ortega, Stephen Hackney, Joyce Townsend, Peter Vandenebee, Antje Potthast, Ute Henniges, Octaviana Marinacas, Colette McDonagh, Dorota Wencel, Philip Bowe, John J. Ackerman, Paul Bellendorf, Johanna Leissner, Alexandra Schieweck, Karin Drda-Kühn <i>New challenges of ground penetrating radar for archaeological survey</i>	196
Costanza Cucci, Andrea Casini, Marcello Picollo, Marco Poggesi, Lorenzo Stefani <i>Hyper-spectral imaging for diagnostics on polychrome artworks: state-of-the-art and recent advances of the research based on the IFAC-CNR hyper-spectral scanner</i>	197
Riccardo Fanti, Deodato Tapete, Giovanni Gigli, Nicola Casagli <i>Terrestrial laser scanning for advanced analysis on historic hilltop sites affected by geohazards</i>	199
Andrea Fiaschi, Luca Matassoni, Giovanni Pratesi, Gilberto Saccorotti <i>Microtremors: from the buildings to the objects</i>	202
Marcello Picollo, Costanza Cucci, Kaori Fukunaga <i>Terahertz imaging methodologies applied to the investigation of artworks</i>	204
Massimiliano Pieraccini, Matteo Fratini, Carlo Atzeni, Michele Betti, Gianni Bartoli <i>Assessment of vibration reduction on the Baptistery of San Giovanni in Florence (Italy) after vehicular traffic block</i>	207
Marco Scaioni, Elisabetta Rosina <i>IRT-photogrammetric procedure for 3D rendering</i>	209
Deodato Tapete, Nicola Casagli, Riccardo Fanti <i>Diagnosis of deterioration in cultural heritage sites: promising perspectives for monitoring at different scales by radar interferometry techniques</i>	210
Ugo Zammit, Fulvio Mercuri, Noemi Orazi, Marco Marinelli, Stefano Paoloni, Folco Scudieri <i>Active irt applications to the cultural heritage analysis</i>	213
Session 3 TECHNOLOGY AND ICT FOR CONSERVATION OF CULTURAL HERITAGE	215
Rapporteur Stefano Francesco Musso <i>Information communication technologies and conservation of Cultural and Architectural Heritage</i>	217
3.1 ARCHITECTURAL CONSERVATION AND TRADITIONAL KNOWLEDGE SYSTEMS	221
Donatella Fiorani <i>Diagnostics for restoration. Scenarios, issues, and an exemplification</i>	221
Stefano Musso <i>Innovation of conservation of architectural heritage</i>	223
Marielle Richon <i>Innovative systems for the conservation, development and management of local knowledge systems</i>	226
Alberto Giretti <i>Knowledge technologies for the enhancement of the cultural heritage</i>	228
Massimo Coli, Giorgio Lacanna, Emanuele Marchetti, Maurizio Ripepe <i>Geo-seismic characterisation of outstanding cultural heritage monuments: first applications at Firenze, Italy</i>	231
Letizia Dipasquale, Natalia Jorquera Silva <i>Learning from local seismic cultures, as a strategy for reducing the risk of cultural heritage</i>	232
Letizia Dipasquale, Natalia Jorquera Silva, Saverio Mecca <i>An interdisciplinary approach to a cultural and architectural heritage: earthen dome architecture in Syria</i>	233
Luca Giorgi, Pietro Matracchi <i>RISEM – seismic risk in monumental structures. The San Gimignano case</i>	236
Alberto Giretti <i>Securart. Large scale management of cultural assets</i>	238
Giuseppe Lotti, Iliaria Serpente <i>Design for the global south: a Mediterranean perspective</i>	239
Giuseppe Lotti, Saverio Mecca <i>Local and indigenous knowledge safeguarding and innovating: the INN-LINK-S research center</i>	242
Marco Masera <i>Energetic issues for the architectural heritage domain</i>	244
Saverio Mecca <i>Cultural plasticity and sustainability of traditional building cultures: earthen architecture as model</i>	247
Saverio Mecca <i>Web-based codified and tacit knowledge management and conservation of vernacular architecture heritage</i>	250
Andrea Fiaschi, Luca Matassoni, Giovanni Pratesi, Gilberto Saccorotti <i>Microtremor: from the container to the contents</i>	252
Luisa Rovero, Ugo Tonietti <i>Criteria for the use of composite materials in the consolidation of historical heritage</i>	253
Valeriano Sandrucci, Enrico Vicario <i>Combining ontologies and social networking in the collection of cultural heritage information resources</i>	255
3.2 GEOMATICS AND MULTIMEDIA TECHNOLOGIES	257
Lysandros Tsoulos <i>The role of geomatics in safeguarding cultural heritage</i>	257
Mario Santana Quintero <i>Safeguarding the significance and integrity of architectural heritage: the role of recording, documentation and information systems</i>	259
Fabio Remondino <i>Digital 3D recording for heritage documentation and preservation - latest developments and perspectives</i>	261
Alberto Del Bimbo <i>Multimedia technologies for cultural heritage</i>	264

Francesco Algostino, Laura Bucalossi, Alessandro Conti, Alessia Nobile <i>Mare nostrum: a heritage trail along the phoenician maritime routes and historic port-cities of the Mediterranean sea</i>	265
Fabio Anfossi, Giulia Bebi, Flaviano Fanfani, Giovanni Pratesi, Valentina Bonora, Daniela Cini, Alessandro Conti, Lidia Fiorini, Grazia Tucci <i>Experiences of natural heritage 3D surveying and physical reproduction</i>	268
Daniela Cini, Alessia Nobile <i>The 3D digital content production for virtual archaeology: models for conservation archives and models for interactive exhibitions</i>	270
Alessandro Conti, Lidia Fiorini, Marco Pagliai <i>3D survey for the knowledge and conservation of the Pratalino Park</i>	273
Valentina Dante, Naida Di Nino, Luigi Mussio, Alice Pozzoli and Fiorella Gaudio <i>3D gis modeling for safeguard of cultural heritage</i>	276
Gabriele Fangi <i>The spherical photogrammetry for cultural heritage</i>	278
Nora Lombardini, Valentina Bonora and Nadia Guardini <i>The survey of the dome of the basilica of St. Vitale in Ravenna</i>	279
Vito Cappellini <i>2D - 3D ch images for ict systems</i>	282
Elisabetta Rosina, Marco Scaioni <i>IRT-photogrammetric procedure for 3D rendering</i>	283
Elisabetta Sonnino, Antonio Iaccarino Idelson, Marco Callieri, Matteo Dellepiane, Roberto Scopigno, Matteo Fabbri <i>The Madonna of Pietranico: a testbed for advancing computer-aided restoration methodologies</i>	286
Grazia Tucci, Valentina Bonora and Francesco Algostino <i>Building the virtual memory of the holy sepulchre in Jerusalem: metric survey and 3D modeling</i>	287
Grazia Tucci, Alessia Nobile, Maria Riemma, Valerio Tesi <i>The Basilica della Madonna dell'Umiltà in Pistoia: 3D survey and study of geometry and structure of the dome</i>	290
Grazia Tucci, Valentina Bonora and Alessia Nobile <i>How can geomatics help?</i>	293
Grazia Tucci, Francesco Algostino, Valentina Bonora and Daniela Cini <i>Cultural heritage between 3D digitization and 3D reproduction</i>	294
Elisabetta Rosina <i>An observatory on innovative techniques for moisture detection in historical masonry</i>	296
Francesco Fassi, Carlo Monti <i>The main spire of Milan's cathedral. Survey, modelling and thinking in 3D</i>	298
Nora Lombardini, Cristiana Achille, Francesco Fassi <i>Training and research. The study for protecting the archaeological area of the Sanctuary of Diana beside the Nemi Lake</i>	301
Nora Lombardini <i>The necessity of knowing the different strategies of conservation for the inspiration of cultural progress</i>	304
Session 4 SOCIETAL FUNCTION OF CULTURAL HERITAGE	307
<i>Rapporteur</i> Magda Antonioli, Fiorenza Belussi, Fernando Alberti <i>Societal function of cultural heritage</i>	309
4.1 CONSERVATION, ENHANCEMENT OF HERITAGE AND CULTURAL TOURISM	313
Luis Cesar Herrero Prieto <i>Measuring economic value and social viability of cultural heritage and institutions</i>	313
Francesca Cominelli and Xavier Greffe <i>Why and how should intangible heritage be safeguarded?</i>	316
Francois Colbert <i>The marketing of cultural heritage: some topics to be explored</i>	319
Magda Antonioli Corigliano <i>Sustainable cultural tourism in european urban systems - state of research and policy recommendations</i>	321
Francesca Imperiale <i>Environmental and cultural system (ECS), "Lands of Lupiae", "Natural areas, archeology and culture in Apulia on the Messapia coast"</i>	325
Elena Livi <i>ITC and museums: the role of web sites in creating knowledge</i>	327
Barbara Sibilio <i>Policies and management of the heritage museum in the different perspectives of value: methods and tools of measurement and communication through ICT</i>	330
Ludovico Solima <i>Agenda for museums: the next future</i>	332
4.2 CREATIVITY AND INNOVATION FOR INDUSTRIES	334
Fernando Alberti <i>Cultural heritage, tourism and regional competitiveness</i>	334
Joan Trullèn <i>Knowledge city strategy: the case of Barcelona</i>	337
Fiorenza Belussi <i>Business models and networks of creativity in historical industrial districts and low-techsectors</i>	338
Anne Lorentzen <i>Experience economy</i>	341
Lisa De Propris <i>Cultural and creative industries: a research agenda</i>	344
Allen J. Scott <i>Cognitive-cultural capitalism and the urban process</i>	347
4.3 BRIDGING CULTURE, SOCIETY AND CREATIVE SPACES	349
Masayuki Sasaki <i>Urban regeneration through cultural creativity and social inclusion in Japan</i>	349
Sharon Zukin <i>Preserving urban cultural heritage: authentic local shopping streets</i>	351
Annarita Lapenna <i>The inter-millieus city</i>	353
Luciano Pilotti <i>Urban ecology and cultural heritage values</i>	356
Jose' Prada <i>Urban regeneration and social cohesion. Using cultural heritage for urban regeneration against shrinkage: the case of Aviles, Spain</i>	360
Chris Younès <i>Regeneration of inhabited milieux</i>	362
ATTENDANCE LIST	364