EDITORIAL. AN ISSUE OF SCIRES-IT ON CULTURAL AND ENVIRONMENTAL HERITAGE DEDICATED TO ANDREA BROGI

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Abstract

This issue of SCIRES-IT contains various and interesting articles in support of the documentation, preservation and fruition of the Cultural and Environmental Heritage. It is dedicated to Professor Andrea Brogi, visual & interaction design architect, who was a member of the Editorial Board of the SCIRES-IT and who recently passed away.

Keywords

SCIRES-IT, Editorial, Andrea Brogi architect, Visual designer. Cultural and Environmental Heritage, Virtual Reality, 3D Animation, Motion Graphics, Cultural Heritage communication, Open Access journal, Open Science

This issue of SCIRES-IT contains various and interesting articles in support of the documentation, preservation and fruition of the Cultural and Environmental Heritage, in line with the themes of this same e-Journal, with the editorial project "Eco-Sustainable OA publications" and the principles of Open Science (Valzano & Cigola, 2020; Valzano, Cigola, & Gargiulo, 2020).

This issue, in particular the cover with the first article, is dedicated to Professor Andrea Brogi, visual & interaction design architect, who was a member of the Editorial Board of the SCIRES-IT and who recently passed away.

Andrea Brogi (Pisa, 1965 - 2020) devoted a great deal of work to technologies applied to Cultural and Environmental Heritage and to the SCIRES-IT journal, since its foundation.

Expert and passionate about music (he played drums in a group) and specialized in BioArchitecture and wooden constructions, he also devoted a great deal of work to his territory with a prominent artistic and political activity on ecological and environmental issues.

He is known nationally for his great competence and professionalism on the use, since the early nineties, of 3D Real-Time graphics and of Virtual Reality and Motion capture systems in the Cultural Heritage sector, in the theatrical, cinematographic and television fields, on the use of digital techniques that have revolutionized the production process of visual communication (see: https://vimeo.com/abadesign).

He has worked as a visual designer for many companies, has collaborated with many Italian Universities, where he has also held academic and training courses, and with the most important National Research Centers, enjoying great success, and receiving prestigious awards and prizes at national and international level. See: www.ceit-otranto.it/index.php/collaborazioni/379-andrea-brogi.

He has also collaborated with the University of Salento since 2000, in particular with the "Coordinameneto SIBA"[1], until 2010, for the training of staff and the realization of three-dimensional reconstruction projects and virtual representation of important archaeological sites and finds and the production of 3D videos of high scientific and technological level, ranked first and awarded nationally and internationally, at the

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[1] Coordinamento SIBA (Servizi Informatici Bibliotecari d'Ateneo), started by Virginia Valzano and directed by her from 1986 to 2010, coordinates the University Library IT services and the Telematic Information System for Research

and Education at the University of Salento (see: http://www.ceit-otranto.it/images/valzano/siba-1986-2010.pdf).

Italian eContent Award and at the World Summit Award (WSA).

In the following years he collaborated with the CEIT (Euro-Mediterranean Center for Technological Innovation for Cultural and Environmental Heritage and Biomedicine) [2] of the same University for the creation of the "School of Relief, Modeling, 3D Printing and Video Production" and as a member of the Scientific committee and professor of the Video Production Course in Motion Graphics for Cultural Heritage and Crafts.

His research activities have focused on the development of new digital narrative forms with particular attention to the use of three-dimensional graphics animated in real time in performance and exhibition areas.

Andrea Brogi, to whom we owe so much for the realization and success of some of our projects, will always remain in our hearts for his great professionalism, far-sightedness, creativity, positive charge, humanity and intellectual generosity and for his mild and sweet attitude towards life.

The first article published in this issue and dedicated to Andrea Brogi, "Cultural Heritage Communication and Digital Resources: three Examples from Messapian Archeology", by Virginia Valzano and Katia Mannino, illustrates three projects and multimedia products of three-dimensional reconstruction and virtual representation of cultural heritage, realized thanks also to his precious collaboration.

This issue, as we have already said, is full of other and interesting articles by various authors, concerning the themes of SCIRES-IT, including:

- "Animation for the Study of Renaissance Treatises on Architecture. Francesco di Giorgio Martini's Corinthian Capital as a Showcase" by A. Nanetti, D. Benvenuti, M. Bigongiari, Z. Radzi, S. Bertocci. This paper reports preliminary results of ongoing interdisciplinary research in digital humanities and animation. This research explores visualisation techniques (e.g., motion graphics, 3D animation, Non-Photorealistic Rendering) to empower the study of depicted objects in Renaissance treatises on architecture and engineering.

- "A Support System for High-Quality Urban Green Management in Tuscany" by M. Romani, B. Rapi, S. Cacini, D. Massa, F. Mati, L. Rocchi, F. Sabatini, P. Battista of IBE-CNR. This paper describes the general structure and main components of a support system for green maintenance, for the protection of historical parks and gardens, for the design and management of High-Quality Green Areas (HQGAs), which takes into account various socio-economic, climatic and environmental factors and oriented towards the achievement of many sustainable development goals of the United Nations.

This is also one of our goals. As we wrote in our "Editorial. Opening of the 10th years of SCIRES-IT" (Valzano & Cigola, 2020), in 2020-2021 we will continue our commitment to the realization of Open Science and new models of scientific communication, and to the knowledge, enhancement, management and preservation of cultural heritage and natural and environmental resources and to eco-sustainable technological innovation. For the tenth year of SCIRES-IT, we have started and intensified many collaboration relationships with some Institutes the University of Salento and the Polytechnic of Bari, and also with the Institute for BioEconomy - IBE of the CNR of Florence, for the design and adoption of "nature and green based" solutions aimed at: i) reducing the effects of climate change and the environmental impact of anthropic activities; ii) increasing the resilience of the urban and periurban environment; iii) identifying and developing reliable and low cost monitoring technologies. Indeed, as we already said, the current health, environmental and socio-economic crisis can be an opportunity to design innovative technological solutions for the management of structures and remote control of factors that can affect the safety and preservation of cultural and natural heritage, for the maintenance of green areas, archaeological parks, historic gardens, botanical gardens.

- "GIS and DTM for the analysis of the archaeological data in Vaste (Southern Apulia)" by G. Mastronuzzi, G. Vizzino. The combined use of tools such as GIS and DT, in the Vaste-Poggiardo archaeological area, in the province of Lecce (Italy), has guaranteed the possibility of

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[2] CEIT: Centro Euromediterraneo di Innovazione Tecnologica per i Beni Culturali e Ambientali e la Biomedicina - Euromediterranean Center for Technological Innovation for Cultural and Environmental Heritage and Biomedicine,

founded and directed by Virginia Valzano (http://www.ceit-otranto.it/).

simulating a few aspects of ancient landscapes, contributing to recognise the strategies on which the choice of the sites destined to become settlements in ancient times was based.

- "Virtual reality for urban planning. The port of Palermo: past, present and future" by F. Avella, F. Schilleci Avella. The case study relates to the development of a 3D model viewable in virtual reality of the Port of Palermo area, of great urban, historical and logistical interest. The system allows the visualization of its current state, historical emergencies and future developments, as well as the comparison between existing services and those planned in the reconfiguration project.

- "Spectroscopic investigations of pigments on a late Roman milestone from Calabria, southern Italy" by F. Caridi, B. Testagrossa, P. Faenza, G. Acri. In this paper the compositional and structural analysis of a Roman milestone, preserved in the Antiquarium of the archaeological park of Bova Marina, Reggio Calabria (Italy), was performed. A combination of spectroscopic techniques was employed for this purpose.

- "GPR Prospecting at the Castle of Alceste in San Vito dei Normanni (Brindisi, Italy)" by L. Matera, R. Persico, G. Semeraro. In this contribution the autors show the results of a non-invasive GPR prospecting performed in the archaeological site of San Vito dei Normanni, in the outskirts of Brindisi, Apulia region (Italy), where the ancient population of the Messapians had an important settlement.

- "The integrated survey for the recovery of the former Hospital / monastery of San Pietro in Luco di Mugello" by B. Aterini, S. Giuricin. The article presents the results of a research on the former hospital-monastery of San Pietro in Luco di Mugello, in the municipality of Borgo San Lorenzo (Firenze), studied from a historical point of view and analyzed by means of an integrated survey. The three-dimensional survey made it possible to investigate the structure in depth, creating the basis for a revaluation project of the structure but, first of all, to establish the interventions to block its degrade and prevent its definitive collapse.

- "Gaming as a disembodied experience of the city: from Assassin's Creed to 'smart learner'" by R. Porreca, V. Geropanta, K. Abril, D. Giordanelli. This paper explores the role of gaming as a learning tool in the design disciplines and suggests a methodology of work that bridges urban planning and virtually reconstructed environments.

This issue is further enriched by four articles, selected among the best presented at the "CHANCES 2019" International Conference, organized by PhD students of the XXXIII Phd cycle in Architecture and Design Cultures of the department of Architecture of the Alma Mater Studiorum - University of Bologna.

The Conference, "CHANCES: Practices, spaces and buildings in cities' transformation", held in Bologna on 24th October 2019, aims to explore, from a multidisciplinary perspective, the fragile but continuous urban transformation through the effective contribution of culture, nature and technology. The aim of this conference is to provide a deeper understanding of urban transformations' research and practices, focusing on the use, re-use, design, renovation and innovative governance and management of public spaces, urban commons and buildings.

The contributions are based on reflections and studies concerning current or historical approaches that are changing the cities in which we have lived:

- "Re_Start from public spaces: new perspectives for the historic centers of Treia in the Marche Region" by E. Petrucci, D. Lapucci, N. Lapucci, L. Barchetta

- "Play and transform the city" by F. Bianconi, M. Filippucci, F. Cornacchini.

- "The potential of neglected places. In loco: the widespread Museum of abandonment" by S. Proli, F. Tortori.

- "Perspectives for a public space. Visualizations visions images" by V. Castagnolo, G. Rossi, A. C. Maiorano.

In line with the objectives and policy of SCIRES-IT, and in accordance with the proposal of prof. Cristiana Bartolomei of the University of Bologna, member of the Editorial Board and former Co Editor-in Chief of this same eJournal, we also wanted to give space to PhD students and young researchers in an international Class A scientific journal, Gold/Diamond Open Access, such as SCIRES-IT, supporting and facilitating scientific research and the dissemination of knowledge.

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