Enhancing Community Resilience through Digital Heritage: Exploring Six Endangered Sites

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Enhancing community resilience in the face of natural and climate-induced disasters is crucial in today's rapidly changing world. This paper proposal focuses on the results of an innovative international summer school program that aims to build global capacities by exploring the role of digital heritage in fostering community resilience. Since 2018, the one week summer school has been organizing by Politecnico di Torino (Department of Urban and Regional Studies) in collaboration with UNESCO and the Cotsen Institute of Archaeology at the University of California¹ The 2023 edition, entitled makes part of a granted Europen HORIZON research project, and takes place in September in Turin, aiming to investigate diverse heritage areas characterized by recent or past disasters, both within and beyond the EU. These "endangered" sites represent a range of factors, including government scale and cultural background diversity. This multiscalar characteristic frame in large-scale areas influence community responses to disasters and encompass diverse tangible and intangible heritage values.

The program examines how these disaster-affected areas, which have been impacted by various types of disasters such as floods, wildfires, and extreme weather events, can rely on their tangible and intangible cultural heritage as a resource for fostering community resilience. By utilizing digital tools for data collection, analysis, and visualization, the structure aims to develop a comprehensive understanding of the challenges faced by communities in these regions. Through the integration of digital tools and human sciences, participants engage in a multidisciplinary approach, guided by an international teaching team derived by project consortium, to develop context-specific strategies for heritage-driven community resilience.

Emphasizing the diversity of factors that influence community resilience, including government scale, cultural background, socio-economic conditions, and historical context, the summer school fosters a nuanced understanding of the interplay between resilience, heritage, and disaster risk management in each site's unique context. Through collaborative activities and knowledge exchange, participants develop holistic approaches to address the complex challenges faced by communities in these disaster-affected areas. Sharing experiences, best practices, and lessons learned contribute to a collective effort in enhancing disaster society resilience at both the regional and global levels.

With the active participation of stakeholders from the pilot sites, the outcomes of the summer school directly inform disaster risk management strategies. By examining the role of heritage and community resilience in these areas, participants generate valuable insights and recommendations for improving strategies and policies. Leveraging digital tools, the summer school enable innovative approaches to data analysis, risk assessment, and evidence-based decision-making, fostering effective disaster risk management practices.

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Within this context, the paper will demonstrate the outcomes of the entire program by highlighting the multiscalar and multicultural characteristics of the results. It will mention the experimental methodologies developed during the week and produced visualizations and digital solutions. It will focus on the investigation way of six endangered sites with a comparative perspective on their specific characteristics. Finally, it will discuss the pros-cons results of the applied methodology in the framework of granted European project