

6.2 Inclusive E-Learning to Understand Collective Memories and Identify New Uses of African Plantations Heritage

Sara Eloy*, Stefania Stellacci

*Instituto Universitário de Lisboa (ISCTE-IUL), ISTAR

Project description:

Digital globalization has been changing and increasing the flow of information, reshaping perspectives, and actions worldwide, with countless benefits in socio-economic, political, environmental, and cultural realms. However, less-developed countries or historically areas subjected to foreign dependency, such as former colonies, have not benefited from sustainable economic development arising from digital globalization. Moreover, historical biases and underrepresented narratives should be also brought to light, especially in Europe. This ongoing project provides new insights on the *Roças*, which were built from the mid-19th century in São Tomé and Príncipe (STP) for the production of soft-commodities – mainly cocoa and coffee. This study tackles timely aspects about *Roças* and its ethical reanalysis by the transnational community. Then, it explores how audio-visual storytelling, serious board game or immersive authentic multisensory tools for visual and auditory stimuli, can be used for making accessible and preserving the value of African plantations heritage. Overcoming the difficulties to reach far and different communities, this project attempts to raise awareness on the tangible and intangible value worldwide. It proposes to pave the way for a dialogue among STP's community (both local and now living in Portugal) with researchers, policy-oriented organizations, policymakers, local entrepreneurs, and archival curatorial staff. In fact, these groups are often disconnected from consuming and discussing the legacies of colonialism in their twofold aspects, as architectures of violence and as part of the most promising production system. This study offers the opportunity to use inclusive e-learning tools for promoting reflexivity and resilience of STP and European communities when addressing dichotomous values of built heritage. In line with recent research paths on digital cultural heritage conducted by ISTAR team, it is shown how mixed and augmented reality tools enable to convey both inclusive e-learning for a broad community and promote sustainable development.

Presenter's short bio:

Sara Eloy focuses on interdisciplinary challenges related to Digital Technologies applied to Architecture. Her main areas of research include shape grammar design systems, Virtual and Augmented Reality, CAAD and Digital Heritage. Eloy develops research activities in ISTAR (Information Sciences Technologies and Architecture Research Center) where real software prototypes are developed. Eloy has led teams developing digital solutions based in VR and AR for heritage visualization. Eloy organized several exhibitions in collaboration with international researchers, including Lisbon Architecture Triennale (2013, 2019), whose digital contents were applied to visualize, interact, and immerse multiple end-users into architectural and heritage context. Examples are the exhibitions “School of Chicago: digital skyscrapers” and “Artificial Realities: Virtual as an aesthetic medium in architectural ideation” an Associated Project of Lisbon Architecture Triennale 2019. Eloy graduated in Architecture (1998) and has a PhD in Architecture (2012). She was director of the Department of Architecture and Urbanism (2013-2016), director of the Integrated Master in Architecture (2013-2016), and director of the ISTAR since 2017. She is an Assistant Professor at Iscte with teaching experience on CAAD, Drawing, new technologies applied to Architecture and Research Methodologies. Eloy is an expert evaluator for the European Commission H2020 programme since 2015.

Stefania Stellacci graduated in Architecture (2006), obtained a postgraduate degree in Conservation of Built Heritage (2007), and has a PhD in Architecture (2018). She has worked in Regional Directorate for Cultural Heritage and Activities and Tourism of Puglia (Bari, Italy) in 2007. From 2008 to 2014 and after her doctoral studies, she has worked as architect and team leader in a number of international architecture competitions, preliminary and executive projects of single-family houses and public equipment in different architecture companies, among which barbiniarquitectos and Mangado architects. Her research interests include architectural history, cultural built heritage, sustainable urban development, traditional craftsmanship, building pathology, adaptive architecture, and timber-framed buildings. Her studies also address priorities and challenges for historic building rehabilitation using multiple-criteria decision analysis (MCDA) and seismic risk assessment. Stellacci has been acting as reviewer for a number of different journals, including *International Journal of Architectural Heritage, Sustainability, Symmetry, Buildings, and Cidades, Comunidades e Territórios*. Stellacci is author of several publications in both conferences and specialized journals. She has currently interested in promoting initiatives engaging underrepresented communities towards the safeguard of built heritage or its memory.

Relevant links:

- [ISTAR-Information Sciences and Technologies and Architecture Research Center](#)
- [School of Chicago: Digital Skyscrapers](#)
- [Artificial Realities: Virtual as an aesthetic medium in architectural ideation](#)
- [Fundação Mário Soares e Maria Barroso](#)
- [mén non](#)