Chapter 17
Phygital Heritage Experiences for a Smart Society:
A Case Study for the City of L'Aquila

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ABSTRACT

Starting from a recognition of the progressive settlement of the conception of cultural heritage through years, and the role that digital technologies have played, the contribution analyses how ICT (information communication technology) solutions, altogether intended, could provide a new human centrality in interpretation and presentation of cultural heritage. This opportunity is provided from the experience of INCIPICT project (INnovating CIty Planning through Information and Communications Technology), developed in L'Aquila since 2012. Within its framework, several reflections and applications on the field of cultural heritage have been developed to achieve results in terms of theory and praxis on the route toward a culture-based smart society.

INTRODUCTION

Over the last decades the international debate has progressively extended and deepened the idea of cultural heritage to make it more inclusive and respectful of the different cultures of the world and their manifestations. At the same time, technological development, particularly in the ICT field, has invested our society, generating substantial and irreversible changes. The scenario of a society 5.0 that is emerging, with its intent to promote human-centred services, bringing the society back to the center of development (Deguchi 2020, De Felice 2021), calls for a rethink of the relationship between the sphere of cultural heritage and the sphere of technological innovation aiming to build a greater integration for the benefit of all.

Indeed, also the safeguard, and the conservation of Cultural Heritage can benefit greatly from the relationship with technology.

So, what is the perimeter of cultural heritage nowadays? What contribution can it make and what role can it play in in strengthening society and furthering its well-being? What challenges and what opportunities do new technologies present in this field?

This contribution seeks answers to these questions.

The first section, Cultural Heritage in the becoming of society 5.0, aims to provide a framework of the progressive development of the concept of cultural heritage. A chronological exploration of the main international documents in the field of cultural heritage will allow deepening various theoretical aspects necessary for providing a comprehensive understanding of the subject. The progressive extension of the cultural heritage perimeter, the inclusion of intangible aspects and the dynamics of community involvement in the interpretation process are still overlooked and remain peripheral to the mainstream discourse, but essential factors in outlining future developments. By delving deeper into these questions, we will be able to actualize the extraordinary opportunity offered by technology to mediate between the tangible and intangible aspects of cultural heritage, facilitating accessibility and the preservation of authenticity. From this point of view, we can observe how the continous digital transcoding of the heritage, its gradual digitalization, gives rise to a phygital convergence, in which we arrive at a synthesis between the tangible and intangible instances of the heritage, functional to its presentation.

In any case, structural integration of applications and services from the infrastructure level of communication networks is essential if these opportunities are to become real. In this sense, the integration of the fields of content development related to the interpretation of cultural heritage and research related to the ICT field must aim at an Open Innovation model, to ensure at the same time the sustainability of the system, its effectiveness, and the necessary support for the full development of society and communities.

The second part of the contribution presents a series of experiences gained within the project INCI-PICT - Innovating City Planning through Information and Communication Technologies and related to the case study of the historic center of L'Aquila, in Italy.

These experiences, ranging from digitalization to the development of interpretative and restitutive models and presentation methodologies, are united by a constant reference to the user experience. This reference to the user experience starts first of all from the need to identify the platforms that guarantee greater accessibility and consequently a greater diffusion of content. The proposed experiences aim to define a workflow that, starting from digitalization, guides the operators to the phase of presentation and maintenance of the contents.

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