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Nota di contenuto	Introduction / Anna Bentkowska-Kafel -- Part I. COSCH case studies -- An interdisciplinary discussion of the terminologies used in cultural heritage research / Vera Moitinho de Almeida, Stefanie Wefers, and Orla Murphy -- From a buried fragment to the virtual artefact: a case study of Greek pottery / Despoina Tsiafaki, Anestis Koutsoudis, Natasa Michailidou, and Fotis Arnaoutoglou -- Beyond photography: an interdisciplinary, exploratory case study in the recording and examination of Roman silver coins / Anna Bentkowska-Kafel, Vera Moitinho de Almeida, Lindsay MacDonald, Julio M. del Hoyo-Melendez, and Aurore Mathys -- Wall paintings in the Chateau de Germolles: an interdisciplinary project for the rediscovery of a unique fourteenth-century decoration / Christian Degriigny and Francesca Pique with contributions from Marco Cucchi, Vincent Detalle, Jean-Philippe Farrugia, Gaetan Le Goic, Alamin Mansouri, Dominique Martos-Levif, Frederic Merienne, Aurelie Mounier, Anthony Pamart, Cristina Tedeschi, Jean-Marc Vallet, and Stefanie Wefers -- A 4d virtual presentation of the White Bastion Fortress in Sarajevo / Selma Rizvic -- Digitization of cultural heritage at the National Museum of Romanian History,

Bucharest / Irina Mihaela Ciortan -- Bremen Cog: three recording techniques for one object / Amandine Colson and Levente Tamas -- A study of spectral imaging acquisition and processing for cultural heritage / Sony George, Jon Y. Hardeberg, Joao Linhares, Lindsay MacDonald, Cristina Montagner, Sergio Nascimento, Marcello Picollo, Ruven Pillay, Tatiana Vitorino, and E. Keats Webb -- Ontology-based structuring of spectral and spatial recording strategies for cultural heritage assets: background, state of affairs, and future perspectives / Ashish Karmacharya and Stefanie Wefers -- Communicating interdisciplinary scholarship: conclusions from COSCH / Anna Bentkowska-Kafel with contribution from Frank Boochs -- Part II. Methods and technologies -- 3d depth sensing / George Pavlidis and Santiago Royo -- 3d laser scanning / Mona Hess with contribution from Ahmad Baik -- Augmented reality / Jean-Philippe Farrugia and Frederic Merienne -- Digital storytelling / Selma Rizvic -- Focus stacking / Aurore Mathys and Jonathan Brecko -- Hyperspectral imaging / Andras Jung -- Laser-Induced Breakdown Spectroscopy (LIBS) / Vincent Detalle with contributions from Dominique Martos-Levif, Barbara Trichereau, Didier Brissaud, Stephanie Duchene, and Xueshi Bai -- Multiple view stereovision / Christos Stentoumis -- Photogrammetry / Julien Guery, Mona Hess, and Aurore Mathys -- Reflectance transformation imaging / Lindsay MacDonald -- Structure from motion / Mona Hess and Susie Green -- Structured light 3d scanning / Dirk Rieke-Zapp and Santiago Royo -- Total station surveying / Massimiliano Ditta and Amandine Colson -- X-Ray Fluorescence (XRF) spectrometry / Julio M. del Hoyo-Melendez.

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## Sommario/riassunto

In this unique collection the authors present a wide range of interdisciplinary methods to study, document, and conserve material cultural heritage. The methods used serve as exemplars of best practice with a wide variety of cultural heritage objects having been recorded, examined, and visualised. The objects range in date, scale, materials, and state of preservation and so pose different research questions and challenges for digitization, conservation, and ontological representation of knowledge. Heritage science and specialist digital technologies are presented in a way approachable to non-scientists, while a separate technical section provides details of methods and techniques, alongside examples of notable applications of spatial and spectral documentation of material cultural heritage, with selected literature and identification of future research. This book is an outcome of interdisciplinary research and debates conducted by the participants of the COST Action TD1201, Colour and Space in Cultural Heritage, 2012-16 and is an Open Access publication available under a CC BY-NC-ND licence.

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