Chapter 4

Definition of a Protocol for the Knowledge, the Analysis and the Communication of the Architectural Heritage: Single Monument, Network of Monuments, Historic Settlement

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ABSTRACT

The communication of architecture is a complex and multidisciplinary process, indispensable for enhancing a monument properly and to allow understanding and knowledge to a large number of users. The European Architectural Heritage, and the Italian one in particular, is enormous; the processes of knowledge, cataloguing and analysis are far from being complete. This fact has prompted the European Union to invest, especially in recent years, in research projects designed to increase the communication strategies and put a value on the present assets in its territory. For example, the programs of the European Commission for Research and Innovation, found in “Horizon 2020”, define the communication based on the new media as the new frontier for the enhancement of architectural heritage (Reflective Cities). The main goal is to develop a better awareness of the Architectural Heritage through increased interaction between the citizen, the monument and the scientific community.

INTRODUCTION

In this paper we want to show three different analysis strategies, knowledge and communication applied to three examples of architectural heritage, very different in type, size and relationship with the local context. The goal is to apply and scientifically verify a protocol useful in communicating the qualities of the architectural heritage. Its specificity is based on the interdisciplinary nature of the protocol and the
Definition of a Protocol for the Knowledge interconnectedness between different scientific fields and operating methods. Methodologically, the analysis strategy provides:

The identification of the phases and tools to be used in the communication process. This phase of work must verify how new technologies can introduce potential within the data processing, in their presentation and interpretation.

The verification of different communication strategies using three different examples of architectural heritage: a single monument, modest in size but rich in history and symbolic values; network architecture, evidence of ancient building traditions (vernacular architecture or “architecture without architects”); an historic settlement (a small town).

The first example is the Cattolica of Stilo, a symbolic monument for Calabria and emblem of the complexity of the historical and artistic heritage of southern Italy during the Byzantine era. The Cattolica is a very small building, entirely contained in a cube with sides about 7.5 m; it dominates the Stilaro valley and due to its location is in dialogue with all the landscape. The strategy of communication for this building is to create a network that connects all Basilian architecture in Calabria by creating a unified graphics and use of multimedia tools able to process a “self-deployment”. It is planned to use Jibo, the first social robot for home use, as a support for the fruition of space and the historical understanding of the monument by visitors.

The second case study, as already mentioned, is related to the “spontaneous” architecture, built without the use of sophisticated techniques and cultural superstructures. We chose to study the Moroccan tighremt architecture built entirely with clay by the Berber people who live in the valleys along the rivers of the High Atlas named Draa, Dades, Ziz and Thodra. In this geographical and cultural enclave a unique architecture in the world has developed, currently suspended between preservation and destruction. The construction technique based on clay requires continuous maintenance and monitoring. The communication strategy, in this case, includes the possibility of involving visitors, scholars and all interested persons in monitoring and surveying through the design of a digital platform supported by the project of crowdsourcing.

The third example concerns the communication of complex and stratified artefacts, such as historic towns or villages. In this case, communication is developed through the exemplification of drawings, the identification of common elements and the construction of three-dimensional geo-referenced models.

Schematically, we can summarize in four phases the process of knowledge, analysis and communication of the architectural heritage: collection and systematization of existing data; acquisition of new cognitive data; implementation of new representations; design, development and implementation of the communication strategy.

The first phase (collection and systematization of existing data) puts together and critically analyses the iconographic and textual information relating to the monument.

The second phase adds new data related to the shape of the monument and its state of preservation.

The third phase, directly linked to the second, involves the construction of three-dimensional models, useful to get traditional and multimedia drawings. The easiest to manage is the pdf 3D, which allows a three-dimensional navigation in real time, accessible even to non-experts.

The fourth phase defines different communication strategies depending on the target audience and the specific architectural work. Communication strategies are all based on three pillars: synthetic, mimetic, analytical. They differ from each other depending on how much one of these components prevails over