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EDITORIAL

In order to respond to the Call of past months, our magazine Vitruvio has on this occasion approached its content in a specific way towards the reuse and sustainable recovery of the built architectural and landscape heritage. Currently, and in spite of having as a starting point the intrinsic, academic and constructive approaches of the past, two fundamental questions become evident. The first is the difficulty of intervening on the built environment; that is to say, how can intervention proposals be undertaken (as a consequence of new designs and very imaginative projects), to obtain a precise and clear result. Any new intervention has to be compatible and respectful of the existing conditions. This operation, which can produce contradictory results, not only for the lay person (who can certainly be our best observers, as they do not understand the idea to be conveyed), can produce different scenarios which, in time, could lead to the very failure of the interventions themselves. Before undertaking any intervention proposal, it is necessary to know their mechanical and physical capabilities, as well as the forms and aesthetics, sometimes referred to as cultural or traditional constructions. The proposals must be compatible, not only in terms of technological and material solutions, but also in terms of legislative regulations. In the end these proposals must provide a final solution that is faithful to the original project without diminishing it or give rise to confusing interpretations. In this issue we will discuss the application of these questions in a concrete context.

In one of the best-known books by architect Le Corbusier, Vers une architecture, the first chapter begins with a very significant title: "Aesthetics of the Engineer, Architecture". There, from the beginning, he clearly expresses his idea about industry: "The tool is the direct, immediate expression of progress; the tool is the obligatory collaborator; it is also the liberator". This "new tool" is the second question we refer to at the beginning of the editorial: the purpose of the new tool or tools, which at present can be described as new technological instruments of support are coming from computerization and communication. This question about tools will be discussed in depth in this issue because the intervention on the built heritage, from conception to completion of a project, is very much associated with the application of these tools or instruments. Not only those of mechanical nature and proven effectiveness, such as the use of a simple drone for the precise capture of hard to reach data, but also other instruments such as the use of the latest generation software, or techniques of augmented reality such as HBIM (Heritage Building Information Modeling) or AR (Augmented Reality) among others. All of these instruments allow different and varied uses including pedagogical and didactic. This condition gives rise to an interdependence of actions which gives way to a multidisciplinary way of proceeding. In term, each and all parties participate with a concrete and positive approach in order to reach optimum results. This methodological, holistic position, regardless of the final or general result, will also be a reason for research on its own development of the work by the participant entities, since each of them is going to highlight the virtues (effectiveness) or defects (adjustments) of all other parts and participants.

Likewise, the work carried out will have in addition an obligatory consideration which will be none other than to take into account sustainability as a general concept. Within this concept, the work has to establish parameters regarding the compatibility of the materials, their durability and therefore their life cycle as well as environmental care and energy savings.

As discussed in two of the articles, rural areas also need to take into account the environmental integration of the proposals, and if it is a question of using existing constructions, their reuse, as it is the case here. The articles investigate and demonstrate the relative interaction of the proposals to the specifically structural and spatial aspects of the technological adaptability of computer systems to better respond to the needs of the information society and its consumers.

In the case of historic urban centers one can employ effective simulations using appropriate software and following state regulations. The simulations can be applied to significant buildings with massive structures. In many cases it is difficult to know in depth the bearing

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and mechanical aspects of the same, and to provide useful information serving as a complement to the research carried out from the beginning.
Currently we are destined for the permanent changes of our cities and our environment, be it on a small or large scale. The social demands and the requirements of consumers (voracious and immediate in many cases), as well as other conditioning factors (economic, spatial and technological), makes us think that the poetry and affection with which anastylosis was treated in an architectural complex or in a monument, refers to the times of the very origin of the term. That is to say, we are as far away as Greece itself.

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