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**STEFANO BERTOCCI****Professor of the Faculty of Architecture, University of Florence, Italy**

Stefano Bertocci is Full Professor of Department of Architecture DIDA at the University of Florence (Italy), where since 2010 he is Director of the inter-university Laboratory "Landscape Survey & Design". He was involved in several national and international research programs, among which: "Petra medieval," archeology of Crusaders' settlements (Ayyubid, Jordan), archaeological survey of the lasos walls (Caria, Turkey), "Michelangelo Project" for surveying and 3D modeling of Michelangelo's architectural heritage in Florence, architectural documentation at Barrio Vista Alegre and Castillo del Morro (Santiago de Cuba), "Wooden Architecture in Karelia" (Russia).

**3D Digital Survey and Documentation: Complex Interactions between Tangible and Intangible Properties of Architectural Heritage**

When one plans 3D survey and documentation campaigns for archaeological sites and urban settlements, the relationship between tangible and intangible heritage is definitely a complex issue to solve. The relevance of these relationships has been recognised by UNESCO as early as 1964, in the Venice Charter, which stated that "A monument is inseparable from the history to which it bears witness and from the setting in which it occurs" (Art. 7). But, the realisation of a suitable design process is far beyond having been accomplished. We are still scratching the surface in the experimentation of the technological opportunities that have matured over the past decade. Digital survey is an activity that allows an almost complete investigation of an artefact (building or urban area), but this activity is usually oriented towards commercial deliverables for architectural conservation design. The research project that Andrea Nanetti, Siew Ann Cheong and I started in collaboration with Chin-Yew Lin (Microsoft Research) in October 2014 aims to explore the opportunities offered by digital survey methodologies to aggregate on a 3D information environment all tangible and intangible data related to architectural artefacts in a smart city management perspective. At present, our research collaboration is studying methodological and operational issues for the creation of ontologies for graph databases that can provide reliable knowledge aggregation of the already existing digital documentation. The NTU research team led by Andrea Nanetti and Siew Ann Cheong has already proposed and successfully experimented similar knowledge aggregators for 2D environments in 2015. Our goal now is to work on 3D platforms as knowledge aggregators.