

Digital Heritage for Palestine

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Abstract

In Palestine, the protection of existing cultural heritage sites from degradation or its loss is of vital importance. Since 1995, the Palestinian national authorities promoted the protection of historical sites as a national objective, but unfortunately it failed to become a priority question. The absence of mechanism to convey the importance of historical places and landscapes causes the formation of new generations of folk who doesn't associate a meaning or value to historical places. In addition, It became clear that the political situation in Palestine is stagnating which prevents implementation of strategies connected to preservation or documentation of valuable historical sites. Ironically, the struggle in Palestine is all about the land, but resources and strategies to deal with and protect historically important landscapes and cultural heritage sites are missing. With no prospect for political solution on the ground, and on the background of the facts mentioned above, a new creative and out-of-the-box thinking for introducing new approach for heritage documentation is required.

Cultural Heritage documentation of archaeological sites and historically important structures and landscapes are traditionally based on flat representations of multi-dimensional space (i.e. maps, aerial photographs, illustrations or drawings) which create an incomplete image of the settings of the sites. This makes it necessary to introduce new methods and techniques for documentation. Today's technologies for archaeology documentation allow to record the position, size and shape, as well as generate very accurate and realistic 3D models both in terms of geometry and textures, that are required in any project related to the conservation of cultural heritage, forming an important element of the documentation and analysis process.

This presentation outlines activities that are made at the Virtual Reality Laboratory (VR-Lab) at Birzeit University (BZU) in collaboration with VR-Lab at the Norwegian University of Life Sciences (NMBU) towards documentation and preservation of cultural heritage in Palestine. More specifically, presenting the outcome of a pilot project for digital reconstruction and 3D capture of heritage sites using a low-cost Unmanned Aerial Vehicles (UAV). The aim is to introduce new method for archaeological needs, conservation and management policies as well as documentation and graphical representations.

Keywords:

3D Documentation, Preservation, Outreach, Enhancing public awareness, Palestine.